

Part Number List: MOSFETs
製品品番一覧表: MOSFET



SEMICONDUCTOR & STORAGE PRODUCTS

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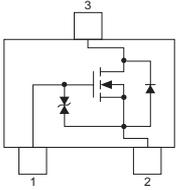
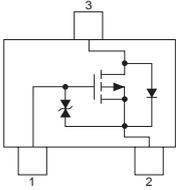
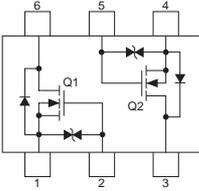
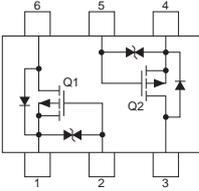
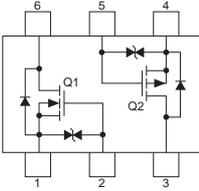
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■ List of Symbols 記号一覧

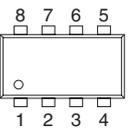
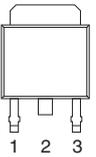
Symbol 記号	Unit 単位	Characteristics 特性	
V _{DSS}	V	Drain-source voltage ドレイン・ソース間電圧	Absolute Maximum Ratings 絶対最大定格
V _{GSS}	V	Gate-source voltage ゲート・ソース間電圧	
I _D	A	Drain current ドレイン電流	
P _D	W	Power dissipation 許容損失	
T _{ch}	°C	Channel temperature チャンネル温度	
R _{DS(ON)}	Ω, mΩ	Drain-source on-resistance ドレイン・ソース間オン抵抗	Electrical Characteristics 電気的特性
C _{iss}	pF	Input capacitance 入力容量	
C _{rss}	pF	Reverse transfer capacitance 帰還容量	
C _{oss}	pF	Output capacitance 出力容量	
Q _g	nC	Total gate charge (gate-source plus gate-drain) ゲート入力電荷量	

■ Internal Circuit 内部回路構成

Channel チャンネル	Internal Connections 内部接続図		
Single Channel シングルチャンネル	 N channel	 P channel	
Dual Channel デュアルチャンネル	 N channel x 2	 P channel x 2	 Complementary (Nch + Pch)

The internal connection diagrams only show the general configurations of the circuits.
内部接続図はイメージ図です。

■ Terminal Number 端子番号

Surface-Mount Package 表面実装パッケージ		When viewed from above, the lower left pin is Pin 1, and the other pins are numbered sequentially in the counterclockwise direction. パッケージを上から見て、左下の端子を1とし、左回り（反時計方向）に番号をつけています。
Through-Hole Package リード挿入パッケージ		When viewed from the front, the leftmost pin is Pin 1. パッケージを正面から見て、左下の端子を1としています。

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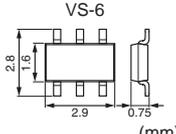
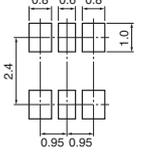
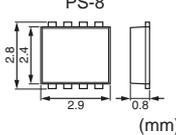
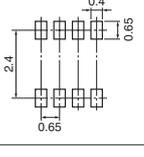
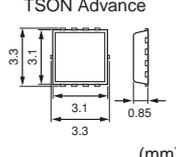
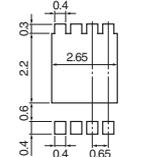
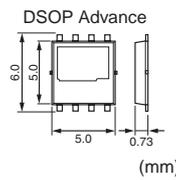
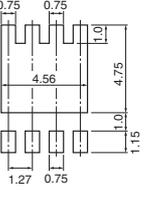
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TK4A55D	38	TK7A50D	38	TPC8059-H	8	TPCA8124	16,47	TPH3300CNH	8		
TK4A55DA	38	TK7A55D	39	TPC8062-H	8	TPCA8125	16,47	TPH3R203NL	7		
TK4A60D	39	TK7A60W	33	TPC8063-H	8	TPCA8128	16	TPH4R003NL	7		
TK4A60DA	39	TK7A60W5	33	TPC8064-H	8	TPCA8131	16	TPH4R008NH	7		
TK4A60DB	39	TK7A65D	39	TPC8065-H	8	TPCA8A09-H	11	TPH4R304NC	45		
TK4A65DA	39	TK7A65W	33	TPC8066-H	8	TPCA8A10-H	11	TPH4R50ANH	7		
TK4P50D	37	TK7A80W	34	TPC8067-H	8	TPCA8A11-H	11	TPH4R606NH	7		
TK4P55D	37	TK7A90E	39	TPC8073	13	TPCC8062-H	6	TPH5200FNH	8		
TK4P55DA	37	TK7E80W	34	TPC8074	13	TPCC8064-H	6	TPH5900CNH	8		
TK4P60D	37	TK7J90E	40	TPC8075	13	TPCC8065-H	6	TPH5R906NH	7		
TK4P60DA	37	TK7P50D	37	TPC8076	13	TPCC8066-H	6	TPH6400ENH	8		
TK4P60DB	37	TK7P60W	32	TPC8078	13	TPCC8067-H	6	TPH6R003NL	7		
TK4Q60DA	37	TK7P60W5	32	TPC8080	13	TPCC8068-H	6	TPH7R506NH	7		
TK50A04K3	10,42	TK7P65W	32	TPC8081	13	TPCC8069	12,45	TPH8R008NH	7		
TK50J30D	40	TK7Q60W	33	TPC8082	13	TPCC8070	12,45	TPH8R80ANH	7		
TK50P03M1	9	TK7Q65W	33	TPC8084	13	TPCC8073	12	TPH8R903NL	7		
TK50P04M1	9	TK7S10N1Z	41	TPC8085	13	TPCC8074	12	TPHR8504PL	7		
TK50S04K3L	14,41	TK80A04K3L	10,42	TPC8086	13	TPCC8076	12	TPHR9003NL	7		
TK55S10N1	9,41	TK80A08K3	10	TPC8087	13	TPCC8084	12	TPN11003NL	6		
TK56A12N1	10	TK80F08K3	14,42	TPC8088	13	TPCC8093	12	TPN11006NL	6		
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TK58E06N1	10	TK8A25DA	38	TPC8120	17	TPCC8105	16	TPN14006NH	6		
TK5A45DA	38	TK8A45D	38	TPC8123	17	TPCC8106	16,47	TPN1600ANH	6		
TK5A50D	38	TK8A45DA	38	TPC8124	17	TPCC8107	16,47	TPN2010FNH	6		
TK5A53D	38	TK8A50D	38	TPC8125	17	TPCC8131	16	TPN2R203NC	12		
TK5A55D	38	TK8A50DA	38	TPC8126	17	TPCC8136	16	TPN2R503NC	12		
TK5A60D	39	TK8A55DA	39	TPC8127	17	TPCC8137	16	TPN2R703NL	6		
TK5A60W	33	TK8A60DA	39	TPC8128	17	TPCC8138	16	TPN30008NH	6		
TK5A60W5	33	TK8A60W	33	TPC8129	17	TPCF8003	12	TPN3300ANH	6		
TK5A65D	39	TK8A60W5	33	TPC8132	17	TPCF8004	12	TPN4R203NC	12		
TK5A65DA	39	TK8A65D	39	TPC8133	17	TPCF8105	15	TPN4R303NL	6		
TK5A65W	33	TK8A65W	33	TPC8134	17	TPCF8107	15	TPN4R712MD	16		
TK5P50D	37	TK8P25DA	37	TPC8223-H	11	TPCF8108	15	TPN5900CNH	6		
TK5P53D	37	TK8P60W	32	TPC8224-H	11	TPCF8305	19	TPN6R003NL	6		
TK5P60W	32	TK8P60W5	32	TPC8227-H	11	TPCF8306	19	TPN6R303NC	12		

Low Voltage MOSFETs / 低耐圧 MOSFET

High-Speed Switching Series / 高速スイッチングシリーズ

(Single N-Channel) / (シングルNチャンネル)

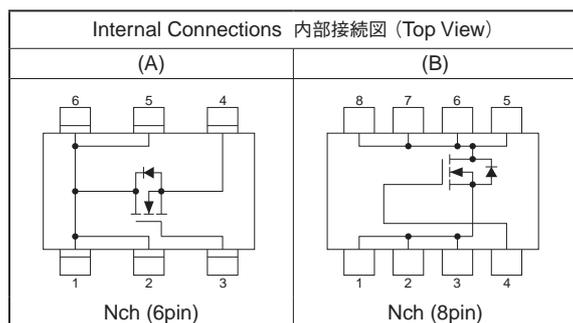
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Package	Part Number	Absolute Maximum Ratings				R _{DS(ON)} max (mΩ)		Ciss typ. (pF)	Crss typ. (pF)	Coss typ. (pF)	Qg typ. (nC)	Series	Internal Connections	Land Pattern Examples (mm)
		V _{DSS} (V)	V _{GSS} (V)	I _D (A)	P _D (W)	V _{GS} = 10 V	V _{GS} = 4.5 V							
 VS-6 (mm)	TPC6008-H	30	±20	5.9	2.2	60	74	232	16	68	4.8	(A)		
	TPC6009-H	40	±20	5.3	2.2	81	98	225	13	54	4.7			
	TPC6010-H	60	±20	6.1	2.2	59	63	640	24	95	12			
 PS-8 (mm)	TPCP8007-H	60	±20	5	1.68	57	64	640	25	90	11	(B)		
 TSON Advance (mm)	TPCC8067-H	30	±20	9	15	25	33	690	28	120	4.7	(B)		
	TPCC8066-H		±20	11	17	15	19	1100	49	190	7.6			
	TPN11003NL		±20	11	19	11	16	510	18	300	3.3			
	TPCC8065-H		±20	13	18	11.4	14.5	1350	63	240	9.9			
	TPCC8068-H		±20	13	17	11.6	16	980	57	210	7.2			
	TPCC8064-H		±20	19	30	8.2	10.6	1600	78	290	11			
	TPN8R903NL		±20	20	22	8.9	12.7	630	21	350	4.4			
	TPN6R003NL		±20	27	32	6	8.3	1050	37	600	8.2			
	TPCC8062-H		±20	27	39	5.6	7.1	2400	120	430	17			
	TPN4R303NL		±20	40	34	4.3	6.3	1110	39	640	6.8			
	TPN2R703NL	±20	45	42	2.7	4.1	1600	53	890	9.5				
	TPN22006NH	60	±20	9	18	22	—	710	14	235	12			
	TPN14006NH		±20	13	30	14	—	1000	25	310	15			
	TPN11006NL		±20	17	30	11.4	17	1500	23	350	23			
	TPN7R506NH		±20	26	42	7.5	—	1410	28	480	22			
	TPN30008NH		80	±20	9.6	27	30	—	710	10	170	11		
	TPN13008NH *			±20	18	42	13.3	—	1230	20	290	18		
	TPN3300ANH	100	±20	9.4	27	33	—	680	8.8	130	11			
	TPN1600ANH		±20	17	42	16	—	1230	18	220	19			
	TPN5900CNH		150	±20	9	39	59	—	460	3	80	7		
TPN1110ENH	200		±20	7.2	39	114	—	460	3	55	7			
TPN2010FNH	250	±20	5.6	39	198	—	460	3	45	7				
 DSOP Advance (mm)	TPWR8503NL *	30	±20	150	142	0.85	1.3	5300	130	2700	32	(B)		
	TPWR8004PL *	40	±20	150	170	0.8	1.35	7370	58	1930	103			
	TPW2R508NH *	75	±20	150	142	2.5	—	4600	50	1100	72			
	TPW4R008NH *	80	±20	116	142	4	—	4100	32	890	59			
	TPW4R50ANH *	100	±20	92	142	4.5	—	4000	31	700	58			
	TPW1500CNH *	150	±20	38	142	15.4	—	1700	7	280	22			
	TPW2900ENH *	200	±20	33	142	29	—	1700	7	180	22			
TPW5200FNH *	250	±20	26	142	52	—	1700	7	140	22				

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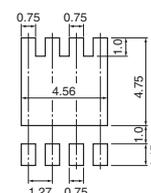
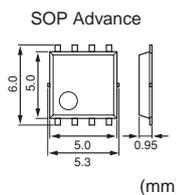
* ご購入の前に、お客様が希望される当社製品のRoHS適合情報を担当営業に必ずご確認ください。



* The internal connection diagrams only show the general configurations of the circuits.

* 内部接続図はイメージ図です。

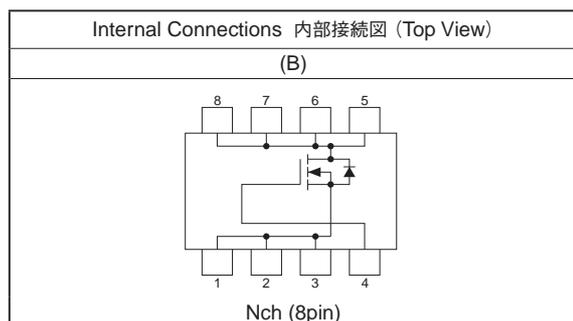
Package	Part Number	Absolute Maximum Ratings				R _{DS(ON)} max (mΩ)		Ciss typ. (pF)	Crss typ. (pF)	Coss typ. (pF)	Qg typ. (nC)	Series	Internal Connections	Land Pattern Examples (mm)
		V _{DSS} (V)	V _{GSS} (V)	I _D (A)	P _D (W)	V _{GS} = 10 V	V _{GS} = 4.5 V							
SOP Advance	TPH11003NL	30	±20	11	21	11	16	510	18	300	3.3	U-MOSVIII-H	(B)	
	TPCA8068-H		±20	15	21	11.6	16	980	57	210	7.2	U-MOSVII-H		
	TPCA8065-H		±20	16	25	11.4	14.5	1350	63	240	9.9	U-MOSVII-H		
	TPCA8064-H		±20	20	32	8.2	10.6	1600	78	290	11	U-MOSVII-H		
	TPH8R903NL		±20	20	24	8.9	12.7	630	21	350	4.4	U-MOSVIII-H		
	TPCA8063-H		±20	22	35	6.8	8.7	1900	93	340	13	U-MOSVII-H		
	TPCA8062-H		±20	28	42	5.6	7.1	2400	120	430	17	U-MOSVII-H		
	TPCA8059-H		±20	32	45	3.8	4.8	2900	150	530	21	U-MOSVII-H		
	TPCA8091-H *		±20	35	25	6	8.4	1410	110	280	9	U-MOSVII-H		
	TPCA8058-H		±20	38	52	3	3.8	3600	200	680	26	U-MOSVII-H		
	TPH6R003NL		±20	38	34	6	8.3	1050	37	600	8.2	U-MOSVIII-H		
	TPH4R003NL		±20	40	36	4	6.2	1110	39	640	6.8	U-MOSVIII-H		
	TPCA8057-H		±20	42	57	2.6	3.2	4300	240	810	31	U-MOSVII-H		
	TPH3R203NL		±20	47	44	3.2	4.7	1600	53	890	9.5	U-MOSVIII-H		
	TPCA8056-H		±20	48	63	2.2	2.7	5200	290	1000	38	U-MOSVII-H		
	TPCA8055-H		±20	56	70	1.9	2.3	6400	360	1200	47	U-MOSVII-H		
	TPH1R403NL		±20	60	64	1.4	2.1	3400	93	1800	20	U-MOSVIII-H		
	TPHR9003NL		±20	60	78	0.9	1.4	5300	130	2700	32	U-MOSVIII-H		
	TPCA8052-H		±20	20	30	11.3	13.1	1620	85	280	25	U-MOSVI-H		
	TPCA8047-H		±20	32	45	7.3	8.5	2590	135	440	43	U-MOSVI-H		
	TPCA8046-H		±20	38	45	5.4	6.3	3545	185	600	55	U-MOSVI-H		
	TPCA8045-H		±20	46	45	3.6	4.1	5800	305	950	90	U-MOSVI-H		
	TPH1R204PL *		±20	150	132	1.24	2.1	5500	93	1300	74	U-MOSIX-H		
	TPHR8504PL *		±20	150	170	0.85	1.4	7370	58	1930	103	U-MOSIX-H		
	TPH1R005PL *		±20	150	170	1.04	1.7	7350	64	1860	99	U-MOSIX-H		
	TPH14006NH *		±20	14	32	14	—	1000	25	310	16	U-MOSVIII-H		
	TPCA8053-H		±20	15	30	22.3	24	1620	60	200	25	U-MOSVI-H		
	TPH11006NL		±20	17	34	11.4	17	1500	23	350	23	U-MOSVIII-H		
	TPH7R506NH *		±20	22	45	7.5	—	1785	40	575	31	U-MOSVIII-H		
	TPCA8049-H		±20	28	45	10.4	11.2	3545	130	420	55	U-MOSVI-H		
	TPH5R906NH *		±20	28	57	5.9	—	2340	50	745	38	U-MOSVIII-H		
	TPH4R606NH *		±20	32	63	4.6	—	3050	60	990	49	U-MOSVIII-H		
	TPCA8048-H		±20	35	45	6.6	7.1	5800	210	650	90	U-MOSVI-H		
	TPH2R306NH *		±20	60	78	2.3	—	4700	55	1500	72	U-MOSVIII-H		
	TPH2R608NH		±20	150	142	2.6	—	4600	50	1100	72	U-MOSVIII-H		
	TPH12008NH		±20	24	48	12.3	—	1490	16	330	22	U-MOSVIII-H		
	TPCA8051-H		±20	28	45	9.4	9.8	5800	150	520	91	U-MOSVI-H		
	TPH8R008NH *		±20	34	61	8	—	2300	23	520	35	U-MOSVIII-H		
	TPH4R008NH		±20	60	78	4	—	4100	32	890	59	U-MOSVIII-H		
	TPH1400ANH *		±20	24	48	13.6	—	1440	15	260	22	U-MOSVIII-H		
TPH8R80ANH *	±20	32	61	8.8	—	2180	21	410	33	U-MOSVIII-H				
TPH4R50ANH *	±20	60	78	4.5	—	4000	31	700	58	U-MOSVIII-H				



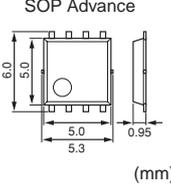
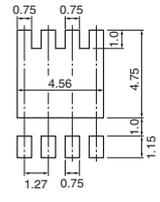
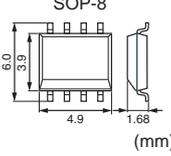
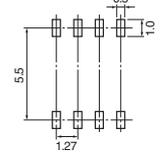
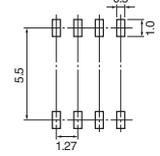
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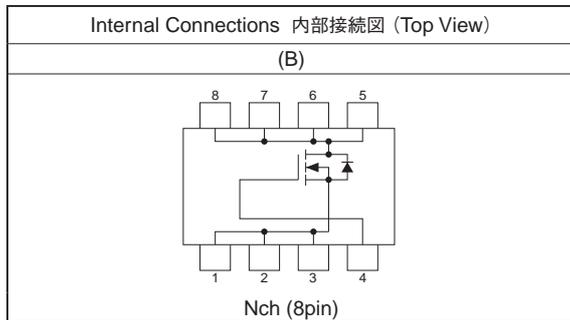
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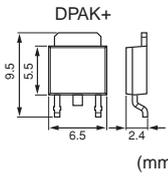
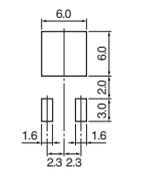
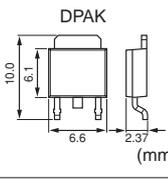
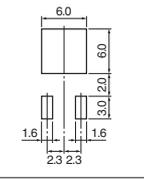
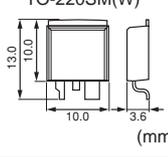
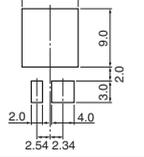
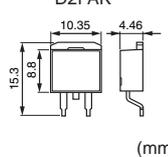
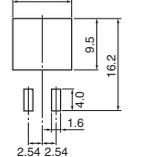
- The internal connection diagrams only show the general configurations of the circuits.
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Package	Part Number	Absolute Maximum Ratings				R _{DS(ON)} max (mΩ)		Ciss typ. (pF)	Crss typ. (pF)	Coss typ. (pF)	Qg typ. (nC)	Series	Internal Connections	Land Pattern Examples (mm)				
		V _{DSS} (V)	V _{GSS} (V)	I _D (A)	P _D (W)	V _{GS} = 10 V	V _{GS} = 4.5 V											
(Continued from previous page)  SOP Advance (mm)	TPH5900CNH	150	±20	9	42	59	—	460	3	80	7	(B)						
	TPH3300CNH		±20	18	57	33	—	810	3	140	10.6							
	TPH1500CNH		±20	38	78	15.4	—	1700	7	280	22							
	 SOP-8 (mm)	TPH1110ENH	200	±20	7.2	42	114	—	460	3	55			7	(B)			
		TPH6400ENH		±20	13	57	64	—	810	3	90			11.2				
		TPH2900ENH		±20	33	78	29	—	1700	7	180			22				
		TPH2010FNH	250	±20	5.6	42	198	—	460	3	45			7			(B)	
		TPH1110FNH		±20	10	57	112	—	810	3	75			11				
		TPH5200FNH	±20	26	78	52	—	1700	7	140	22							
TPC8067-H		30	±20	9	1.9	25	33	690	28	120	4.7	U-MOSVII-H						
TPC8066-H			±20	11	1.9	16	19	1100	49	190	7.6	U-MOSVII-H						
TPC8065-H			±20	13	1.9	11.6	14.7	1350	63	240	9.9	U-MOSVII-H						
TP89R103NL			±20	15	1.9	9.1	12.9	630	21	350	4.4	U-MOSVIII-H						
TPC8064-H			±20	16	1.9	8.4	10.8	1600	78	290	11	U-MOSVII-H						
TPC8063-H			±20	17	1.9	7	8.9	1900	93	340	13	U-MOSVII-H						
TP86R203NL			±20	18	1.9	6.2	8.5	1050	37	600	8.2	U-MOSVIII-H						
TPC8055-H			±20	18	1.9	2.1	2.5	6400	360	1200	47	U-MOSVII-H						
TPC8056-H			±20	18	1.9	2.4	2.9	5200	290	1000	38	U-MOSVII-H						
TPC8057-H			±20	18	1.9	2.8	3.4	4300	240	810	31	U-MOSVII-H						
TPC8058-H		±20	18	1.9	3.2	4	3600	200	680	26	U-MOSVII-H							
TPC8059-H		±20	18	1.9	4	5	2900	150	530	21	U-MOSVII-H							
TPC8062-H		±20	18	1.9	5.8	7.3	2400	120	430	17	U-MOSVII-H							
TPC8089-H		40	±20	7.2	1.9	32	36	850	40	145	14	U-MOSVI-H						
TPC8052-H			±20	12	1.9	11.5	13.3	1620	85	280	25	U-MOSVI-H						
TPC8047-H			±20	16	1.9	7.6	8.8	2590	135	440	43	U-MOSVI-H						
TPC8045-H			±20	18	1.9	3.9	4.4	5800	305	950	90	U-MOSVI-H						
TPC8046-H	60	±20	18	1.9	5.7	6.6	3545	185	600	57	U-MOSVI-H							
TPC8053-H		±20	9	1.9	22.5	24.2	1620	60	200	25	U-MOSVI-H							
TPC8050-H		±20	11	1.9	14.5	15.6	2590	95	300	41	U-MOSVI-H							
TPC8049-H		±20	13	1.9	10.7	11.5	3545	130	420	56	U-MOSVI-H							
TPC8048-H	80	±20	16	1.9	6.9	7.4	5800	210	650	87	U-MOSVI-H							
TPC8051-H		±20	13	1.9	9.7	10.1	5800	150	520	85	U-MOSVI-H							

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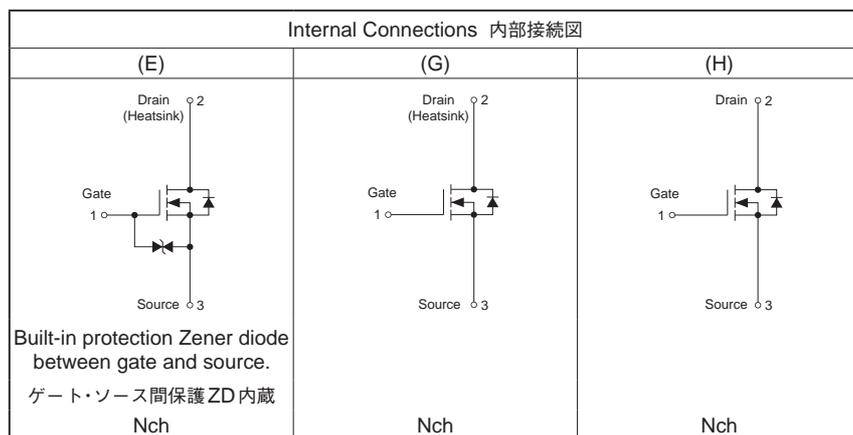


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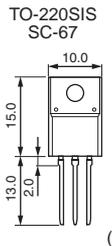
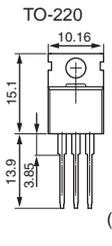
Package	Part Number	Absolute Maximum Ratings				R _{DS(ON)} max (mΩ)		C _{iss} typ. (pF)	C _{rss} typ. (pF)	C _{oss} typ. (pF)	Q _g typ. (nC)	Series	Internal Connections	Land Pattern Examples (mm)
		V _{DSS} (V)	V _{GSS} (V)	I _D (A)	P _D (W)	V _{GS} = 10 V	V _{GS} = 4.5 V							
 (mm)	TK15S04N1L *	40	±20	15	46	17.8	37	610	50	390	10	U-MOSVIII-H	(E)	
	TK65S04N1L *		±20	65	107	4.3	7.8	2550	130	1430	39	U-MOSVIII-H		
	TK100S04N1L *		±20	100	100	2.3	4.5	5490	220	3000	76	U-MOSVIII-H		
	TK25S06N1S **		±20	25	53	18.5	36.8	855	69	490	15	U-MOSVIII-H		
	TK90S06N1S **		±20	90	100	3.3	5.2	5400	350	2630	81	U-MOSVIII-H		
	TK33S10N1H **		±20	33	78.9	9.7	—	2050	140	1070	28	U-MOSVIII-H		
 (mm)	TK40P03M1	30	±20	40	33	10.8	14.4	1150	85	260	9.4	U-MOSVI-H	(G)	
	TK45P03M1		±20	45	39	9.7	12	1500	100	320	13	U-MOSVI-H		
	TK50P03M1		±20	50	47	7.5	9.8	1700	125	380	13.3	U-MOSVI-H		
	TK20P04M1	40	±20	20	27	29	34	985	37	159	15	U-MOSVI-H		
	TK40P04M1		±20	40	47	11	13.4	1920	90	310	29	U-MOSVI-H		
	TK50P04M1		±20	50	60	8.7	10.2	2600	110	420	38	U-MOSVI-H		
 (mm)	TK200F04N1L *	40	±20	200	375	0.9	—	14920	650	7680	214	U-MOSVIII-H	(G)	
	TK160F10N1 *	100	±20	160	375	2.4	—	8510	500	3960	121	U-MOSVIII-H		
 (mm)	TK65G10N1	100	±20	65	156	4.5	—	5400	42	950	81	U-MOSVIII-H	(H)	

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*: New product / 新製品
 **: Under development / 開発中

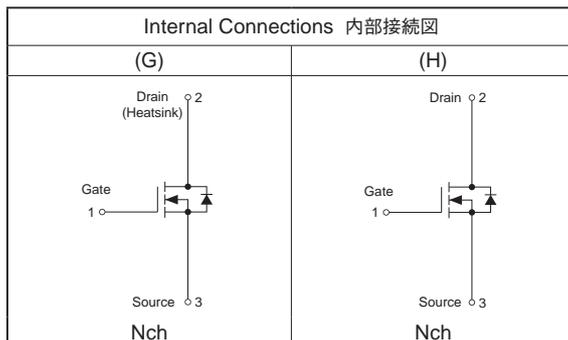


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Package	Part Number	Absolute Maximum Ratings				R _{DS(ON)} max (mΩ)		Ciss typ. (pF)	Crss typ. (pF)	Coss typ. (pF)	Qg typ. (nC)	Series	Internal Connections	Land Pattern Examples (mm)
		V _{DSS} (V)	V _{GSS} (V)	I _D (A)	P _D (W)	V _{GS} = 10 V	V _{GS} = 4.5 V							
 TO-220SIS SC-67 (mm)	TK50A04K3	40	±20	50	42	3.5	—	4500	900	1100	102	U-MOSIV	(H)	
	TK80A04K3L		±20	80	48	2.4	—	9400	1200	1900	190	U-MOSIV		
	TK30A06N1	60	±20	30	25	15	—	1050	33	400	16	U-MOSVIII-H		
	TK40A06N1		±20	40	30	10.4	—	1700	40	580	23	U-MOSVIII-H		
	TK58A06N1		±20	58	35	5.4	—	3400	45	1120	46	U-MOSVIII-H		
	TK100A06N1		±20	100	45	2.7	—	10500	50	3500	140	U-MOSVIII-H		
	TK80A08K3	75	±20	80	40	4.5	—	8200	770	1140	175	U-MOSIV		
	TK35A08N1	80	±20	35	30	12.2	—	1700	18	440	25	U-MOSVIII-H		
	TK46A08N1		±20	46	35	8.4	—	2500	22	620	37	U-MOSVIII-H		
	TK72A08N1		±20	72	45	4.5	—	5500	38	1300	81	U-MOSVIII-H		
	TK100A08N1		±20	100	45	3.2	—	9000	52	2100	130	U-MOSVIII-H		
	TK8A10K3	100	±20	8	18	120	—	530	55	75	12.9	U-MOSIV		
	TK12A10K3		±20	12	20	80	—	780	75	105	18	U-MOSIV		
	TK22A10N1		±20	22	30	13.8	—	1800	18	310	28	U-MOSVIII-H		
	TK25A10K3		±20	25	25	40	—	1580	135	200	34	U-MOSIV		
	TK34A10N1		±20	34	35	9.5	—	2600	23	450	38	U-MOSVIII-H		
	TK40A10N1		±20	40	35	8.2	—	3000	29	520	49	U-MOSVIII-H		
	TK65A10N1		±20	65	45	4.8	—	5400	42	950	81	U-MOSVIII-H		
	TK100A10N1		±20	100	45	3.8	—	8800	63	1500	140	U-MOSVIII-H		
	TK32A12N1	120	±20	32	30	13.8	—	2000	13	330	34	U-MOSVIII-H		
TK42A12N1	±20		42	35	9.4	—	3100	16	490	52	U-MOSVIII-H			
TK56A12N1	±20		56	45	7.5	—	4200	19	650	69	U-MOSVIII-H			
TK72A12N1	±20		72	45	4.5	—	8100	30	1200	130	U-MOSVIII-H			
 TO-220 (mm)	TK30E06N1	60	±20	30	53	15	—	1050	33	400	16	U-MOSVIII-H	(G)	
	TK40E06N1		±20	40	67	10.4	—	1700	40	580	23	U-MOSVIII-H		
	TK58E06N1		±20	58	110	5.4	—	3400	45	1120	46	U-MOSVIII-H		
	TK100E06N1		±20	100	255	2.3	—	10500	50	3500	140	U-MOSVIII-H		
	TK35E08N1	80	±20	35	72	12.2	—	1700	18	440	25	U-MOSVIII-H		
	TK46E08N1		±20	46	103	8.4	—	2500	22	620	37	U-MOSVIII-H		
	TK72E08N1		±20	72	192	4.3	—	5500	38	1300	81	U-MOSVIII-H		
	TK100E08N1		±20	100	255	3.2	—	9000	52	2100	130	U-MOSVIII-H		
	TK18E10K3	100	±20	18	71	42	—	1580	135	200	33	U-MOSIV		
	TK22E10N1		±20	22	72	13.8	—	1800	18	310	28	U-MOSVIII-H		
	TK34E10N1		±20	34	103	9.5	—	2600	23	450	38	U-MOSVIII-H		
	TK40E10N1		±20	40	126	8.2	—	3000	29	520	49	U-MOSVIII-H		
	TK65E10N1	120	±20	65	192	4.8	—	5400	42	950	81	U-MOSVIII-H		
	TK100E10N1		±20	100	255	3.4	—	8800	63	1500	140	U-MOSVIII-H		
	TK32E12N1		±20	32	98	13.8	—	2000	13	330	34	U-MOSVIII-H		
	TK42E12N1		±20	42	140	9.4	—	3100	16	490	52	U-MOSVIII-H		
TK56E12N1	120	±20	56	168	7	—	4200	19	650	69	U-MOSVIII-H			
TK72E12N1		±20	72	255	4.4	—	8100	30	1200	130	U-MOSVIII-H			

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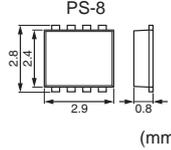
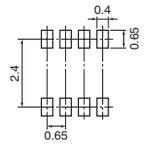
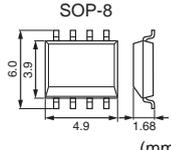
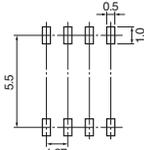
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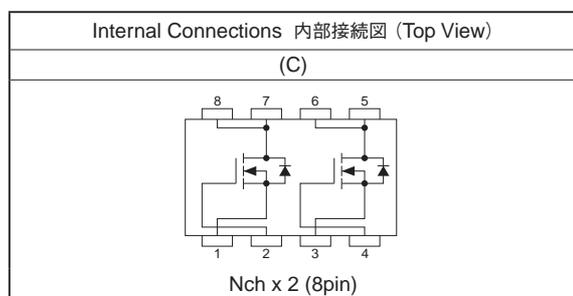
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(Dual Channel) / (デュアルチャネル)

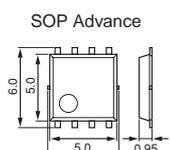
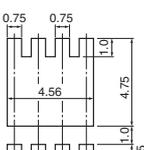
Package	Polarity	Part Number	Absolute Maximum Ratings				R _{DS(ON)} max (mΩ)		Ciss typ. (pF)	Crss typ. (pF)	Coss typ. (pF)	Qg typ. (nC)	Series	Internal Connections	Land Pattern Examples (mm)
			V _{DSS} (V)	V _{GSS} (V)	I _D (A)	P _D (W)	V _{GS} = 10 V	V _{GS} = 4.5 V							
 (mm)	Nchx2	TPCP8205-H	30	±20	6.5	1.48	26	29	830	53	177	13.8	U-MOSVI-H	(C)	
 (mm)	Nchx2	TPC8224-H	30	±20	8	1.5	26	34	690	28	120	4.7	U-MOSVII-H	(C)	
		TPC8223-H		±20	9	1.5	17	21	1190	55	210	8.3	U-MOSVII-H		
		TPC8227-H	40	±20	5.1	1.5	33	40	640	35	115	10	U-MOSVI-H		
		TPC8228-H	60	±20	3.8	1.5	57	64	640	25	90	11	U-MOSVI-H		
		TPC8229-H	80	±20	3.2	1.5	80	87	640	17	75	11	U-MOSVI-H		

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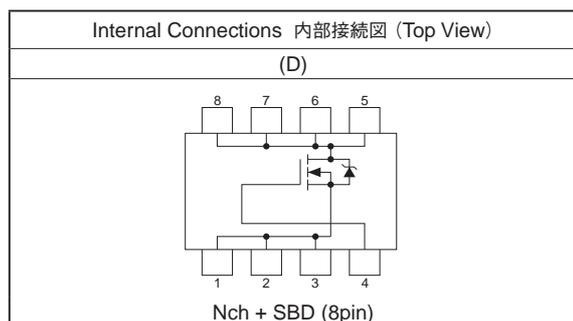


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(Built-in Schottky Barrier Diode) / (SBD混載品)

Package	Polarity	Part Number	Absolute Maximum Ratings				R _{DS(ON)} max (mΩ)		Ciss typ. (pF)	Crss typ. (pF)	Coss typ. (pF)	Qg typ. (nC)	Series	Internal Connections	Land Pattern Examples (mm)
			V _{DSS} (V)	V _{GSS} (V)	I _D (A)	P _D (W)	V _{GS} = 10 V	V _{GS} = 4.5 V							
 (mm)	Nch + SBD	TPCA8A11-H	30	±20	35	52	3.6	4.6	3200	170	600	23	U-MOSVII-H	(D)	
		TPCA8A10-H		±20	40	58	3	3.8	4000	200	810	29	U-MOSVII-H		
		TPCA8A09-H		±20	51	70	2.3	2.8	5900	250	1100	41	U-MOSVII-H		

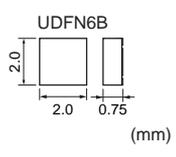
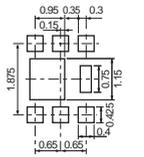
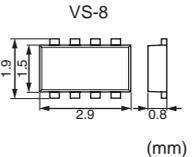
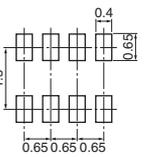
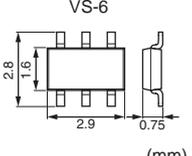
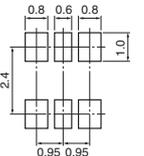
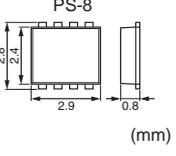
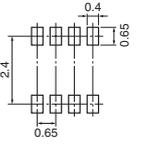
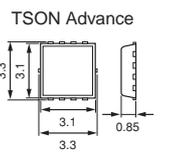
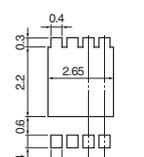
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Low On-Resistance Series / 低オン抵抗シリーズ
(Single N-Channel) / (シングルNチャンネル)

(1/3)

Package	Part Number	Absolute Maximum Ratings				R _{DS(ON)} max (mΩ)					C _{iss} typ. (pF)	C _{rss} typ. (pF)	C _{oss} typ. (pF)	Q _g typ. (nC)	Series	Internal Connections	Land Pattern Examples (mm)
		V _{DSS} (V)	V _{GSS} (V)	I _b (A)	P _b (W)	V _{GS} = 10 V	V _{GS} = 6.0 V	V _{GS} = 4.5 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V							
 UDFN6B (mm)	SSM6K504NU	30	±20	9	2.5	19.5	—	26	—	—	620	42	110	4.8	U-MOSVII	(A)	
	SSM6K513NU *		±20	15	2.5	8.9	—	12	—	—	1130	52	350	7.5	U-MOSIX-H		
	SSM6K514NU *	40	±20	12	2.5	11.6	—	17.3	—	—	1110	26	245	7.5	U-MOSIX-H		
	SSM6K341NU **	60	±20	6	2.5	36	—	51	—	—	550	35	300	9.3	U-MOSVIII-H		
	SSM6K361NU **	100	±20	3.5	2.5	69	—	92	—	—	430	22	160	3.2	U-MOSVIII-H		
 VS-8 (mm)	TPCF8003	20	±12	7	2.5	—	—	18	34	—	500	155	215	9.5	U-MOSIV	(E)	
	TPCF8004	30	±20	7	2.5	24	—	30	—	—	610	34	130	9	U-MOSVII		
 VS-6 (mm)	TPC6012	20	±12	6	2.2	—	—	20	38	—	630	150	180	9	U-MOSIV	(C)	
	TPC6067	30	±20	6	2.2	23	—	29	—	—	610	34	130	8	U-MOSVII		
 PS-8 (mm)	TPCP8011	40	±20	5	1.96 ₍₁₎	31.8	51.2	—	—	—	505	66	115	11.8	U-MOSIV	(G)	
	TPCP8010		±20	6	1.96 ₍₁₎	23.8	38.4	—	—	—	600	75	132	13.1	U-MOSIV		
	TPCP8009		±20	10	2.01 ₍₁₎	11.8	19.5	—	—	—	1250	165	265	25.1	U-MOSIV		
	TPCP8013	60	±20	4	1.96 ₍₁₎	51.8	77.9	—	—	—	515	48	86	12	U-MOSIV		
	TPCP8012		±20	8	2.01 ₍₁₎	20.2	29.1	—	—	—	1160	120	200	26.6	U-MOSIV		
 TSON Advance (mm)	TPCC8093	20	±12	21	30	—	—	5.8	9.5	—	1860	140	365	16	U-MOSVII	(F)	
	TPCC8074	30	±20	20	30	6.3	—	8.5	—	—	1800	88	330	25	U-MOSVII		
	TPN6R303NC		±20	20	19	6.3	—	8.4	—	—	1370	110	420	24	U-MOSVIII		
	TPN4R203NC		±20	23	22	4.2	—	6.4	—	—	1370	110	420	24	U-MOSVIII		
	TPCC8073		±20	27	39	4.5	—	5.9	—	—	2600	130	470	37	U-MOSVII		
	TPN2R503NC		±20	40	35	2.5	—	4.1	—	—	2230	160	650	40	U-MOSVIII		
	TPN2R203NC		±20	45	42	2.2	—	3.6	—	—	2230	160	650	34	U-MOSVIII		
	TPCC8084	33	±20	21	32	6.7	—	9	—	—	1900	98	300	27	U-MOSVII		
	TPCC8076		±20	27	39	4.6	—	6.2	—	—	2500	120	430	34	U-MOSVII		
	TPCC8069		40	±20	30	46.8	8.1	14.1	—	—	—	1640	200	340	34		
TPCC8070	60		±20	30	46.8	13.5	21.3	—	—	—	1600	150	260	34	U-MOSIV		

Note (1): Device mounted on a glass board. t = 5 seconds. / ガラスエポキシ基板。t = 5 秒。

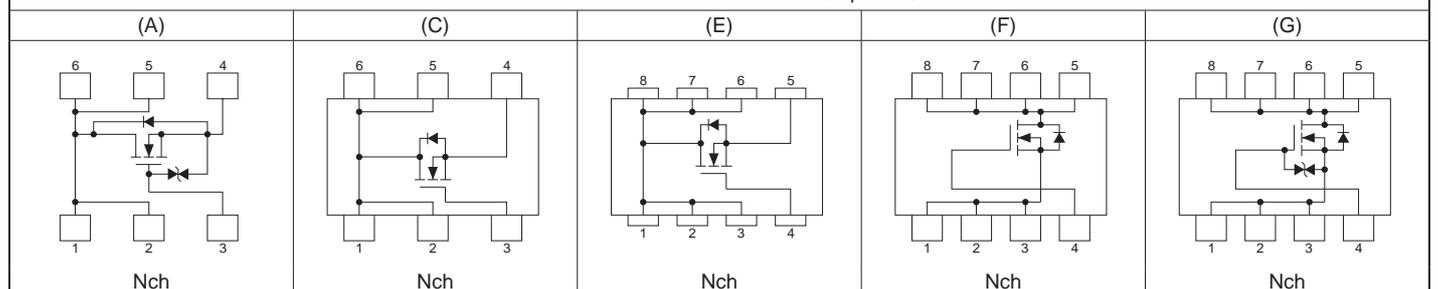
*: New product / 新製品

** : Under development / 開発中

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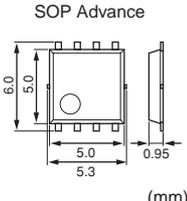
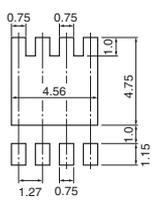
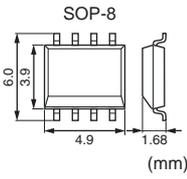
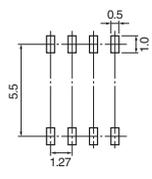
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Internal Connections 内部接続図 (Top View)



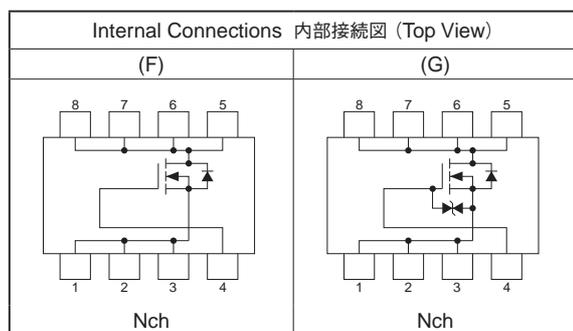
• The internal connection diagrams only show the general configurations of the circuits.

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Package	Part Number	Absolute Maximum Ratings				R _{DS(ON)} max (mΩ)					C _{iss} typ. (pF)	C _{rss} typ. (pF)	C _{oss} typ. (pF)	Q _g typ. (nC)	Series	Internal Connections	Land Pattern Examples (mm)
		V _{DSS} (V)	V _{GSS} (V)	I _D (A)	P _D (W)	V _{Gs1} = 10 V	V _{Gs1} = 6.0 V	V _{Gs1} = 4.5 V	V _{Gs1} = 2.5 V	V _{Gs1} = 1.8 V							
 <p>SOP Advance (mm)</p>	TPCA8082	30	±20	32	45	3.8	—	4.8	—	—	2900	150	530	41	U-MOSVII	(F)	
	TPCA8081		±20	38	52	3	—	3.8	—	—	3600	200	680	51	U-MOSVII		
	TPCA8080		±20	42	57	2.6	—	3.2	—	—	4300	240	810	61	U-MOSVII		
	TPCA8088		±20	48	63	2.2	—	2.7	—	—	5200	290	1000	74	U-MOSVII		
	TPCA8087	±20	56	70	1.9	—	2.3	—	—	6400	360	1200	91	U-MOSVII			
	TPCA8075	±20	48	63	2.4	—	3.1	—	—	5200	300	970	70	U-MOSVII			
	TPCA8078	±20	54	70	2.1	—	2.6	—	—	6400	370	1200	90	U-MOSVII			
	TPCA8085	40	±20	40	55	5.7	10.4	—	—	—	2050	250	410	41	U-MOSIV		
TPCA8086	60	±20	35	55	11.2	16.6	—	—	—	1990	170	290	41	U-MOSIV	(G)		
 <p>SOP-8 (mm)</p>	TPC8092	30	±20	15	1.9	9	—	11.1	—	—	1800	88	330	25	U-MOSVII	(F)	
	TPC8074		±20	17	1.9	6.5	—	8.7	—	—	1800	88	330	25	U-MOSVII	(G)	
	TPC8086		±20	17	1.9	6.4	—	8.5	—	—	1900	90	330	26	U-MOSVII	(G)	
	TPC8073		±20	18	1.9	4.7	—	6.1	—	—	2600	130	470	37	U-MOSVII	(F)	
	TPC8080	±20	18	1.9	2.8	—	3.4	—	—	4300	240	810	61	U-MOSVII	(F)		
	TPC8081	±20	18	1.9	3.2	—	4	—	—	3600	200	680	51	U-MOSVII	(F)		
	TPC8082	±20	18	1.9	4	—	5	—	—	2900	150	530	41	U-MOSVII	(F)		
	TPC8085	±20	18	1.9	4.7	—	6.1	—	—	2600	130	470	37	U-MOSVII	(G)		
	TPC8087	±20	18	1.9	2.1	—	2.5	—	—	6400	360	1200	91	U-MOSVII	(F)		
	TPC8088	±20	18	1.9	2.4	—	2.9	—	—	5200	290	1000	74	U-MOSVII	(F)		
	TPC8084	±20	17	1.9	6.9	—	9.2	—	—	1900	98	300	27	U-MOSVII	(G)		
	TPC8075	±20	18	1.9	2.6	—	3.3	—	—	5200	300	970	70	U-MOSVII	(F)		
	TPC8076	±20	18	1.9	4.9	—	6.5	—	—	2500	120	430	34	U-MOSVII	(G)		
TPC8078	±20	18	1.9	2.3	—	2.8	—	—	6400	370	1200	90	U-MOSVII	(F)			

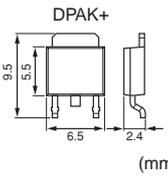
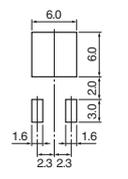
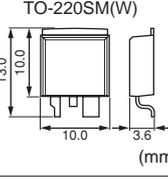
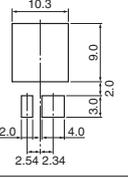
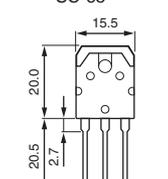
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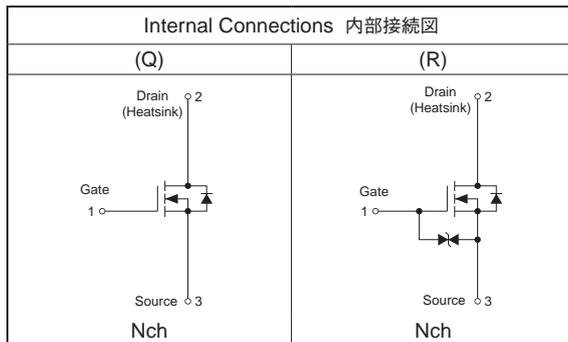
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Package	Part Number	Absolute Maximum Ratings				R _{DS(ON)} max (mΩ)					C _{iss} typ. (pF)	C _{rss} typ. (pF)	C _{oss} typ. (pF)	Q _g typ. (nC)	Series	Internal Connections	Land Pattern Examples (mm)
		V _{DSS} (V)	V _{GSS} (V)	I _D (A)	P _D (W)	V _{Gs} = 10 V	V _{Gs} = 6.0 V	V _{Gs} = 4.5 V	V _{Gs} = 2.5 V	V _{Gs} = 1.8 V							
 (mm)	TK20S04K3L	40	±20	20	38	14	26	—	—	—	820	110	190	18	U-MOSIV	(R)	
	TK35S04K3L		±20	35	58	10.3	15	—	—	—	1370	180	320	28	U-MOSIV		
	TK50S04K3L		±20	50	68	5.4	10	—	—	—	2010	255	435	42	U-MOSIV		
	TK8S06K3L		±20	8	25	54	80	—	—	—	400	40	80	10	U-MOSIV		
	TK20S06K3L	60	±20	20	38	29	40	—	—	—	780	75	136	18	U-MOSIV		
	TK30S06K3L		±20	30	58	18	30	—	—	—	1350	130	230	28	U-MOSIV		
	TK45S06K3L		±20	45	68	10.5	16.4	—	—	—	1950	185	315	41	U-MOSIV		
	TK80S06K3L		±20	80	100	5.5	7.8	—	—	—	4200	400	650	85	U-MOSIV		
 (mm)	TK100F04K3	40	±20	100	180	3	—	—	—	4500	900	1100	102	U-MOSIV	(Q)		
	TK100F04K3L		±20	100	180	3	4.5	—	—	—	4980	680	1100	105	U-MOSIV		(R)
	TK100F06K3	60	±20	100	180	5	—	—	—	4500	600	800	98	U-MOSIV	(Q)		
	TK130F06K3		±20	130	300	3.4	—	—	—	8400	1020	1420	170	U-MOSIV			
	TK80F08K3	75	±20	80	300	4.3	—	—	—	8200	770	1140	175	U-MOSIV	(Q)		
 (mm)	TK70J04K3Z	40	±20	70	125	4.1	—	—	—	4500	800	1150	100	U-MOSIV	(R)		
	TK75J04K3Z		±20	75	150	3	—	—	—	8450	1480	2060	190	U-MOSIV			
	TK70J06K3	60	±20	70	125	6	—	—	—	4500	600	800	98	U-MOSIV	(Q)		

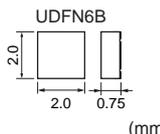
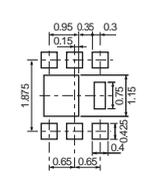
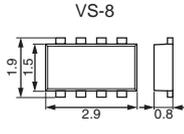
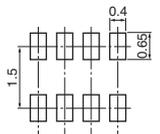
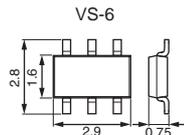
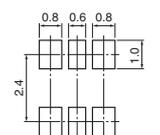
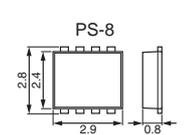
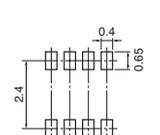
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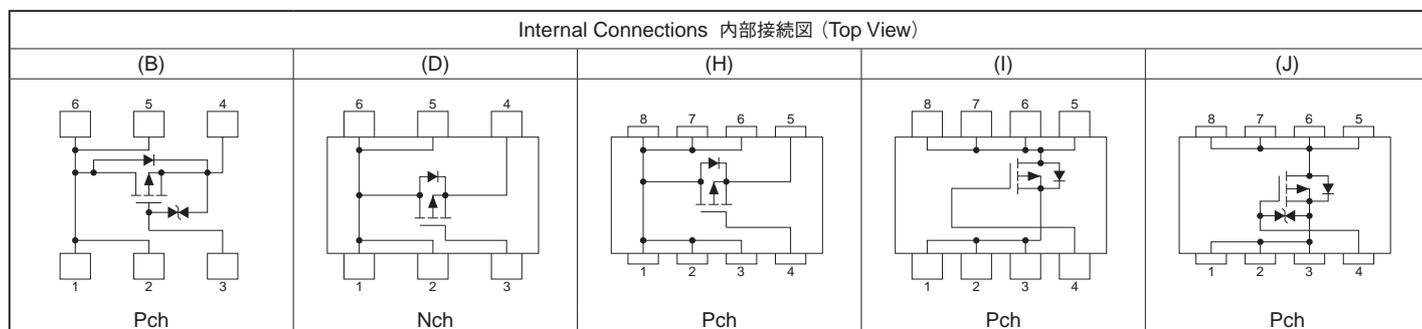
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Package	Part Number	Absolute Maximum Ratings				R _{DS(ON)} max (mΩ)					C _{iss} typ. (pF)	C _{rss} typ. (pF)	C _{oss} typ. (pF)	Q _g typ. (nC)	Series	Internal Connections	Land Pattern Examples (mm)	
		V _{DSS} (V)	V _{GSS} (V)	I _D (A)	P _D (W)	V _{Gs1} = 10 V	V _{Gs1} = 6.0 V	V _{Gs1} = 4.5 V	V _{Gs1} = 2.5 V	V _{Gs1} = 1.8 V								
 UDFN6B (mm)	SSM6J512NU	-12	±10	-10	2.5	—	—	18.7	25.7	40.1	1400	225	250	19.5	U-MOSVII	(B)		
	SSM6J505NU		±6	-12	2.5	—	—	12	16	21	2700	800	800	37.6	U-MOSVI			
	SSM6J511NU		±10	-14	2.5	—	—	10	13.5	19.2	3350	570	590	47	U-MOSVII			
	SSM6J502NU	-20	±8	-6	2	—	—	23.1	28.3	38.4	1800	190	205	24.8	U-MOSVI			
	SSM6J503NU		±8	-6	2	—	—	32.4	41.7	57.9	840	99	118	12.8	U-MOSVI			
	SSM6J501NU		±8	-10	2	—	—	15.3	19	26.5	2600	280	290	29.9	U-MOSVI			
	SSM6J509NU	**	-25/ +20	-4	2.5	42	—	—	66	—	—	600	100	100	TBD			U-MOSVI
	SSM6J508NU	**	-25/ +20	-6	2.5	26	—	—	40	—	—	1083	180	180	TBD			U-MOSVI
SSM6J507NU		-25/ +20	-10	2.5	20	—	—	28	—	—	1150	185	210	13.6	U-MOSVI			
 VS-8 (mm)	TPCF8105	-20	±12	-6	2.5	—	—	30	41	100	1100	160	190	17	U-MOSVI	(H)		
	TPCF8108		±12	-7	2.5	—	—	26	37	95	1320	180	210	19	U-MOSVI			
	TPCF8107	-30	-25/ +20	-6	2.5	28	—	—	38	—	—	970	170	200	22			U-MOSVI
 VS-6 (mm)	TPC6130	-20	±12	-2.8	2.2	—	—	106	164	—	360	47	63	5.1	U-MOSVI	(D)		
	TPC6113		±12	-5	2.2	—	—	55	85	—	690	93	117	10	U-MOSVI			
	TPC6111		±8	-5.5	2.2	—	—	40	57	80	700	100	140	10	U-MOSV			
	TPC6110	-30	-25/ +20	-4.5	2.2	56	—	—	77	—	—	510	85	110	14			U-MOSVI
 PS-8 (mm)	TPCP8105	-20	±12	-7.2	1.68	—	—	17	23	60	2280	296	340	28	U-MOSVI	(J)		
	TPCP8106	-30	-25/ +20	-5.2	1.68	33	—	—	44	—	870	150	190	19	U-MOSVI	(I)		
	TPCP8109	-40	-20/ +10	-4.5	1.96 (1)	52.3	76.8	—	—	—	810	85	130	18	U-MOSVI	(J)		
	TPCP8107		-20/ +10	-8	2.01 (1)	18	26.8	—	—	—	2160	238	292	44.6	U-MOSVI			
	TPCP8111	-60	-20/ +10	-3	1.96 (1)	117	158.4	—	—	—	760	60	90	17	U-MOSVI	(J)		
	TPCP8110		-20/ +10	-5	2.01 (1)	39.5	53.2	—	—	—	2075	150	205	45	U-MOSVI			

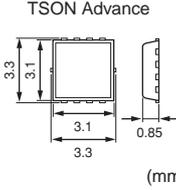
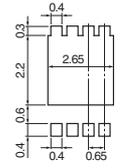
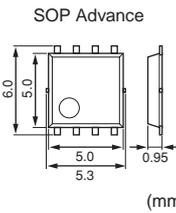
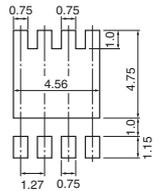
Note (1): Device mounted on a glass board. t = 5 seconds. / ガラスエポキシ基板。t = 5 秒。

** : Under development / 開発中

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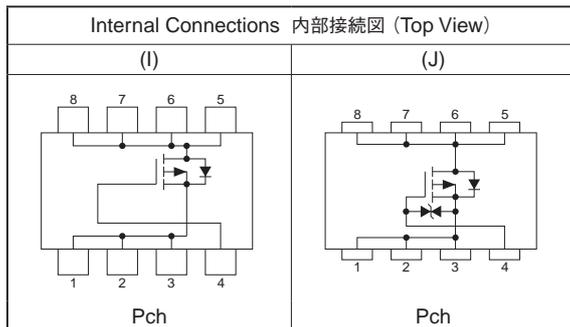


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Package	Part Number	Absolute Maximum Ratings				R _{DS(ON)} max (mΩ)					C _{iss} typ. (pF)	C _{rss} typ. (pF)	C _{oss} typ. (pF)	Q _g typ. (nC)	Series	Internal Connections	Land Pattern Examples (mm)	
		V _{DSS} (V)	V _{GSS} (V)	I _D (A)	P _D (W)	V _{Gs1} = 10 V	V _{Gs1} = 6.0 V	V _{Gs1} = 4.5 V	V _{Gs1} = 2.5 V	V _{Gs1} = 1.8 V								
 <p>TSON Advance (mm)</p>	TPCC8136	-20	±12	-9.4	18	—	—	16	22	60	2350	330	360	36	U-MOSVI	(I)		
	TPCC8137		±12	-13	30	—	—	10	16	52	2990	400	435	43	U-MOSVI			
	TPCC8138		±12	-18	39	—	—	7.5	11	42	4165	575	620	63	U-MOSVI			
	TPN4R712MD		±12	-36	42	—	—	4.7	8.1	—	4300	640	700	65	U-MOSVI			
	TPCC8131	-30	-25/+20	-10	20	17.6	—	23	—	—	1700	280	320	40	U-MOSVI			
	TPCC8103		±20	-18	27	12	—	—	—	—	1600	340	490	38	U-MOSV			
	TPCC8104		-25/+20	-20	27	8.8	—	12.4	—	—	2260	430	485	58	U-MOSVI			
	TPCC8105		-25/+20	-23	30	7.8	—	10.4	—	—	3240	520	580	76	U-MOSVI			
	TPCC8106	-40	-20/+10	-30	46.8	12.3	18.9	—	—	—	3100	320	390	66	U-MOSVI			(J)
	TPCC8107	-60	-20/+10	-25	46.8	30.5	42.9	—	—	—	2930	230	270	63	U-MOSVI			
 <p>SOP Advance (mm)</p>	TPH1R712MD	-20	±12	-60	78	—	—	1.7	2.7	—	10900	1550	2010	91	U-MOSVI	(I)		
	TPCA8131	-30	-25/+20	-13	27	17	—	22	—	—	1700	280	320	40	U-MOSVI			
	TPCA8109		-25/+20	-24	30	9	—	13	—	—	2400	400	460	56	U-MOSVI			
	TPCA8128		-25/+20	-34	45	4.8	—	6.7	—	—	4800	800	900	115	U-MOSVI			
	TPCA8120		-25/+20	-45	45	3	—	4	—	—	7420	1180	1440	190	U-MOSVI			
	TPCA8121	-20/+10	-45	45	3	—	4	—	—	7420	1180	1440	190	U-MOSVI				
	TPCA8124	-40	-20/+10	-35	55	10.5	14.6	—	—	—	3570	370	450	77	U-MOSVI			
	TPCA8122		-20/+10	-60	84	5	7.2	—	—	—	7340	770	980	152	U-MOSVI			
	TPCA8125	-60	-20/+10	-25	55	25.5	34.4	—	—	—	2650	260	320	78	U-MOSVI			
TPCA8123	-20/+10		-50	84	11.1	14.9	—	—	—	7000	540	680	163	U-MOSVI				

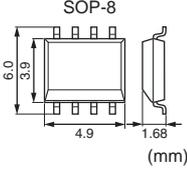
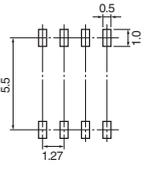
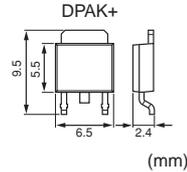
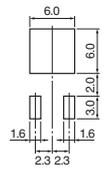
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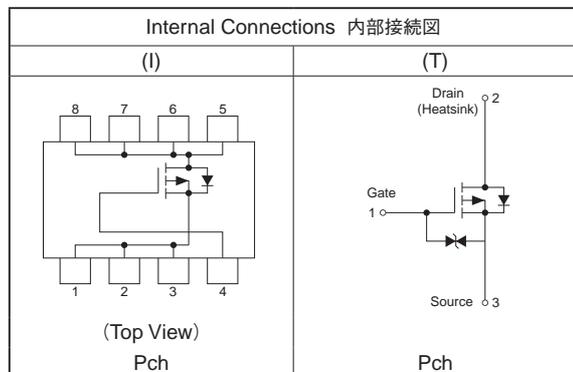


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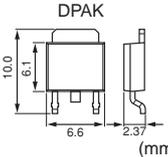
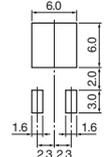
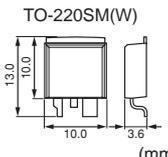
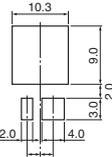
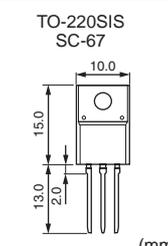
• 内部接続図はイメージ図です。

Package	Part Number	Absolute Maximum Ratings				R _{DS(ON)} max (mΩ)					C _{iss} typ. (pF)	C _{rss} typ. (pF)	C _{oss} typ. (pF)	Q _g typ. (nC)	Series	Internal Connections	Land Pattern Examples (mm)
		V _{DSS} (V)	V _{GSS} (V)	I _D (A)	P _D (W)	V _{Gs1} = 10 V	V _{Gs1} = 6.0 V	V _{Gs1} = 4.5 V	V _{Gs1} = 2.5 V	V _{Gs1} = 1.8 V							
	TPC8129	-30	-25/ +20	-9	1.9	22	-	28	-	-	1650	260	300	39	U-MOSVI	(I)	
	TPC8125		-25/ +20	-10	1.9	13	-	17	-	-	2580	430	490	64	U-MOSVI		
	TPC8123		-25/ +20	-11	1.9	9	-	12.5	-	-	2940	460	520	68	U-MOSVI		
	TPC8126		-25/ +20	-11	1.9	10	-	14	-	-	2400	400	460	56	U-MOSVI		
	TPC8127		-25/ +20	-13	1.9	6.5	-	8.9	-	-	3800	620	710	92	U-MOSVI		
	TPC8128		-25/ +20	-16	1.9	5	-	6.9	-	-	4800	800	900	115	U-MOSVI		
	TPC8120		-25/ +20	-18	1.9	3.2	-	4.2	-	-	7420	1180	1440	180	U-MOSVI		
	TPC8134		-25/ +20	-5	1.9	52	-	66	-	-	890	100	130	20	U-MOSVI		
	TPC8132		-25/ +20	-7	1.9	25	-	33	-	-	1580	190	230	34	U-MOSVI		
	TPC8133		-25/ +20	-9	1.9	15	-	18	-	-	2900	350	410	64	U-MOSVI		
	TPC8124		-25/ +20	-12	1.9	8	-	10	-	-	4750	540	620	104	U-MOSVI		
	TJ10S04M3L	-40	-20/ +10	-10	27	44	62	-	-	930	90	140	19	U-MOSVI	(T)		
	TJ20S04M3L		-20/ +10	-20	41	22.2	32	-	-	1850	180	250	37	U-MOSVI			
	TJ40S04M3L		-20/ +10	-40	68	9.1	13	-	-	4140	410	510	83	U-MOSVI			
	TJ60S04M3L		-20/ +10	-60	90	6.3	9.4	-	-	6510	570	780	125	U-MOSVI			
	TJ80S04M3L		-20/ +10	-80	100	5.2	7.9	-	-	7770	740	970	158	U-MOSVI			
	TJ8S06M3L		-20/ +10	-8	27	104	130	-	-	890	60	100	19	U-MOSVI			
	TJ15S06M3L		-20/ +10	-15	41	50	63	-	-	1770	130	180	36	U-MOSVI			
	TJ30S06M3L		-20/ +10	-30	68	21.8	28	-	-	3950	270	360	80	U-MOSVI			
	TJ50S06M3L		-20/ +10	-50	90	13.8	17.4	-	-	6290	410	560	124	U-MOSVI			
	TJ60S06M3L		-20/ +10	-60	100	11.2	14.5	-	-	7760	530	690	156	U-MOSVI			

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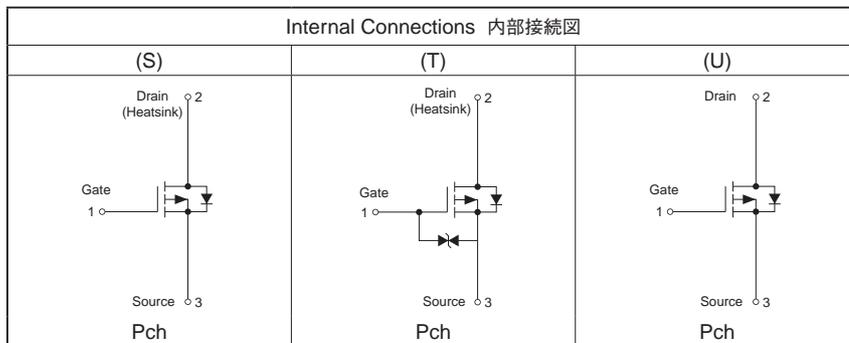


- The internal connection diagrams only show the general configurations of the circuits.
- 内部接続図はイメージ図です。

Package	Part Number	Absolute Maximum Ratings				$R_{DS(ON)}$ max (m Ω)					Ciss typ. (pF)	Crss typ. (pF)	Coss typ. (pF)	Cg typ. (nC)	Series	Internal Connections	Land Pattern Examples (mm)
		V _{DSS} (V)	V _{GSS} (V)	I _D (A)	P _D (W)	V _{Gs1} = 10 V	V _{Gs1} = 6.0 V	V _{Gs1} = 4.5 V	V _{Gs1} = 2.5 V	V _{Gs1} = 1.8 V							
 DPAK (mm)	TJ15P04M3	-40	± 20	-15	29	36	—	48	—	—	1100	130	170	26	U-MOSVI	(S)	
 TO-220SM(W) (mm)	TJ100F04M3L	-40	-20/ +10	-100	250	3.6	5.4	—	—	—	9500	1000	1550	250	U-MOSVI	(T)	
	TJ200F04M3L	-40	-20/ +10	-200	375	1.8	2.6	—	—	—	12800	1150	2400	460	U-MOSVI	(S)	
	TJ100F06M3L	-60	-20/ +10	-100	250	7.1	10.7	—	—	—	9000	700	1100	250	U-MOSVI	(T)	
	TJ150F06M3L	-60	-20/ +10	-150	300	5.6	6.1	—	—	—	12500	880	1750	420	U-MOSVI	(T)	
 TO-220SIS SC-67 (mm)	TJ9A10M3		± 20	-9	19	170	—	—	—	—	2900	120	150	47	U-MOSVI	(U)	
	TJ11A10M3	-100	± 20	-11	24	130	—	—	—	—	3200	135	190	69	U-MOSVI		
	TJ20A10M3		± 20	-20	35	90	—	—	—	—	5500	200	290	120	U-MOSVI		

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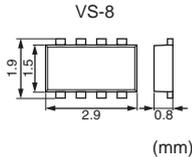
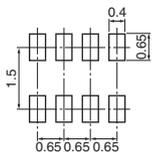
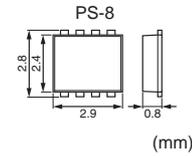
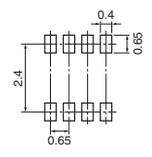
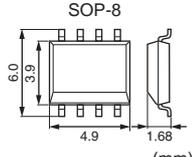
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・ The internal connection diagrams only show the general configurations of the circuits.

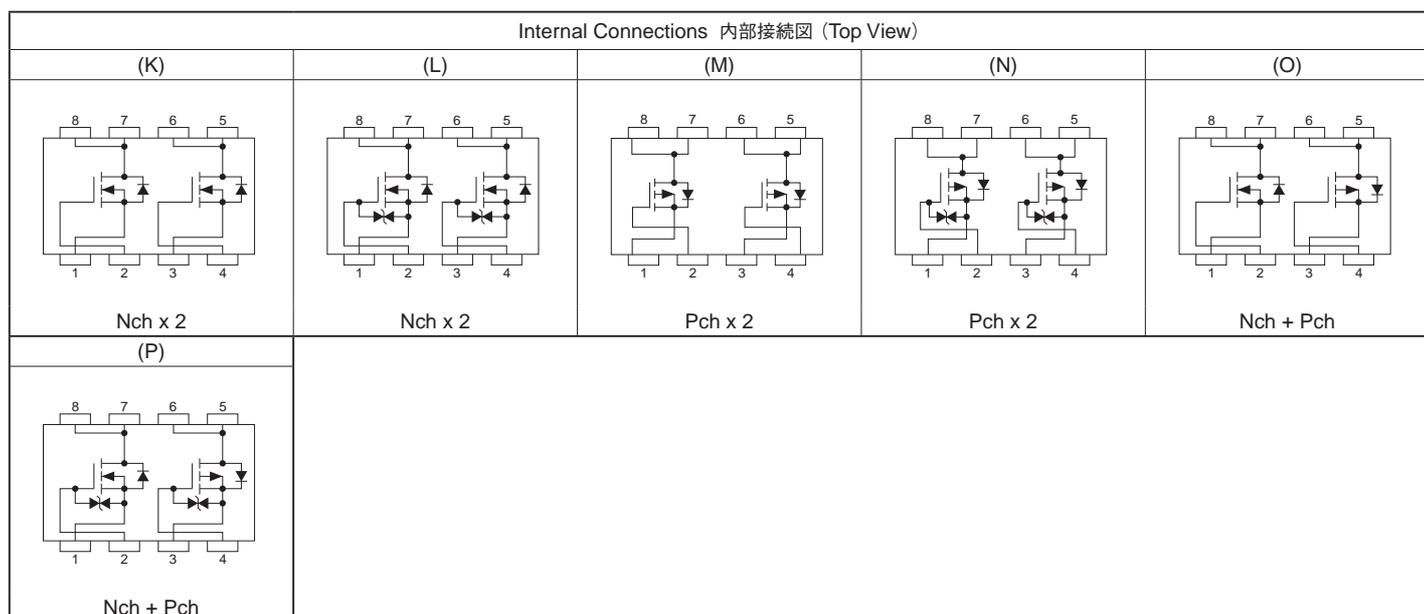
・ 内部接続図はイメージ図です。

(Dual Channel/Complementary) / (デュアルチャンネル/コンプリメンタリ)

Package	Polarity	Part Number	Absolute Maximum Ratings				R _{DS(ON)} max (mΩ)					C _{iss} typ. (pF)	C _{rss} typ. (pF)	C _{oss} typ. (pF)	Q _g typ. (nC)	Series	Internal Connections	Land Pattern Examples (mm)
			V _{DSS} (V)	V _{GSS} (V)	I _D (A)	P _D (W)	V _{Gs1} = 10 V	V _{Gs1} = 6.0 V	V _{Gs1} = 4.5 V	V _{Gs1} = 2.5 V	V _{Gs1} = 1.8 V							
 VS-8 (mm)	Pchx2	TPCF8305	-20	±12	-4	1.35	-	-	58	83	265	680	85	108	9.2	U-MOSVI	(M)	
		TPCF8306	-30	-25/ +20	-3.2	1.35	72	-	120	-	-	390	65	85	10	U-MOSVI		
 PS-8 (mm)	Nchx2	TPCP8206	20	±12	6	1.48	-	-	24	35	-	630	47	144	5.8	U-MOSVII	(K)	
		TPCP8204	30	±20	4.2	1.48	50	-	77	-	-	190	45	65	4.6	U-MOSIV		
		TPCP8207	40	±20	5	1.77 ⁽¹⁾	36.3	62.8	-	-	-	505	66	115	11.8	U-MOSIV		
	Pchx2	TPCP8303	-20	±8	-3.8	1.48	-	-	46	60	90	640	100	140	10	U-MOSV	(N)	
		TPCP8306		±12	-4	1.48	-	-	58	83	265	680	85	108	9.2	U-MOSVI		
		TPCP8305		±12	-6	1.48	-	-	30	42	-	1500	215	250	21.5	U-MOSVI		
	Nch + Pch	TPCP8404	30	±20	4	1.48	50	-	80	-	-	190	45	60	4.6	U-MOSIV	(O)	
			-30	±20	-4	1.48	50	-	80	-	-	510	110	170	13	U-MOSV		
		TPCP8405	30	±20	6.5	1.48	26	-	29	-	-	830	53	177	13.8	U-MOSVI-H	(O)	
			-30	±20	-6	1.48	31.3	-	42	-	-	1075	190	234	24.1	U-MOSVI		
TPCP8407	40	±20	5	1.77 ⁽¹⁾	36.3	62.8	-	-	-	505	66	115	11.8	U-MOSIV	(P)			
	-40	-20/ +10	-4	1.48	56.8	82.2	-	-	-	810	85	130	18	U-MOSVI				
TPCP8406	40	±20	6	1.48	32	-	36	-	-	850	40	142	13.7	U-MOSVI-H	(O)			
	-40	±20	-5	1.48	43.2	-	53.4	-	-	1105	133	166	24.2	U-MOSVI				
 SOP-8 (mm)	Nch + Pch	TPC8407	30	±20	9	1.5	17	-	21	-	-	1190	55	210	17	U-MOSVII-H	(O)	
			-30	±20	-7.4	1.5	23	-	29	-	-	1650	260	300	39	U-MOSVI		
		TPC8408	40	±20	6.1	1.5	32	-	36	-	-	850	40	145	14	U-MOSVI-H		
			-40	±20	-5.3	1.5	43	-	53	-	-	1105	135	165	24	U-MOSVI		

Note (1): Device mounted on a glass board. t = 5 seconds. / ガラスエポキシ基板。t = 5 秒。

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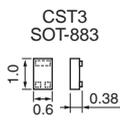
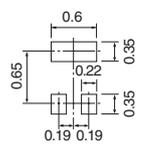
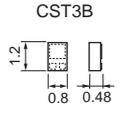
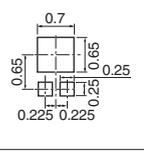
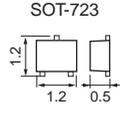
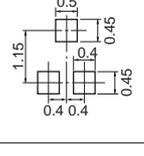
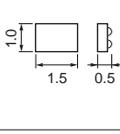
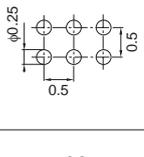
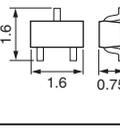
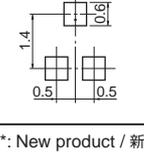


- ・ The internal connection diagrams only show the general configurations of the circuits.
- ・ 内部接続図はイメージ図です。

Small-Package Series / 小型パッケージシリーズ

(Semi-Power Type: Single N-Channel) / (セミパワータイプ: シングルNチャンネル)

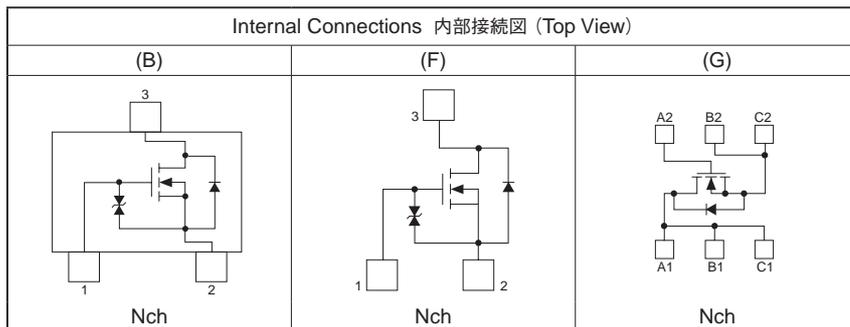
(1/2)

Package	Part Number	Absolute Maximum Ratings				R _{DS(ON)} max (mΩ)					C _{iss} typ. (pF)	C _{rss} typ. (pF)	C _{oss} typ. (pF)	Q _g typ. (nC)	Series	Internal Connections	Land Pattern Examples (mm)
		V _{DSS} (V)	V _{GSS} (V)	I _B (A)	P _D (W)	V _{Gs1} = 4.5 V	V _{Gs1} = 4.0 V	V _{Gs1} = 2.5 V	V _{Gs1} = 1.8 V	V _{Gs1} = 1.5 V							
 CST3 SOT-883 (mm)	SSM3K56ACT *	20	±8	1.4	0.5	235	—	300	480	840	55	6	16	1	U-MOSVII-H	(F)	
 CST3B (mm)	SSM3K59CTB *	40	±12	2	1	228	—	268	420	—	130	26	7.5	1.1	U-MOSVII-H	(F)	
 VESM SOT-723 (mm)	SSM3K56MFV *	20	±8	0.8	0.5	235	—	300	480	840	55	6	16	1	U-MOSVII-H	(B)	
 WCSP6C (mm)	SSM6K781G *	12	±8	7	1.6	18	—	23.2	47.4	124	600	120	250	5.4	U-MOSVII-H	(G)	
 SSM SOT-416 (mm)	SSM3K56FS	20	±8	0.8	0.5	235	—	300	480	840	55	6	16	1	U-MOSVII-H	(B)	

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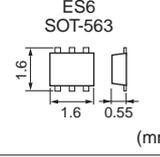
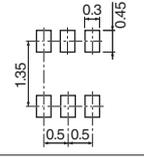
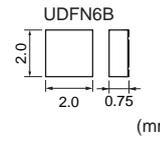
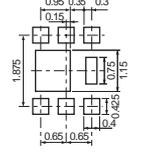
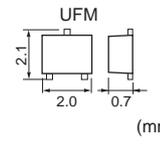
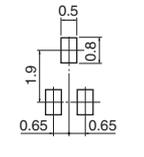
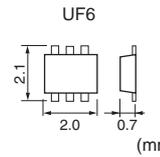
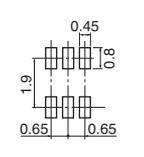
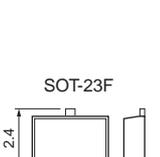
*: New product / 新製品

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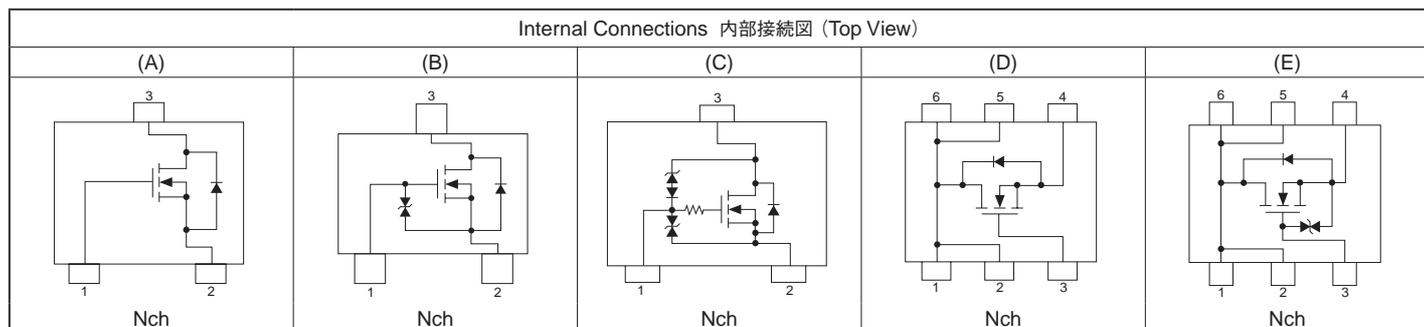
Package	Part Number	Absolute Maximum Ratings				R _{DS(ON)} max (mΩ)						C _{iss} typ. (pF)	C _{rss} typ. (pF)	C _{oss} typ. (pF)	Q _g typ. (nC)	Series	Internal Connections	Land Pattern Examples (mm)	
		V _{DSS} (V)	V _{GSS} (V)	I _D (A)	P _D (W)	V _{Gs} = 10 V	V _{Gs} = 4.5 V	V _{Gs} = 4.0 V	V _{Gs} = 2.5 V	V _{Gs} = 1.8 V	V _{Gs} = 1.5 V								
 ES6 SOT-563 (mm)	SSM6K204FE	20	±10	2	0.5	—	—	126	164	214	307	195	29	35	3.4	U-MOSIII	(E)		
	SSM6K211FE		±10	3.2	0.5	—	47	—	59	82	118	510	85	98	10.8	U-MOSIII			
	SSM6K208FE	30	±12	1.9	0.5	—	—	133	177	296	—	123	18	43	1.9	U-MOSIII			
	SSM6K217FE *		40	±12	1.8	0.5	—	208	—	248	400	—	130	7.5	26	1.1			U-MOSVII-H
 UDFN6B (mm)	SSM6K504NU *	30	±20	9	1.25	—	26	—	—	—	—	620	42	110	4.8	U-MOSVII-H	(E)		
	SSM6K513NU *		±20	15	2.5	8.9	12	—	—	—	—	—	1130	52	350	7.5			U-MOSIX-H
	SSM6K514NU *	40	±20	12	2.5	11.6	17.3	—	—	—	—	1110	26	245	7.5	U-MOSIX-H			
	SSM6K341NU **	60	±20	6	2.5	36	51	—	—	—	—	550	35	300	9.3	U-MOSVII-H			
	SSM6K361NU **	100	±20	3.5	2.5	69	92	—	—	—	—	430	22	160	3.2	U-MOSVIII-H			
 UFM (mm)	SSM3K122TU	20	±10	2	0.5	—	—	123	161	211	304	195	29	35	3.4	U-MOSIII	(B)		
	SSM3K121TU		±10	3.2	0.5	—	—	48	63	93	140	400	60	68	5.9	U-MOSIII			
	SSM3K123TU		±10	4.2	0.5	—	—	28	32	43	66	1010	150	162	13.6	U-MOSIII			
	SSM3K127TU	30	±12	2	0.5	—	—	123	167	286	—	123	18	43	1.5	U-MOSIII			
	SSM3K116TU		±12	2.2	0.5	—	100	—	135	—	—	245	33	41	—	U-MOSIII			
	SSM3K131TU		±20	6	0.5	—	41.5	—	—	—	—	450	77	120	10.1	U-MOSIV			
	SSM3K2615TU *		60	±20	2	0.5	—	—	440	—	—	—	150	25	70	6			π-MOSV
 UF6 (mm)	SSM6K404TU	20	±10	3	0.5	—	—	55	70	100	147	400	60	68	5.9	U-MOSIII	(E)		
	SSM6K403TU		±10	4.2	0.5	—	—	28	32	43	66	1050	160	175	16.8	U-MOSIII			
	SSM6K411TU	±12	10	1	—	12	—	23.8	—	—	710	170	240	9.4	U-MOSIV	(D)			
	SSM6K406TU	30	±20	4.4	0.5	—	38.5	—	—	—	490	105	143	12.4	U-MOSIV	(E)			
	SSM6K407TU	60	±20	2	0.5	—	—	440	—	—	—	150	25	70	6	π-MOSV			
	 SOT-23F (mm)	SSM3K336R	30	±20	3	1	—	140	—	—	—	—	126	8	26	1.7	U-MOSVII-H		(B)
SSM3K329R		±12		3.5	1	—	—	126	170	289	—	123	18	43	1.5	U-MOSIII			
SSM3K324R *		±12		4	1	—	56	—	72	109	—	200	18	40	2.2	U-MOSVII-H			
SSM3K333R		±20		6	1	—	42	—	—	—	—	436	28	77	3.4	U-MOSVII-H			
SSM3K335R		±20		6	1	—	56	—	—	—	—	340	20	60	2.7	U-MOSVII-H			
SSM3K337R		38	±20	2	1	—	176	200	—	—	—	120	7.2	33	3	U-MOSIV	(C)		
SSM3K339R *		40	±12	2	1	—	198	—	238	390	—	130	7.5	26	1.1	U-MOSVII-H			
SSM3K2615R *		60	±20	2	1	—	—	440	—	—	—	150	25	70	6	π-MOSV			
SSM3K318R *			±20	2.5	1	—	145	—	—	—	—	235	23	31	7	U-MOSIV			
SSM3K341R *			±20	6	1.2	—	51	69	—	—	—	550	35	300	9.3	U-MOSVIII-H			
SSM3K361R *			100	±20	3.5	1.2	—	92	—	—	—	—	430	22	160	3.2	U-MOSVIII-H		

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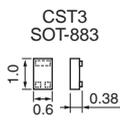
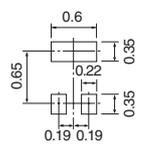
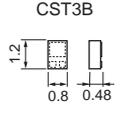
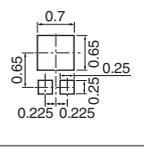
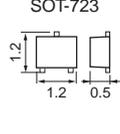
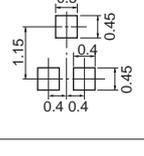
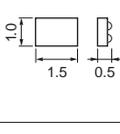
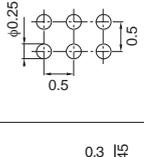
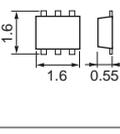
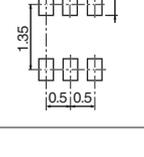
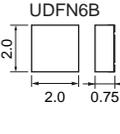
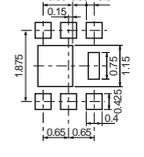
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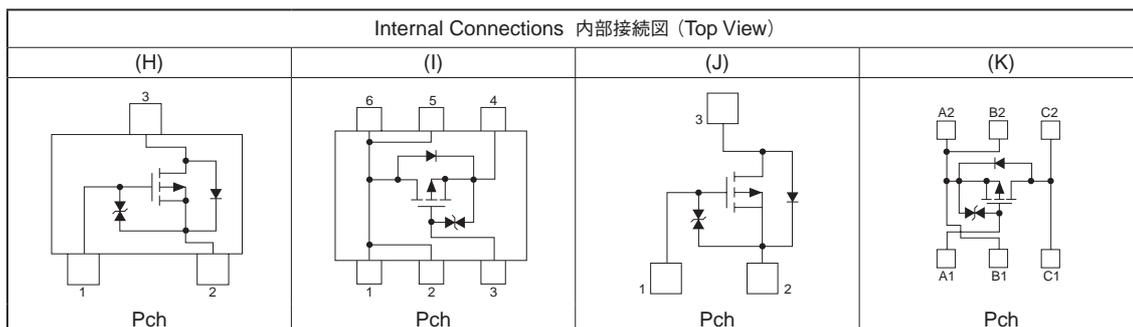
Package	Part Number	Absolute Maximum Ratings				R _{DS(ON)} max (mΩ)					Ciss typ. (pF)	Crss typ. (pF)	Coss typ. (pF)	Cqg typ. (nC)	Series	Internal Connections	Land Pattern Examples (mm)
		V _{DSS} (V)	V _{GSS} (V)	I _b (A)	P _b (W)	V _{Gs1} = 4.5 V	V _{Gs1} = 4.0 V	V _{Gs1} = 2.5 V	V _{Gs1} = 1.8 V	V _{Gs1} = 1.5 V							
 (mm)	SSM3J56ACT *	-20	±8	-1.4	0.5	390	—	480	660	900	100	10	16	1.6	U-MOSVI	(J)	
 (mm)	SSM3J46CTB	-20	±8	-2	1	103	—	133	178	250	290	32	44	4.7	U-MOSVI	(J)	
 (mm)	SSM3J56MFV	-20	±8	-0.8	0.5	390	—	480	660	900	100	10	16	1.6	U-MOSVI	(H)	
 (mm)	SSM6J771G *	-20	±12	-5	1.6	35	—	47.5	—	—	870	120	150	9.8	U-MOSVI	(K)	
 (mm)	SSM6J216FE	-12	±8	-4.8	0.5	32	—	39.3	56	88.1	1040	180	200	12.7	U-MOSVI	(I)	
	SSM6J213FE		±8	-2.6	0.5	103	—	133	178	250	290	32	44	4.7	U-MOSVI		
	SSM6J215FE	-20	±8	-3.4	0.5	59	—	79	104	154	630	60	75	10.4	U-MOSVI		
	SSM6J212FE		±8	-4	0.5	40.7	—	49	65.4	94	970	109	127	14.1	U-MOSVI		
	SSM6J207FE	-30	±20	-1.4	0.5	—	491	—	—	—	137	20	39	—	U-MOSII		
	SSM6J214FE	-12	±3.6	0.5	57	—	77.6	149.6	—	560	65	80	7.9	U-MOSVI			
 (mm)	SSM6J512NU *	±10	-10	1.25	18.7	—	25.7	40.1	—	1400	225	250	19.5	U-MOSVI	(I)		
	SSM6J505NU	-12	±6	-12	1.25	12	—	16	21	30	2700	800	800	37.6			U-MOSVI
	SSM6J511NU *	±10	-14	1.25	10	—	13.5	19.2	—	3350	570	590	47	U-MOSVII			
	SSM6J502NU		±8	-6	1	23.1	—	28.3	38.4	60.5	1800	190	205	24.8			U-MOSVI
	SSM6J503NU	-20	±8	-6	1	32.4	—	41.7	57.9	89.6	840	99	118	12.8			U-MOSVI
	SSM6J501NU		±8	-10	1	15.3	—	19	26.5	43	2600	290	280	29.9			U-MOSVI
	SSM6J509NU **		-25/+20	-4	1.25	66	77	—	—	—	600	100	100	TBD			U-MOSVI
	SSM6J508NU **	-30	-25/+20	-6	1.25	40	46	—	—	—	1083	180	180	TBD			U-MOSVI
SSM6J507NU *		-25/+20	-10	1.25	28	32	—	—	—	1150	185	210	20.4	U-MOSVI			

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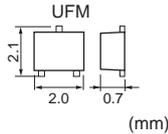
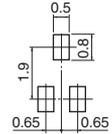
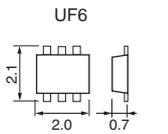
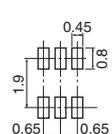
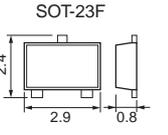
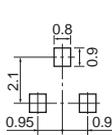
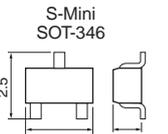
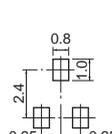
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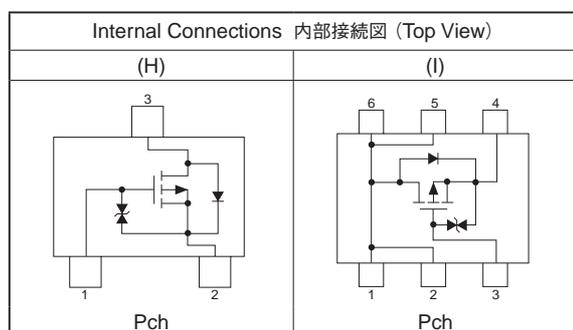
Package	Part Number	Absolute Maximum Ratings				R _{DS(ON)} max (mΩ)					C _{iss} typ. (pF)	C _{rss} typ. (pF)	C _{oss} typ. (pF)	Q _g typ. (nC)	Series	Internal Connections	Land Pattern Examples (mm)	
		V _{DSS} (V)	V _{GSS} (V)	I _D (A)	P _D (W)	V _{Gs} = 4.5 V	V _{Gs} = 4.0 V	V _{Gs} = 2.5 V	V _{Gs} = 1.8 V	V _{Gs} = 1.5 V								
 (mm)	SSM3J132TU	-12	±6	-5.4	0.5	17	—	21	29	39	2700	525	525	33	U-MOSVI	(H)	 (mm)	
	SSM3J135TU	-20	±8	-3	0.5	103	—	132	180	260	270	32	40	4.6	U-MOSVI			
	SSM3J134TU		±8	-3.2	0.5	93	—	123	168	240	290	32	44	4.7	U-MOSVI			
	SSM3J130TU		±8	-4.4	0.5	25.8	—	31	41.1	63.2	1800	190	205	24.8	U-MOSVI			
	SSM3J133TU		±8	-5.5	0.5	29.8	—	39.7	56	88.4	840	99	118	12.8	U-MOSVI			
	SSM3J112TU		±20	-1.1	0.5	—	790	—	—	—	86	14	25	—	U-MOSII			
	SSM3J118TU		±20	-1.4	0.5	—	480	—	—	—	137	20	39	—	U-MOSII			
SSM3J117TU	±20	-2	0.5	—	225	—	—	—	280	45	80	—	U-MOSII					
 (mm)	SSM6J50TU	-20	±10	-2.5	0.5	64	—	100	—	—	800	120	160	—	U-MOSIV	(I)	 (mm)	
	SSM6J412TU		* ±8	-4	1	42.7	—	51.4	67.8	99.6	840	99	118	12.8	U-MOSVI			
	SSM6J414TU	-30	±8	-6	1	22.5	—	26	36	54	1650	90	220	23.1	U-MOSVI			
	SSM6J402TU		±20	-2	0.5	—	225	—	—	—	280	45	80	5.3	U-MOSIII			
	SSM6J410TU		±20	-2.1	0.5	—	393	—	—	—	120	21	32	2.9	U-MOSIII			
SSM6J401TU	±20	-2.5	0.5	—	145	—	—	—	730	90	110	16	U-MOSIII					
 (mm)	SSM3J338R	* -12	±10	-6	1	20.2	—	27.9	45.3	—	1400	225	250	19.5	U-MOSVII	(H)	 (mm)	
	SSM3J327R	-20	±8	-3.9	1	93	—	123	168	240	290	32	44	4.6	U-MOSVI			
	SSM3J331R		±8	-4	1	55	—	75	100	150	630	60	75	10.4	U-MOSVI			
	SSM3J328R		±8	-6	1	29.8	—	39.7	56	88.4	840	99	118	12.8	U-MOSVI			
	SSM3J334R		±20	-4	1	105	136	—	—	—	280	40	55	5.9	U-MOSVI			
	SSM3J340R		* -30	-25/+20	-4	1	66	77	—	—	—	600	100	100	100			U-MOSVI
	SSM3J332R		±12	-6	1	50	—	72	144	—	560	65	80	8.2	U-MOSVI			
	SSM3J356R	* -60	-20/+10	-2	1	360	400	—	—	—	330	25	40	8.3	U-MOSVI			
SSM3J351R	** -20/+10	-2.5	1	200	—	—	—	—	491	TBD	TBD	TBD	U-MOSVI					
 (mm)	SSM3J325F	-20	±8	-2	0.6	150	—	179	231	311	270	32	40	4.6	U-MOSVI	(H)	 (mm)	
	SSM3J352F		* ±12	-2	0.6	136	—	119	443	—	210	31	39	5.1	U-MOSVI			
	SSM3J353F	** -30	-25/+20	-2	0.6	270	552	—	—	—	175	23	30	TBD	U-MOSVI			

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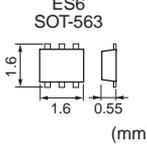
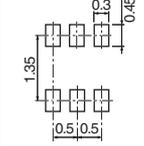
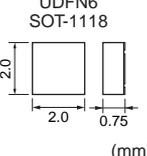
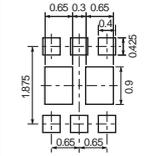
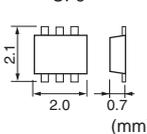
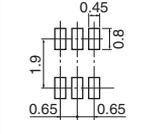
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(Semi-Power Type: Dual Channel/Complementary) / (セミパワータイプ：デュアルチャネル/コンプリメンタリ)

Package	Polarity	Part Number	Absolute Maximum Ratings				R _{DS(ON)} max (mΩ)						Ciss typ. (pF)	Crss typ. (pF)	Coss typ. (pF)	Qg typ. (nC)	Series	Internal Connections	Land Pattern Examples (mm)	
			V _{DSS} (V)	V _{GSS} (V)	I _b (A)	P _b (W)	V _{GS} = 4.5 V	V _{GS} = 4.0 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V								
 ES6 SOT-563 (mm)	Nchx2	SSM6N56FE *	20	±8	0.8	0.25	235	—	300	480	840	—	55	6	16	1	U-MOSVII-H	(L)		
	Pchx2	SSM6P41FE	-20	±8	-0.72	0.15	300	—	440	670	1040	—	110	20	28	1.76	U-MOSV	(M)		
	Nch + Pch	SSM6L14FE	20	±10	0.8	0.15	240	—	330	450	600	—	90	15	21	2	U-MOSIII	(O)		
 UDFN6 SOT-1118 (mm)	Nchx2	SSM6N61NU *	20	±8	4	1	33	—	45	74	108	—	410	40	85	3.6	U-MOSVII-H	(L)		
		SSM6N55NU	30	±20	4	1	64	—	—	—	—	—	—	280	20	53	2.5			U-MOSVII-H
		SSM6N57NU	30	±12	4	1	39.1	—	53	82	—	—	—	310	20	52	3.2			U-MOSVII-H
		SSM6N58NU	30	±12	4	1	84	—	117	180	—	—	—	129	13	34	1.8			U-MOSVII-H
	Pchx2	SSM6P47NU	-20	±8	-4	1	95	—	125	170	242	—	290	32	44	4.6	U-MOSVI	(M)		
		SSM6P49NU	-20	±12	-4	1	56	—	76	157	—	—	—	480	76	90	6.74	U-MOSVI		
Nch + Pch	SSM6L61NU *	20	±8	4	1	33	—	45	74	108	—	410	40	85	3.6	U-MOSVII-H	(N)			
 UF6 (mm)	Nchx2	SSM6N62TU **	20	±8	0.8	0.5	95	—	113	168	275	121 (typ.)	215	25	55	2	U-MOSVII-H	(L)		
		SSM6N39TU	30	±10	1.6	0.5	—	119	139	190	247	—	260	37	45	7.5	U-MOSIII			
		SSM6N24TU	30	±12	0.5	0.5	145	—	180	—	—	—	—	245	33	41	—			U-MOSIII
		SSM6N40TU	30	±20	1.6	0.5	—	182	—	—	—	—	—	180	27	34	5.1			U-MOSIII
	Pchx2	SSM6P54TU	-20	±8	-1.2	0.5	—	—	228	350	555	—	331	39	48	7.7	U-MOSIV	(M)		
		SSM6P39TU	-20	±8	-1.5	0.5	—	213	294	430	—	—	—	250	35	43	6.4	U-MOSIII		
		SSM6P40TU	-30	±20	-1.4	0.5	—	403	—	—	—	—	—	120	21	32	2.9	U-MOSIII		
	Nch + Pch	SSM6L39TU	20	±10	1.6	0.5	—	119	139	190	247	—	260	37	45	7.5	U-MOSIII	(N)		
		SSM6L12TU	30	±12	0.5	0.5	145	—	180	—	—	—	—	245	33	41	—	U-MOSIII		(P)
			-20	±12	-0.5	0.5	—	260	430	—	—	—	—	218	42	52	—	U-MOSIII		
SSM6L40TU	30	±20	1.6	0.5	—	182	—	—	—	—	—	180	27	34	5.1	U-MOSIII	(N)			
-30	±20	-1.4	0.5	—	403	—	—	—	—	—	—	120	21	32	2.9	U-MOSIII				

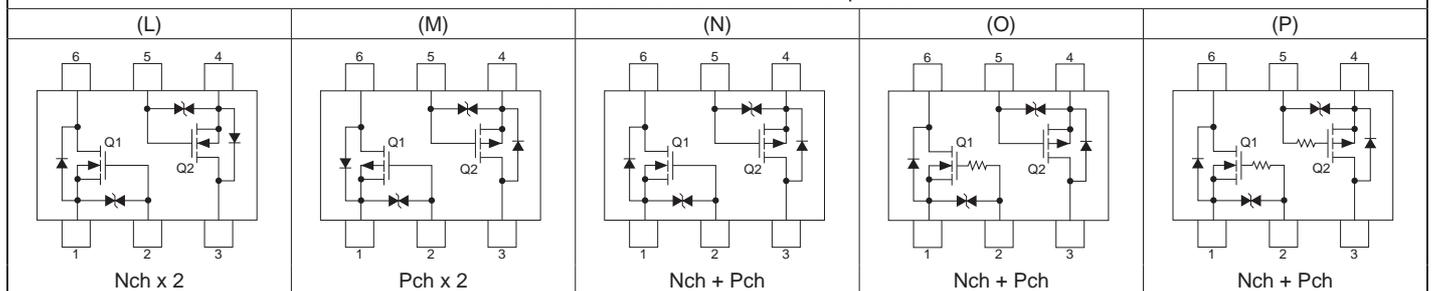
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** : Under development / 開発中

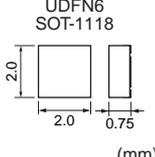
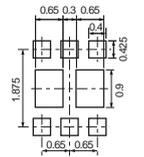
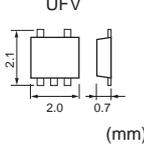
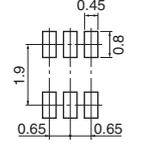
Internal Connections 内部接続図 (Top View)



・ The internal connection diagrams only show the general configurations of the circuits.

・ 内部接続図はイメージ図です。

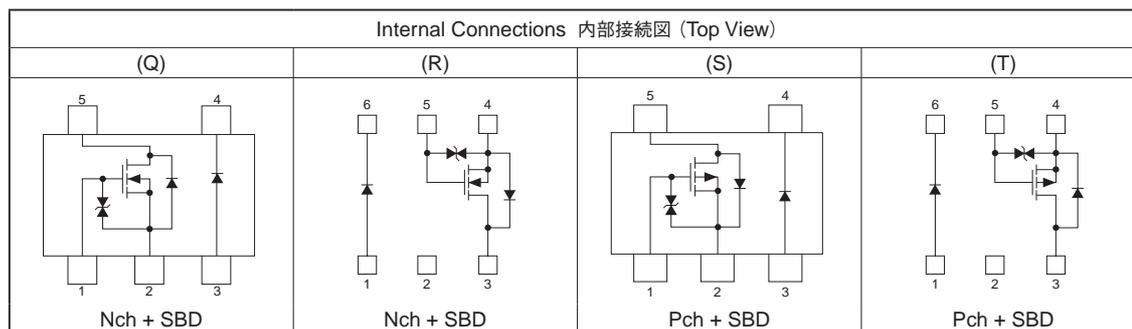
(Semi-Power Type: Built-in Schottky Barrier Diode) / (セミパワータイプ : SBD混載品)

Package	Polarity	Part Number	Absolute Maximum Ratings				R _{DS(ON)} max (mΩ)					C _{iss} typ. (pF)	C _{rss} typ. (pF)	C _{oss} typ. (pF)	Q _g typ. (nC)	Series	Internal Connections	Land Pattern Examples (mm)	
			V _{DSS} (V)	V _{GSS} (V)	I _D (A)	P _D (W)	V _{Gs} = 4.5 V	V _{Gs} = 4.0 V	V _{Gs} = 2.5 V	V _{Gs} = 1.8 V	V _{Gs} = 1.5 V								
 UDFN6 SOT-1118 (mm)	Nch + SBD	SSM6H19NU *	40	±12	2	1	198	—	238	390	—	130	7.5	26	1.1	U-MOSVII-H	(R)		
	Pch + SBD	SSM6G18NU	-20	±8	-2	1	112	—	143	185	261	270	32	40	4.6	U-MOSVI	(T)		
 UFV (mm)	Nch + SBD	SSM5H08TU	20	±12	1.5	0.5	—	160	220	—	—	125	17	42	—	U-MOSIII	(Q)		
		SSM5H90ATU		±10	2.4	0.5	—	65	89	—	—	200	13	40	2.2	U-MOSVII-H			
		SSM5H01TU	30	±20	1.4	0.5	—	450	—	—	—	106	15	28	—	U-MOSIII			
		SSM5H11TU		±20	1.6	0.5	—	182	—	—	—	180	27	34	5.1	U-MOSIII			
		SSM5H16TU		±12	1.9	0.5	—	133	177	296	—	123	18	43	1.9	U-MOSIII			
	Pch + SBD	SSM5G02TU	-12	±12	-1	0.5	—	160	240	—	—	310	70	110	—	U-MOSII			(S)
		SSM5G09TU		±8	-1.5	0.5	—	130	200	—	—	550	155	170	—	U-MOSIII			
		SSM5G11TU	-30	±20	-1.4	0.5	—	403	—	—	—	120	21	32	2.9	U-MOSIII			

・ Contact the Toshiba sales representative for information about RoHS compliance before you purchase any components.

*: New product / 新製品

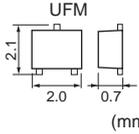
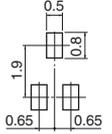
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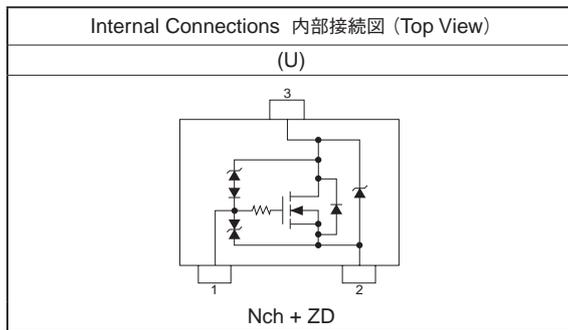
(Semi-Power Type: Built-in Zener Diode) / (セミパワータイプ: ZD混載品)

Package	Polarity	Part Number	Absolute Maximum Ratings				R _{DS(ON)} max (mΩ)					Ciss typ. (pF)	Crss typ. (pF)	Coss typ. (pF)	Qg typ. (nC)	Series	Internal Connections	Land Pattern Examples (mm)
			V _{DSS} (V)	V _{GSS} (V)	I _b (A)	P _b (W)	V _{GS} = 4.5 V	V _{GS} = 4.0 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V							
 UFM (mm)	Nch + ZD	SSM3H137TU *	34	±20	2	1	280	295	—	—	—	119	8	40	3	U-MOSIV	(U)	

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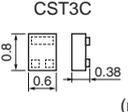
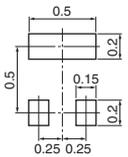
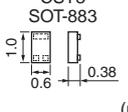
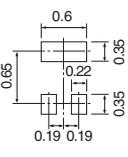
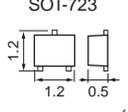
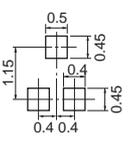
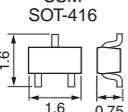
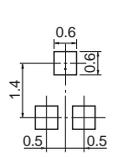
*: New product / 新製品

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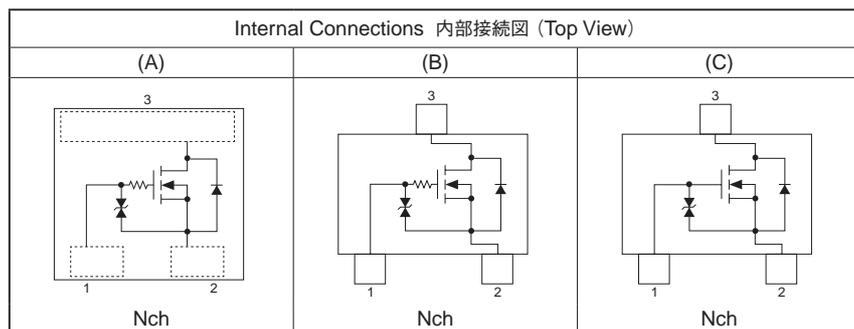
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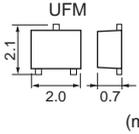
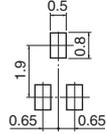
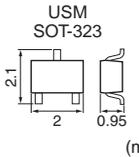
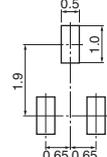
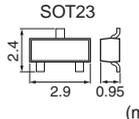
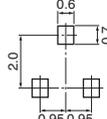
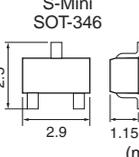
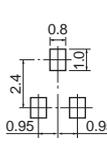
Package	Part Number	Absolute Maximum Ratings				R _{DS(ON)} max (Ω)					C _{iss} typ. (pF)	C _{rss} typ. (pF)	C _{oss} typ. (pF)	Q _g typ. (nC)	Series	Internal Connections	Land Pattern Examples (mm)
		V _{DSS} (V)	V _{GSS} (V)	I _D (A)	P _D (W)	V _{Gs1} = 4.5 V	V _{Gs1} = 4.0 V	V _{Gs1} = 2.5 V	V _{Gs1} = 1.8 V	V _{Gs1} = 1.5 V							
 CST3C (mm)	SSM3K35CTC *	20	±10	0.25	0.5	1.1	—	1.6	2.4	3.1	18	5	6	0.34	U-MOSIII	(A)	
	SSM3K15ACTC *	30	±20	0.1	0.5	3.6	—	6	—	—	14	7	8	—	U-MOSIII		
	SSM3K72CTC *	60	±20	0.15	0.5	4.7	—	—	—	—	11	0.7	3	0.27	U-MOSVII-H		
 CST3 SOT-883 (mm)	SSM3K35CT	20	±10	0.18	0.1	—	3	4	—	8	9.5	4.1	9.5	—	π-MOSVI	(A)	
	SSM3K37CT		±10	0.2	0.1	2.2	—	3.02	4.05	5.6	12	4.1	5.5	—	U-MOSIII		
	SSM3K56ACT *	±8	1.4	0.5	0.235	—	0.3	0.48	0.84	55	6	16	1	U-MOSVII-H			
	SSM3K15ACT	30	±20	0.1	0.1	—	3.6	6	—	—	13.5	6.5	8	—	U-MOSIII		
	SSM3K72KCT **	60	±20	0.3	0.1	1.75	—	—	—	—	26	1.3	5.5	0.39	U-MOSVII-H		
 VESM SOT-723 (mm)	SSM3K35MFV	20	±10	0.18	0.15	—	3	4	—	8	9.5	4.1	9.5	—	π-MOSVI	(B)	
	SSM3K37MFV		±10	0.25	0.15	2.2	—	3.02	4.05	5.6	12	4.1	5.5	—	U-MOSIII		
	SSM3K36MFV		±10	0.5	0.15	0.66	—	0.85	1.14	1.52	46	7.3	10.8	1.23	U-MOSIII		
	SSM3K56MFV *		±8	0.8	0.15	0.235	—	0.3	0.48	0.84	55	6	16	1	U-MOSVII-H		
	SSM3K15AMFV	30	±20	0.1	0.15	—	3.6	6	—	—	13.5	6.5	8	—	U-MOSIII	(B)	
	SSM3K44MFV		±20	0.1	0.15	—	4	7	—	—	8.5	5.3	9.4	—	π-MOSVI		
 SSM SOT-416 (mm)	SSM3K35FS	20	±10	0.18	0.1	—	3	4	—	8	9.5	4.1	9.5	—	π-MOSVI	(B)	
	SSM3K37FS		±10	0.2	0.1	2.2	—	3.02	4.05	5.6	12	4.1	5.5	—	U-MOSIII		
	SSM3K36FS		±10	0.5	0.15	0.66	—	0.85	1.14	1.52	46	7.3	10.8	1.23	U-MOSIII		
	SSM3K56FS		±8	0.8	0.15	0.235	—	0.3	0.48	0.84	55	6	16	1	U-MOSVII-H		
	SSM3K15AFS	30	±20	0.1	0.1	—	3.6	6	—	—	13.5	6.5	8	—	U-MOSIII	(B)	
	SSM3K44FS		±20	0.1	0.15	—	4	7	—	—	8.5	5.3	9.4	—	π-MOSVI		
	SSM3K72CFS **	60	±20	0.17	0.15	4.7	—	—	—	—	11	0.7	3	0.27	U-MOSVII-H	(B)	
	SSM3K72KFS **		±20	0.3	0.15	1.75	—	—	—	—	26	1.3	5.5	0.39	U-MOSVII-H		

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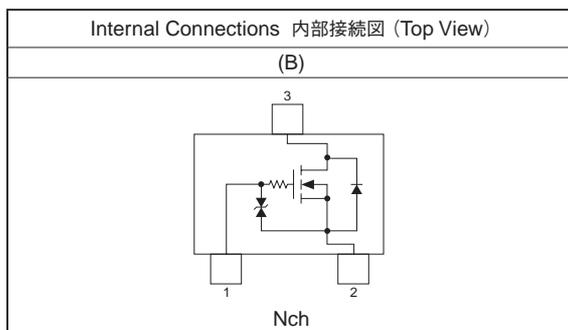
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Package	Part Number	Absolute Maximum Ratings				R _{DS(ON)} max (Ω)					C _{iss} typ. (pF)	C _{rss} typ. (pF)	C _{oss} typ. (pF)	Q _g typ. (nC)	Series	Internal Connections	Land Pattern Examples (mm)
		V _{DSS} (V)	V _{GSS} (V)	I _D (A)	P _D (W)	V _{GSL} = 4.5 V	V _{GSL} = 4.0 V	V _{GSL} = 2.5 V	V _{GSL} = 1.8 V	V _{GSL} = 1.5 V							
 (mm)	SSM3K36TU	20	±10	0.5	0.5	0.66	—	0.85	1.14	1.52	46	7.3	10.8	1.23	U-MOSIII	(B)	
 (mm)	SSM3K15AFU	30	±20	0.1	0.15	—	3.6	6	—	—	13.5	6.5	8	—	U-MOSIII	(B)	
	SSM3K09FU		±20	0.4	0.15	—	1.2	—	—	—	20	7	16	—	π-MOSVI		
	SSM3K17FU	50	±7	0.1	0.15	—	20	40	—	—	7	3	7	—	π-MOSV		
	SSM3K7002CFU *	60	±20	0.17	0.15	4.7	—	—	—	—	11	0.7	3	0.27	U-MOSVII-H		
	SSM3K7002KFU *		±20	0.3	0.15	1.75	—	—	—	—	26	1.3	5.5	0.39	U-MOSVII-H		
 (mm)	T2N7002AK *	60	±20	0.2	0.32	4.7	—	—	—	—	11	0.7	3	0.27	U-MOSVII-H	(B)	
	T2N7002BK *		±20	0.4	0.32	1.75	—	—	—	—	26	1.3	5.5	0.39	U-MOSVII-H		
 (mm)	SSM3K15F	30	±20	0.1	0.2	—	4	7	—	—	7.8	3.6	8.8	—	π-MOSVI	(B)	
	SSM3K7002KF *	60	±20	0.4	0.27	1.75	—	—	—	—	26	1.3	5.5	0.39	U-MOSVII-H		

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*: New product / 新製品

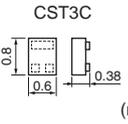
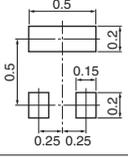
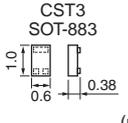
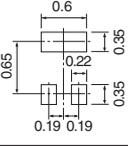
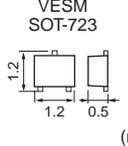
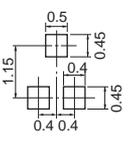
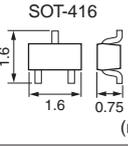
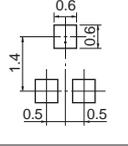
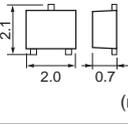
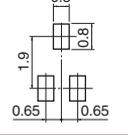
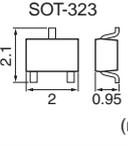
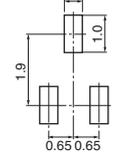
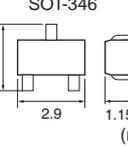
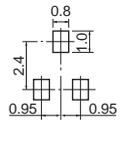
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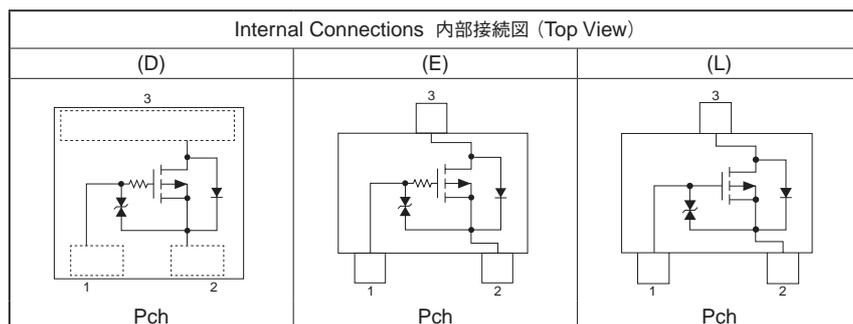
(Small-Signal Standard Type: Single P-Channel) / (小信号スタンダードタイプ：シングルPチャンネル)

Package	Part Number	Absolute Maximum Ratings				R _{DS(ON)} max (Ω)					C _{iss} typ. (pF)	C _{rss} typ. (pF)	C _{oss} typ. (pF)	Q _g typ. (nC)	Series	Internal Connections	Land Pattern Examples (mm)
		V _{DSS} (V)	V _{GSS} (V)	I _D (A)	P _D (W)	V _{Gs1} = 4.5 V	V _{Gs1} = 4.0 V	V _{Gs1} = 2.5 V	V _{Gs1} = 1.8 V	V _{Gs1} = 1.5 V							
 CST3C (mm)	SSM3J35CTC *	-20	±10	-0.25	0.5	1.5	—	2.1	2.9	4	21	2	6	—	U-MOSVII	(D)	
 CST3 SOT-883 (mm)	SSM3J35CT	-20	±10	-0.1	0.1	—	8	11	—	22	12.2	6.5	10.4	—	π-MOSVI	(D)	
	SSM3J56ACT *	-20	±8	-1.4	0.5	0.39	—	0.48	0.66	0.9	100	10	16	1.6	U-MOSVI		
	SSM3J15CT	-30	±20	-0.1	0.1	—	12	32	—	—	9.1	3.5	8.6	—	π-MOSVI		
 VESM SOT-723 (mm)	SSM3J35MFV	-20	±10	-0.1	0.15	—	8	11	—	22	12.2	6.5	10.4	—	π-MOSVI	(E)	
	SSM3J36MFV	-20	±8	-0.33	0.15	1.31	—	—	2.7	3.6	43	6.1	10.3	1.2	U-MOSIII		
	SSM3J56MFV	-20	±8	-0.8	0.15	0.39	—	0.48	0.66	0.9	100	10	16	1.6	U-MOSVI		
	SSM3J15FV	-30	±20	-0.1	0.15	—	12	32	—	—	9.1	3.5	8.6	—	π-MOSVI		
 SSM SOT-416 (mm)	SSM3J35FS	-20	±10	-0.1	0.1	—	8	11	—	22	12.2	6.5	10.4	—	π-MOSVI	(E)	
	SSM3J36FS	-20	±8	-0.33	0.15	1.31	—	—	2.7	3.6	43	6.1	10.3	1.2	U-MOSIII		
	SSM3J15FS	-30	±20	-0.1	0.1	—	12	32	—	—	9.1	3.5	8.6	—	π-MOSVI		
 UFM (mm)	SSM3J36TU	-20	±8	-0.33	0.5	1.31	—	—	2.7	3.6	43	6.1	10.3	1.2	U-MOSIII	(E)	
 USM SOT-323 (mm)	SSM3J15FU	-20	±20	-0.1	0.15	—	12	32	—	—	9.1	3.5	8.6	—	π-MOSVI	(E)	
	SSM3J09FU	-30	±20	-0.2	0.15	—	4.2	—	—	—	22	5	14	—	π-MOSVI		
 S-Mini SOT-346 (mm)	SSM3J15F	-30	±20	-0.1	0.2	—	12	32	—	—	9.1	3.5	8.6	—	π-MOSVI	(E)	
	2SJ168	-60	±20	-0.2	0.2	—	—	—	—	—	73	15	48	—	π-MOSIII	(L)	

• Contact the Toshiba sales representative for information about RoHS compliance before you purchase any components.

*: New product / 新製品

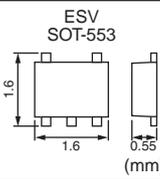
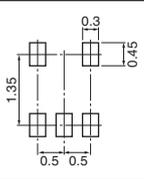
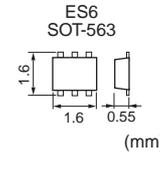
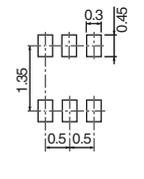
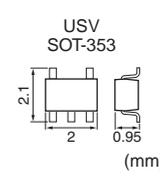
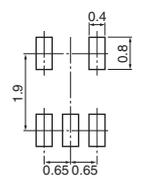
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• The internal connection diagrams only show the general configurations of the circuits.

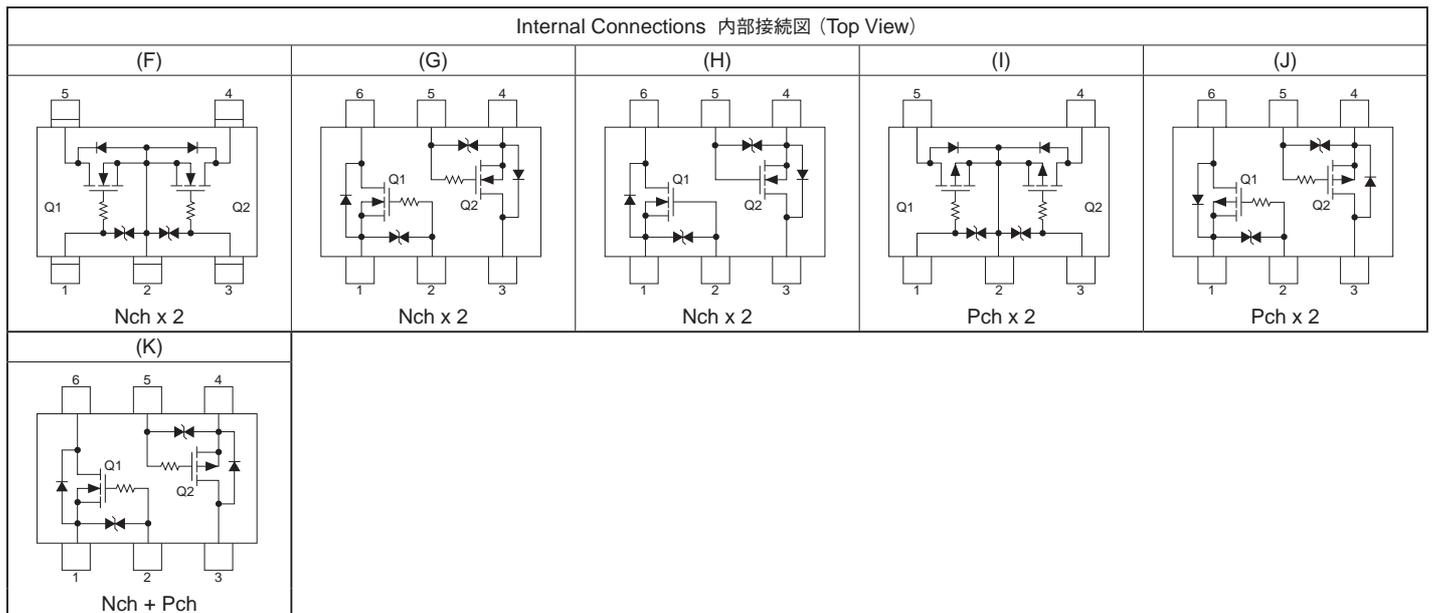
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(Small-Signal Standard Type: Dual Channel/Complementary) / (小信号スタンダードタイプ:デュアルチャネル/コンプリメンタリ) (1/2)

Package	Polarity	Part Number	Absolute Maximum Ratings				R _{DS(ON)} max (Ω)					Ciss typ. (pF)	Crss typ. (pF)	Coss typ. (pF)	Qg typ. (nC)	Series	Internal Connections	Land Pattern Examples (mm)
			V _{DSS} (V)	V _{GSS} (V)	I _b (A)	P _b (W)	V _{GS} = 4.5 V	V _{GS} = 4.0 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V							
 ESV SOT-553 (mm)	Nchx2	SSM5N16FE	20	±10	0.1	0.15	—	3	4	—	15	9.3	4.5	9.8	—	π-MOSVI	(F)	
	Nchx2	SSM5N15FE	30	±20	0.1	0.15	—	4	7	—	—	7.8	3.6	8.8	—	π-MOSVI		
	Pchx2	SSM5P16FE	-20	±10	-0.1	0.15	—	8	12	—	45	11	3.7	10	—	π-MOSVI		
	Pchx2	SSM5P15FE	-30	±20	-0.1	0.15	—	12	32	—	—	9.1	3.5	8.6	—	π-MOSVI		
 ES6 SOT-563 (mm)	Nchx2	SSM6N35FE	20	±10	0.18	0.15	—	3	4	—	8	9.5	4.1	9.5	—	π-MOSVI	(G)	
		SSM6N37FE		±10	0.25	0.15	2.2	—	3.02	4.05	5.6	12	4.1	5.5	—	U-MOSIII		
		SSM6N36FE		±10	0.5	0.15	0.66	—	0.85	1.14	1.52	46	7.3	10.8	1.23	U-MOSIII		
		SSM6N56FE		±8	0.8	0.15	0.235	—	0.3	0.48	0.84	55	6	16	1	U-MOSVII-H		
	Nchx2	SSM6N15AFE	30	±20	0.1	0.15	—	3.6	6	—	—	13.5	6.5	8	—	U-MOSIII	(G)	
		SSM6N44FE		±20	0.1	0.15	—	4	7	—	—	8.5	5.3	9.4	—	π-MOSVI		
	Pchx2	SSM6P16FE	-20	±10	-0.1	0.15	—	8	12	—	45	11	3.7	10	—	π-MOSVI	(J)	
		SSM6P35FE		±10	-0.1	0.15	—	8	11	—	22	12.2	6.5	10.4	—	π-MOSVI		
		SSM6P36FE		±8	-0.33	0.15	1.31	—	—	2.7	3.6	43	6.1	10.3	1.2	U-MOSIII		
		SSM6P15FE		-30	±20	-0.1	0.15	—	12	32	—	—	9.1	3.5	8.6	—		
	Nch + Pch	SSM6L35FE	20	±10	0.18	0.15	—	3	4	—	8	9.5	4.1	9.5	—	π-MOSVI	(K)	
			-20	±10	-0.1	0.15	—	8	11	—	22	12.2	6.5	10.4	—	π-MOSVI		
SSM6L36FE		20	±10	0.5	0.15	0.66	—	0.85	1.14	1.52	46	7.3	10.8	1.23	U-MOSIII			
		-20	±8	-0.33	0.15	1.31	—	—	2.7	3.6	43	6.1	10.3	1.2	U-MOSIII			
 USV SOT-353 (mm)	Nchx2	SSM5N16FU	20	±10	0.1	0.2	—	3	4	—	15	9.3	4.5	9.8	—	π-MOSVI	(F)	
		Nchx2	SSM5N15FU	30	±20	0.1	0.2	—	4	7	—	—	7.8	3.6	8.8	—		
	Pchx2	SSM5P16FU	-20	±10	-0.1	0.2	—	8	12	—	45	11	3.7	10	—	π-MOSVI	(I)	
		Pchx2	SSM5P15FU	-30	±20	-0.1	0.2	—	12	32	—	—	9.1	3.5	8.6	—		

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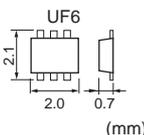
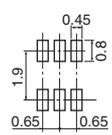
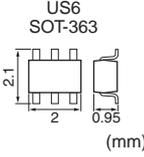
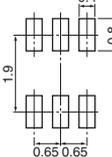
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• The internal connection diagrams only show the general configurations of the circuits.

• 内部接続図はイメージ図です。

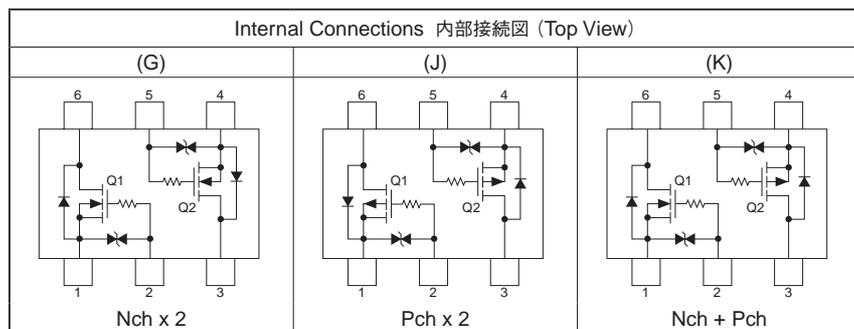
(Small-Signal Standard Type: Dual Channel/Complementary) / (小信号スタンダードタイプ：デュアルチャンネル/コンプリメンタリ) (2/2)

Package	Polarity	Part Number	Absolute Maximum Ratings				R _{DS(ON)} max (Ω)					C _{iss} typ. (pF)	C _{rss} typ. (pF)	C _{oss} typ. (pF)	Q _g typ. (nC)	Series	Internal Connections	Land Pattern Examples (mm)	
			V _{DSS} (V)	V _{GSS} (V)	I _D (A)	P _D (W)	V _{Gs1} = 4.5 V	V _{Gs1} = 4.0 V	V _{Gs1} = 2.5 V	V _{Gs1} = 1.8 V	V _{Gs1} = 1.5 V								
 UF6 (mm)	Nchx2	SSM6N36TU	20	±10	0.5	0.5	0.66	—	0.85	1.14	1.52	46	7.3	10.8	1.23	U-MOSIII	(G)		
	Pchx2	SSM6P36TU	-20	±8	-0.33	0.5	1.31	—	—	2.7	3.6	43	6.1	10.3	1.2	U-MOSIII	(J)		
	Nch + Pch	SSM6L36TU	20	±10	0.5	0.5	0.66	—	0.85	1.14	1.52	46	7.3	10.8	1.23	U-MOSIII	(K)		
 US6 SOT-363 (mm)	Nchx2	SSM6N35FU	20	±10	0.18	0.2	—	3	4	—	8	9.5	4.1	9.5	—	π-MOSVI	(G)		
		SSM6N37FU		±10	0.25	0.3	2.2	—	3.02	4.05	5.6	12	4.1	5.5	—	U-MOSIII			
		SSM6N43FU		±10	0.5	0.2	0.66	—	0.85	1.14	1.52	46	7.3	10.8	1.23	U-MOSIII			
		SSM6N15AFU	30	±20	0.1	0.3	—	3.6	6	—	—	13.5	6.5	8	—	U-MOSIII			
		SSM6N44FU		±20	0.1	0.2	—	4	7	—	—	8.5	5.3	9.4	—	π-MOSVI			
		SSM6N09FU		±20	0.4	0.3	—	1.2	—	—	—	20	7	16	—	π-MOSVI			
		SSM6N17FU	60	±20	±7	0.1	0.2	—	20	40	—	—	7	3	7	—			π-MOSV
		SSM6N7002CFU *		±20	0.17	0.285	4.7	—	—	—	—	—	11	0.7	3	0.27			U-MOSVII-H
	SSM6N7002KFU *	±20		0.3	0.5	1.75	—	—	—	—	—	26	1.3	5.5	0.39	U-MOSVII-H			
	Pchx2	SSM6P16FU	-20	±10	-0.1	0.2	—	8	12	—	45	11	3.7	10	—	π-MOSVI	(J)		
		SSM6P35FU		±10	-0.1	0.2	—	8	11	—	22	12.2	6.5	10.4	—	π-MOSVI			
		SSM6P15FU	-30	±20	-0.1	0.2	—	12	32	—	—	9.1	3.5	8.6	—	π-MOSVI			
		SSM6P09FU		±20	-0.2	0.3	—	4.2	—	—	—	22	5	14	—	π-MOSVI			
	Nch + Pch	SSM6L35FU	20	±10	0.18	0.2	—	3	4	—	8	9.5	4.1	9.5	—	π-MOSVI	(K)		
SSM6L09FU		-20	±10	-0.1	0.2	—	8	11	—	22	12.2	6.5	10.4	—	π-MOSVI				
			30	±20	0.4	0.3	—	1.2	—	—	—	20	7	16	—	π-MOSVI			
		-30	±20	-0.2	0.3	—	4.2	—	—	—	22	5	14	—	π-MOSVI				

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*: New product / 新製品

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・ The internal connection diagrams only show the general configurations of the circuits.

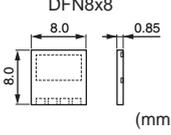
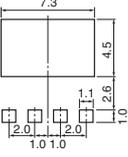
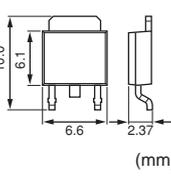
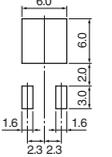
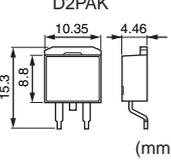
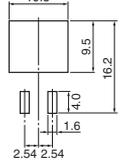
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Mid-High Voltage MOSFETs / 中高耐压 MOSFET

DTMOS Series / DTMOS シリーズ

(Single N-Channel) / (シングルNチャネル)

(1/5)

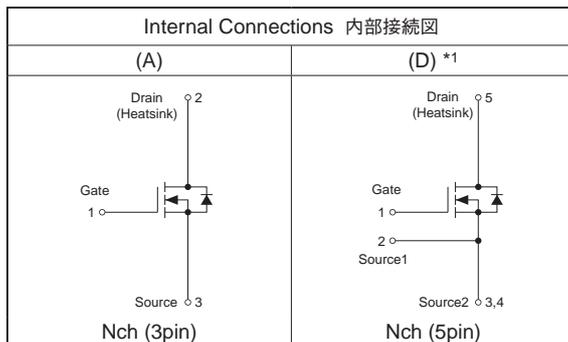
Package	Part Number	Absolute Maximum Ratings				R _{DS(ON)} max (Ω) V _{GS} = 10 V	C _{iss} typ. (pF)	C _{rss} typ. (pF)	C _{oss} typ. (pF)	Q _g typ. (nC)	Series	Internal Connections	Land Pattern Examples (mm)
		V _{DSS} (V)	V _{GS} (V)	I _D (A)	P _D (W)								
 DFN8x8 (mm)	TK10V60W	600	±30	9.7	83.3	0.38	700	2.3	20	20	DTMOSIV	 (D)	
	TK12V60W		±30	11.5	104	0.3	890	2.8	23	25	DTMOSIV		
	TK16V60W		±30	15.8	139	0.19	1350	4	35	38	DTMOSIV		
	TK16V60W5		±30	15.8	139	0.245	1350	4	35	43	DTMOSIV(HSD)		
	TK20V60W		±30	20	156	0.17	1680	7	40	48	DTMOSIV		
	TK20V60W5		±30	20	156	0.19	1800	5.5	45	55	DTMOSIV(HSD)		
	TK25V60X		±30	25	180	0.135	2400	6	60	40	DTMOSIV-H		
	TK25V60X5		±30	25	180	0.15	2400	6	50	60	DTMOSIV-H(HSD)		
	TK31V60W		±30	30.8	240	0.098	3000	9.5	70	86	DTMOSIV		
	TK31V60W5		±30	30.8	240	0.109	3000	9.5	70	105	DTMOSIV(HSD)		
	TK31V60X		±30	30.8	240	0.098	3000	7	70	65	DTMOSIV-H		
	TK14V65W *		±30	13.7	139	0.28	1300	4	35	35	DTMOSIV		
	TK17V65W *		±30	17.3	156	0.21	1800	7	40	45	DTMOSIV		
	TK22V65X5 **		±30	(22)	(180)	(0.17)	(2400)	(9)	(60)	(50)	DTMOSIV-H(HSD)		
	TK28V65W *		±30	27.6	240	0.12	3000	8	70	75	DTMOSIV		
TK28V65W5 **	±30	27.6	24	(0.14)	3000	8	70	90	DTMOSIV(HSD)				
 DPAK (mm)	TK5P60W5 **	600	±30	4.5	60	0.99	370	1	11	11.5	DTMOSIV(HSD)	 (A)	
	TK5P60W		±30	5.4	60	0.9	380	1.5	10	10.5	DTMOSIV		
	TK6P60W		±30	6.2	60	0.82	390	1.7	12	12	DTMOSIV		
	TK7P60W		±30	7	60	0.6	490	1.7	13	15	DTMOSIV		
	TK7P60W5		±30	7	60	0.67	490	1.7	13	16	DTMOSIV(HSD)		
	TK8P60W		±30	8	80	0.5	570	2.5	16	18.5	DTMOSIV		
	TK8P60W5 *		±30	8	80	0.56	590	1.7	16	22	DTMOSIV(HSD)		
	TK10P60W		±30	9.7	80	0.43	700	2.3	20	20	DTMOSIV		
	TK12P60W		±30	11.5	100	0.34	890	2.8	23	25	DTMOSIV		
	TK5P65W		±30	5.2	60	1.22	380	1.5	10	10.5	DTMOSIV		
	TK6P65W		±30	5.8	60	1.05	390	1.7	12	11	DTMOSIV		
	TK7P65W		±30	6.8	60	0.8	490	1.7	13	15	DTMOSIV		
	TK8P65W		±30	7.8	80	0.67	570	2.5	16	16	DTMOSIV		
	TK9P65W		±30	9.3	80	0.56	700	2.3	20	20	DTMOSIV		
	TK11P65W		±30	11.1	100	0.44	890	2.8	23	25	DTMOSIV		
TK3P80W **	±20	(2.5)	TBD	(2.25)	TBD	TBD	TBD	TBD	DTMOSIV				
TK6P80W **	±20	5.5	100	1.05	630	1.2	15	12	DTMOSIV				
 D2PAK (mm)	TK16G60W	600	±30	15.8	130	0.19	1350	4	35	38	DTMOSIV	 (A)	
	TK16G60W5		±30	15.8	130	0.23	1350	4	35	43	DTMOSIV(HSD)		
	TK20G60W		±30	20	130	0.155	1680	7	40	48	DTMOSIV		
	TK14G65W	±30	13.7	130	0.25	1300	4	35	35	DTMOSIV			
	TK14G65W5	±30	13.7	130	0.3	1300	4	35	40	DTMOSIV(HSD)			

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*: New product / 新製品

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**: Under development / 開発中

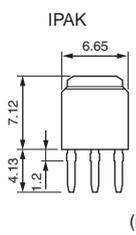
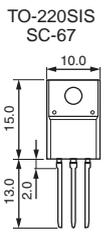


(*1) Notice : Please use the source1 pin for gate input signal return. Make sure that the main current flows into the source2 pins.

(*1) ご注意 : ソース1はゲート入力信号のリターン用として使用してください。主電流はソース2を流すように配線パターンを設計してください。

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* 内部接続図はイメージ図です。

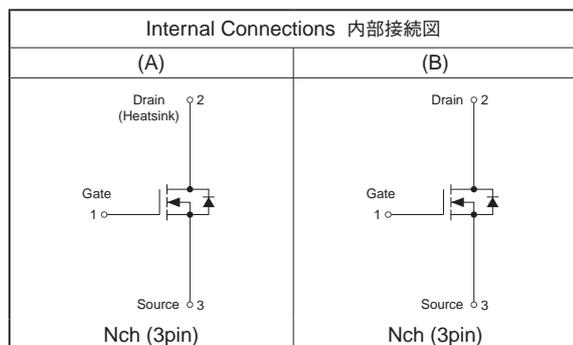
Package	Part Number	Absolute Maximum Ratings				R _{DS(ON)} max (Ω) V _{GS} = 10 V	C _{iss} typ. (pF)	C _{rss} typ. (pF)	C _{oss} typ. (pF)	Q _g typ. (nC)	Series	Internal Connections	
		V _{DSS} (V)	V _{GSS} (V)	I _D (A)	P _D (W)								
 <p>IPAK (mm)</p>	TK5Q60W	600	±30	5.4	130	0.9	380	1.5	10	10.5	DTMOSIV	(A)	
	TK6Q60W		±30	6.2	130	0.82	390	1.7	12	12	DTMOSIV		
	TK7Q60W		±30	7	130	0.6	490	1.7	13	15	DTMOSIV		
	TK8Q60W		±30	8	130	0.5	570	2.5	16	18.5	DTMOSIV		
	TK10Q60W		±30	9.7	130	0.43	700	2.3	20	20	DTMOSIV		
	TK12Q60W		±30	11.5	130	0.34	890	2.8	23	25	DTMOSIV		
	<td>TK5Q65W</td> <td rowspan="6">650</td> <td>±30</td> <td>5.2</td> <td>130</td> <td>1.22</td> <td>380</td> <td>1.5</td> <td>10</td> <td>10.5</td> <td>DTMOSIV</td>	TK5Q65W	650	±30	5.2	130	1.22	380	1.5	10	10.5		DTMOSIV
		TK6Q65W		±30	5.8	130	1.05	390	1.7	12	11		DTMOSIV
		TK7Q65W		±30	6.8	130	0.8	490	1.7	13	15		DTMOSIV
		TK8Q65W		±30	7.8	130	0.67	570	2.5	16	16		DTMOSIV
		TK9Q65W		±30	9.3	130	0.56	700	2.3	20	20		DTMOSIV
		TK11Q65W		±30	11.1	130	0.44	890	2.8	23	25		DTMOSIV
	<td>TK3Q80W **</td> <td rowspan="2">800</td> <td>±20</td> <td>(2.5)</td> <td>TBD</td> <td>(2.25)</td> <td>TBD</td> <td>TBD</td> <td>TBD</td> <td>TBD</td> <td>DTMOSIV</td>	TK3Q80W **	800	±20	(2.5)	TBD	(2.25)	TBD	TBD	TBD	TBD		DTMOSIV
		TK6Q80W **		±20	5.5	100	1.05	630	1.2	15	12		DTMOSIV
 <p>TO-220SIS SC-67 (mm)</p>	TK5A60W5 *	600	±30	4.5	30	0.95	370	1	11	11.5	DTMOSIV(HSD)	(B)	
	TK5A60W		±30	5.4	30	0.9	380	1.5	10	10.5	DTMOSIV		
	TK6A60W		±30	6.2	30	0.75	390	1.7	12	12	DTMOSIV		
	TK7A60W		±30	7	30	0.6	490	1.7	13	15	DTMOSIV		
	TK7A60W5		±30	7	30	0.65	490	1.7	13	16	DTMOSIV(HSD)		
	TK8A60W		±30	8	30	0.5	570	2.5	16	18.5	DTMOSIV		
	TK8A60W5		±30	8	30	0.54	590	1.7	16	22	DTMOSIV(HSD)		
	TK10A60W		±30	9.7	30	0.38	700	2.3	20	20	DTMOSIV		
	TK10A60W5		±30	9.7	30	0.45	720	2	20	25	DTMOSIV(HSD)		
	TK12A60W		±30	11.5	35	0.3	890	2.8	23	25	DTMOSIV		
	TK16A60W		±30	15.8	40	0.19	1350	4	35	38	DTMOSIV		
	TK16A60W5		±30	15.8	40	0.23	1350	4	35	43	DTMOSIV(HSD)		
	TK20A60W		±30	20	45	0.155	1680	7	40	48	DTMOSIV		
	TK20A60W5		±30	20	45	0.175	1800	5.5	45	55	DTMOSIV(HSD)		
	TK25A60X		±30	25	45	0.125	2400	6	60	40	DTMOSIV-H		
	TK25A60X5		±30	25	45	0.14	2400	6	60	60	DTMOSIV-H(HSD)		
	TK31A60W		±30	30.8	45	0.088	3000	9.5	70	86	DTMOSIV		
	TK39A60W		±30	38.8	50	0.065	4100	10	90	110	DTMOSIV		
	<td>TK5A65W</td> <td rowspan="5">650</td> <td>±30</td> <td>5.2</td> <td>30</td> <td>1.2</td> <td>380</td> <td>1.5</td> <td>10</td> <td>10.5</td> <td>DTMOSIV</td>	TK5A65W	650	±30	5.2	30	1.2	380	1.5	10	10.5		DTMOSIV
		TK6A65W		±30	5.8	30	1	390	1.7	12	11		DTMOSIV
		TK7A65W		±30	6.8	30	0.78	490	1.7	13	15		DTMOSIV
		TK8A65W		±30	7.8	30	0.65	570	2.5	16	16		DTMOSIV
		TK9A65W		±30	9.3	30	0.5	700	2.3	20	20		DTMOSIV
(Continued on next page)	TK11A65W		±30	11.1	35	0.39	890	2.8	23	25	DTMOSIV		

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*: New product / 新製品

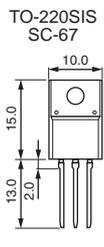
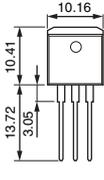
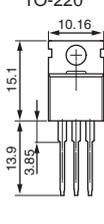
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** : Under development / 開発中



・ The internal connection diagrams only show the general configurations of the circuits.

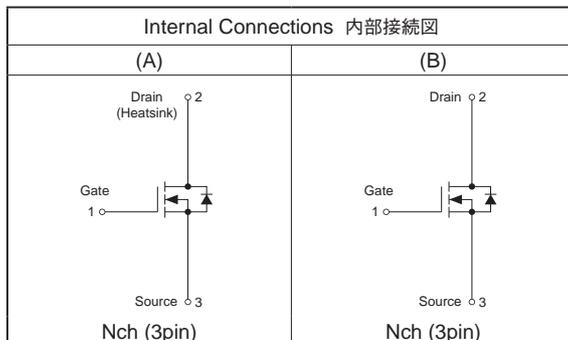
・ 内部接続図はイメージ図です。

Package	Part Number	Absolute Maximum Ratings				$R_{DS(ON)}$ max (Ω) $V_{GS} = 10\text{ V}$	C_{iss} typ. (pF)	C_{rss} typ. (pF)	C_{oss} typ. (pF)	Q_g typ. (nC)	Series	Internal Connections	
		V_{DSS} (V)	V_{GSS} (V)	I_D (A)	P_D (W)								
(Continued from previous page)  TO-220SIS SC-67 (mm)	TK14A65W	650	± 30	13.7	40	0.25	1300	4	35	35	DTMOSIV	(B)	
	TK14A65W5		± 30	13.7	40	0.3	1300	4	35	40	DTMOSIV(HSD)		
	TK17A65W		± 30	17.3	45	0.2	1800	7	40	45	DTMOSIV		
	TK17A65W5		± 30	17.3	45	0.23	1800	5.5	45	50	DTMOSIV(HSD)		
	TK22A65X5 **		± 30	(22)	(45)	(0.16)	(2400)	(9)	(60)	(50)	DTMOSIV-H(HSD)		
	TK28A65W		± 30	27.6	45	0.11	3000	8	70	75	DTMOSIV		
	TK35A65W		± 30	35	50	0.08	4100	9	90	100	DTMOSIV		
	TK35A65W5		± 30	35	50	0.095	4100	9	90	115	DTMOSIV(HSD)		
	TK7A80W **		± 20	(6.5)	TBD	(0.9)	TBD	TBD	TBD	TBD	DTMOSIV		
	TK10A80W **		± 20	9.5	40	0.55	1150	2	27	19	DTMOSIV		
	TK12A80W **		± 20	11.5	45	0.45	1400	3	29	23	DTMOSIV		
	TK17A80W		± 20	17	45	0.29	2050	2	42	32	DTMOSIV		
 I2PAK (mm)	TK16C60W	600	± 30	15.8	130	0.19	1350	4	35	38	DTMOSIV	(A)	
	TK20C60W		± 30	20	165	0.155	1680	7	40	48	DTMOSIV		
	TK14C65W	650	± 30	13.7	130	0.25	1300	4	35	35	DTMOSIV		
	TK14C65W5		± 30	13.7	130	0.3	1300	4	35	40	DTMOSIV(HSD)		
	TK17C65W		± 30	17.3	165	0.2	1800	7	40	45	DTMOSIV		
 TO-220 (mm)	TK10E60W	600	± 30	9.7	100	0.38	700	2.3	20	20	DTMOSIV	(A)	
	TK12E60W		± 30	11.5	110	0.3	890	2.8	23	25	DTMOSIV		
	TK16E60W		± 30	15.8	130	0.19	1350	4	35	38	DTMOSIV		
	TK16E60W5		± 30	15.8	130	0.23	1350	4	35	43	DTMOSIV(HSD)		
	TK20E60W		± 30	20	165	0.155	1680	7	40	48	DTMOSIV		
	TK20E60W5		± 30	20	165	0.175	1800	5.5	45	55	DTMOSIV(HSD)		
	TK25E60X		± 30	25	180	0.125	2400	6	60	40	DTMOSIV-H		
	TK25E60X5		± 30	25	180	0.14	2400	6	60	60	DTMOSIV-H(HSD)		
	TK31E60W		± 30	30.8	230	0.088	3000	9.5	70	86	DTMOSIV		
	TK31E60X		± 30	30.8	230	0.088	3000	7	70	65	DTMOSIV-H		
	TK14E65W		650	± 30	13.7	130	0.25	1300	4	35	35		DTMOSIV
	TK14E65W5			± 30	13.7	130	0.3	1300	4	35	40		DTMOSIV(HSD)
	TK17E65W			± 30	17.3	165	0.2	1800	7	40	45		DTMOSIV
	TK28E65W **		± 30	27.6	230	0.11	3000	8	70	75	DTMOSIV		
	TK7E80W **		800	± 20	(6.5)	TBD	(0.9)	TBD	TBD	TBD	TBD		DTMOSIV
	TK10E80W **			± 20	9.5	130	0.55	1150	2	27	19		DTMOSIV
	TK12E80W **			± 20	11.5	165	0.45	1400	3	29	23		DTMOSIV
TK17E80W **	± 20	17		418	0.29	2050	2	42	32	DTMOSIV			

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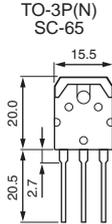
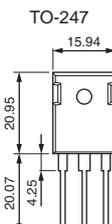
** : Under development / 開発中

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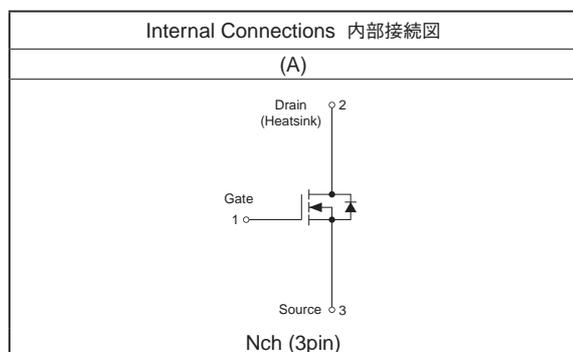
• 内部接続図はイメージ図です。

Package	Part Number	Absolute Maximum Ratings				R _{DS(ON)} max (Ω) V _{GS} = 10 V	C _{iss} typ. (pF)	C _{rss} typ. (pF)	C _{oss} typ. (pF)	Q _g typ. (nC)	Series	Internal Connections
		V _{DSS} (V)	V _{GSS} (V)	I _D (A)	P _D (W)							
 <p>TO-3P(N) SC-65 (mm)</p>	TK12J60W	600	±30	11.5	110	0.3	890	2.8	23	25	DTMOSIV	(A)
	TK16J60W		±30	15.8	130	0.19	1350	4	35	38	DTMOSIV	
	TK16J60W5		±30	15.8	130	0.23	1350	4	35	43	DTMOSIV(HSD)	
	TK20J60W		±30	20	165	0.155	1680	7	40	48	DTMOSIV	
	TK20J60W5		±30	20	165	0.175	1800	5.5	45	55	DTMOSIV(HSD)	
	TK31J60W		±30	30.8	230	0.088	3000	9.5	70	86	DTMOSIV	
	TK31J60W5		±30	30.8	230	0.099	3000	9.5	70	105	DTMOSIV(HSD)	
	TK39J60W		±30	38.8	270	0.065	4100	10	90	110	DTMOSIV	
	TK39J60W5		±30	38.8	270	0.074	4100	10	90	135	DTMOSIV(HSD)	
	TK62J60W		±30	61.8	400	0.04	6500	20	140	180	DTMOSIV	
	TK62J60W5		±30	61.8	400	0.045	6500	16	140	205	DTMOSIV(HSD)	
	 <p>TO-247 (mm)</p>		TK16N60W	600	±30	15.8	130	0.19	1350	4	35	
TK16N60W5		±30	15.8		130	0.23	1350	4	35	43	DTMOSIV(HSD)	
TK20N60W		±30	20		165	0.155	1680	7	40	48	DTMOSIV	
TK20N60W5		±30	20		165	0.175	1800	5.5	45	55	DTMOSIV(HSD)	
TK25N60X		±30	25		180	0.125	2400	6	60	40	DTMOSIV-H	
TK25N60X5		±30	25		180	0.14	2400	6	60	60	DTMOSIV-H(HSD)	
TK31N60W		±30	30.8		230	0.088	3000	9.5	70	86	DTMOSIV	
TK31N60W5		±30	30.8		230	0.099	3000	9.5	70	105	DTMOSIV(HSD)	
TK31N60X		±30	30.8		230	0.088	3000	7	70	65	DTMOSIV-H	
TK39N60W		±30	38.8		270	0.065	4100	10	90	110	DTMOSIV	
TK39N60W5		±30	38.8		270	0.074	4100	10	90	135	DTMOSIV(HSD)	
TK39N60X		±30	38.8		270	0.065	4100	8	90	85	DTMOSIV-H	
TK62N60W		±30	61.8	400	0.04	6500	20	140	180	DTMOSIV		
TK62N60W5		±30	61.8	400	0.045	6500	16	140	205	DTMOSIV(HSD)		
TK62N60X		±30	61.8	400	0.04	6500	15	140	135	DTMOSIV-H		
TK14N65W		650	±30	13.7	130	0.25	1300	4	35	35	DTMOSIV	
TK14N65W5			±30	13.7	130	0.3	1300	4	35	40	DTMOSIV(HSD)	
TK17N65W			±30	17.3	165	0.2	1800	7	40	45	DTMOSIV	
TK28N65W			±30	27.6	230	0.11	3000	8	70	75	DTMOSIV	
TK28N65W5			±30	27.6	230	0.13	3000	8	70	90	DTMOSIV(HSD)	
TK35N65W			±30	35	270	0.08	4100	9	90	100	DTMOSIV	
TK35N65W5			±30	35	270	0.095	4100	9	90	115	DTMOSIV(HSD)	
TK49N65W			±30	49.2	400	0.055	6500	15	140	160	DTMOSIV	
TK49N65W5			±30	49.2	400	0.057	6500	15	140	185	DTMOSIV(HSD)	
TK12N80W **		800	±20	11.5	165	0.45	1400	3	29	23	DTMOSIV	
TK17N80W **			±20	17	418	0.29	2050	2	42	32	DTMOSIV	

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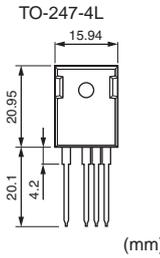
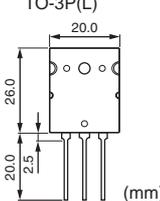
** : Under development / 開発中

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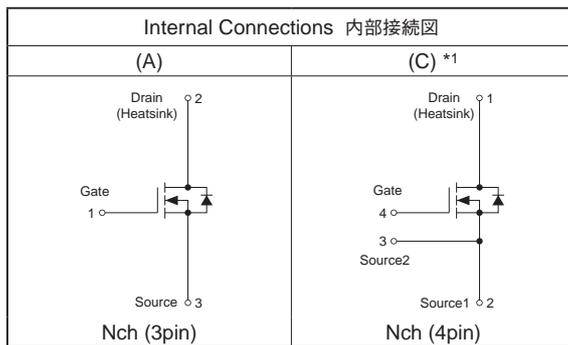
・ 内部接続図はイメージ図です。

Package	Part Number	Absolute Maximum Ratings				$R_{DS(ON)}$ max (Ω) V_{GS} = 10 V	C_{iss} typ. (pF)	C_{rss} typ. (pF)	C_{oss} typ. (pF)	Q_g typ. (nC)	Series	Internal Connections
		V_{DSS} (V)	V_{GSS} (V)	I_D (A)	P_D (W)							
 TO-247-4L (mm)	TK25Z60X *	600	± 30	25	180	0.125	2400	6	60	40	(C)	
	TK31Z60X *		± 30	30.8	230	0.088	3000	7	70	65		
	TK39Z60X *		± 30	38.8	270	0.065	4100	8	90	85		
	TK62Z60X *		± 30	61.8	400	0.04	6500	15	140	135		
 TO-3P(L) (mm)	TK100L60W	600	± 30	100	797	0.018	15000	50	320	360	(A)	

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*: New product / 新製品

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(*1) Notice : Please use the source1 pin for gate input signal return. Make sure that the main current flows into the source2 pins.

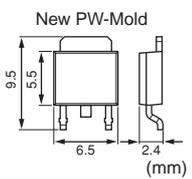
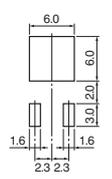
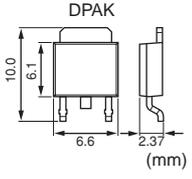
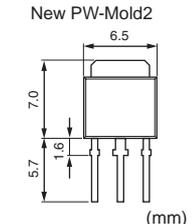
(*1) ご注意 : ソース1はゲート入力信号のリターン用として使用してください。主電流はソース2を流すように配線パターンを設計してください。

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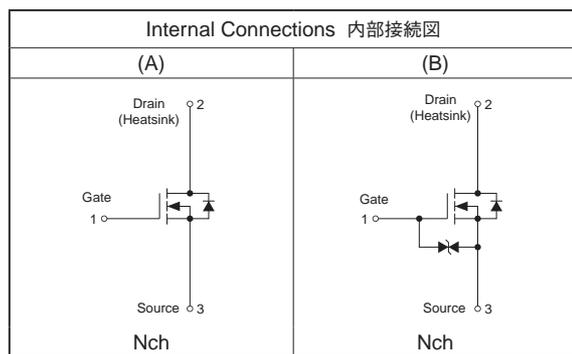
・ 内部接続図はイメージ図です。

π-MOS Series / π-MOS シリーズ
 (Single N-Channel) / (シングルNチャネル)

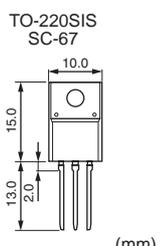
(1/4)

Package	Part Number	Absolute Maximum Ratings				R _{DS(ON)} max (Ω) V _{GS} = 10 V	C _{iss} typ. (pF)	C _{rss} typ. (pF)	C _{oss} typ. (pF)	Q _g typ. (nC)	Series	Internal Conne- ctions	Land Pattern Examples (mm)
		V _{DSS} (V)	V _{GSS} (V)	I _D (A)	P _D (W)								
	TK2P60D	600	±30	2	60	4.3	280	1.5	30	7	π-MOSVII	(A)	
		TK8P25DA	250	±20	7.5	55	0.5	550	5.1	40	16	π-MOSVII	
TK13P25D		±20		13	96	0.25	1100	8	66	25	π-MOSVII		
TK3P50D		500	±30	3	60	3	280	1.5	30	7	π-MOSVII		
TK4P50D			±30	4	80	2	380	3	45	9	π-MOSVII		
TK5P50D			±30	5	80	1.5	490	3	55	11	π-MOSVII		
TK7P50D		525	±30	7	100	1.22	600	4	70	12	π-MOSVII		
TK5P53D			±30	5	80	1.5	540	3	60	11	π-MOSVII		
TK6P53D		550	±30	6	100	1.3	600	4	70	12	π-MOSVII		
TK4P55DA			±30	3.5	80	2.45	380	2.5	45	9	π-MOSVII		
TK4P55D		600	±30	4	80	1.88	490	3	55	11	π-MOSVII		
TK4P60DA			±30	3.5	80	2.2	490	3	55	11	π-MOSVII		
TK4P60DB			±30	3.7	80	2	540	3	60	11	π-MOSVII		
TK4P60D		800	±30	4	100	1.7	600	4	70	12	π-MOSVII		
TK3P80E			±30	3	80	4.9	500	4	40	12	π-MOSVIII		
TK2P90E		900	±30	2	80	5.9	500	4	40	12	π-MOSVIII		
	TK2Q60D	600	±30	2	60	4.3	280	4	30	7	π-MOSVII	(A)	
	TK4Q60DA		±30	3.5	80	2.2	490	4	55	11	π-MOSVII		
	TK1Q90A	900	±30	1	20	9	320	4	35	13	π-MOSIV	(B)	

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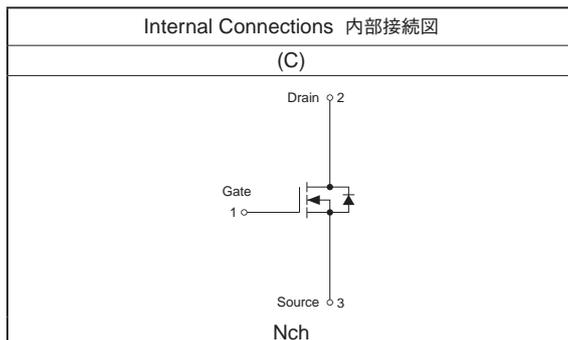
- ・ The internal connection diagrams only show the general configurations of the circuits.
- ・ 内部接続図はイメージ図です。

Package	Part Number	Absolute Maximum Ratings				$R_{DS(ON)}$ max (Ω) $V_{GS} = 10\text{ V}$	C_{iss} typ. (pF)	C_{rss} typ. (pF)	C_{oss} typ. (pF)	Q_g typ. (nC)	Series	Internal Connections	
		V_{DSS} (V)	V_{GSS} (V)	I_D (A)	P_D (W)								
 TO-220SIS SC-67 (mm)	TK9A20DA	200	± 20	8.5	30	0.4	550	4	40	14	π -MOSVII	(C)	
	TK15A20D		± 20	15	35	0.18	1050	4	80	26	π -MOSVII		
	TK20A20D		± 20	20	45	0.109	1650	4	120	43	π -MOSVII		
	TK25A20D		± 20	25	45	0.07	2550	4	180	60	π -MOSVII		
	TK8A25DA	250	± 20	7.5	30	0.5	550	4	40	16	π -MOSVII		
	TK13A25D		± 20	13	35	0.25	1100	4	66	25	π -MOSVII		
	TK17A25D		± 20	17	45	0.15	1650	4	110	43	π -MOSVII		
	TK20A25D		± 20	20	45	0.1	2550	4	150	55	π -MOSVII		
	TK18A30D	300	± 20	18	45	0.139	2600	4	140	60	π -MOSVII		
	TK5A45DA	450	± 30	4.5	30	1.75	380	4	45	9	π -MOSVII		
	TK6A45DA		± 30	5.5	35	1.35	490	4	55	11	π -MOSVII		
	TK7A45DA		± 30	6.5	35	1.2	540	4	60	11	π -MOSVII		
	TK8A45DA		± 30	7.5	35	1.1	600	4	70	12	π -MOSVII		
	TK8A45D		± 30	8	35	0.9	700	4	80	16	π -MOSVII		
	TK9A45D		± 30	9	40	0.77	800	4	100	16	π -MOSVII		
	TK11A45D		± 30	11	40	0.62	1050	5	100	20	π -MOSVII		
	TK12A45D		± 30	12	45	0.52	1200	6	120	24	π -MOSVII		
	TK13A45D		± 30	13	45	0.46	1350	6	135	25	π -MOSVII		
	TK14A45DA		± 30	13.5	45	0.41	1550	7	165	28	π -MOSVII		
	TK14A45D		± 30	14	45	0.34	1800	9	190	38	π -MOSVII		
	TK16A45D		± 30	16	50	0.27	2300	10	250	40	π -MOSVII		
	TK19A45D		± 30	19	50	0.25	2600	11	280	45	π -MOSVII		
	TK4A50D		500	± 30	4	30	2	380	2.5	45	9		π -MOSVII
	TK5A50D			± 30	5	35	1.5	490	3	55	11		π -MOSVII
	TK6A50D			± 30	6	35	1.4	540	3	60	11		π -MOSVII
	TK7A50D	± 30		7	35	1.22	600	4	70	12	π -MOSVII		
	TK8A50DA	± 30		7.5	35	1.04	700	4	80	16	π -MOSVII		
	TK8A50D	± 30		8	40	0.85	800	4	100	16	π -MOSVII		
	TK10A50D	± 30		10	45	0.72	1050	5	100	20	π -MOSVII		
	TK11A50D	± 30		11	45	0.6	1200	6	120	24	π -MOSVII		
	TK12A50D	± 30		12	45	0.52	1350	6	135	25	π -MOSVII		
	TK13A50DA	± 30		12.5	45	0.47	1550	7	165	28	π -MOSVII		
	TK13A50D	± 30		13	45	0.4	1800	9	190	38	π -MOSVII		
TK15A50D	± 30	15		50	0.3	2300	10	250	40	π -MOSVII			
TK18A50D	± 30	18	50	0.27	2600	11	280	45	π -MOSVII				
TK4A53D	525	± 30	4	35	1.7	490	3	55	11	π -MOSVII			
TK5A53D		± 30	5	35	1.5	540	3	60	11	π -MOSVII			
TK6A53D		± 30	6	35	1.3	600	4	70	12	π -MOSVII			
TK12A53D		± 30	12	45	0.58	1350	6	135	25	π -MOSVII			
TK4A55DA	550	± 30	3.5	30	2.45	380	2.5	45	9	π -MOSVII			
TK4A55D		± 30	4	35	1.88	490	3	55	11	π -MOSVII			
TK5A55D		± 30	5	35	1.7	540	3	60	11	π -MOSVII			

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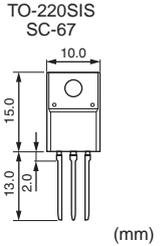
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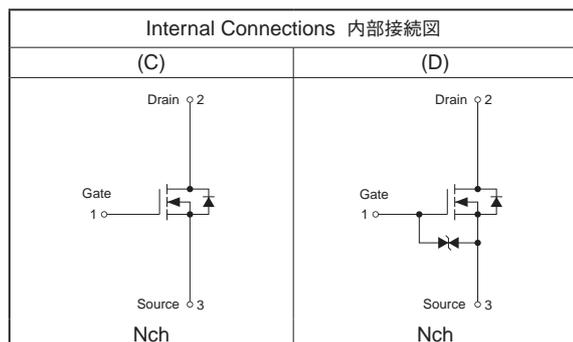
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Package	Part Number	Absolute Maximum Ratings				R _{DS(ON)} max (Ω) V _{GS} = 10 V	C _{iss} typ. (pF)	C _{rss} typ. (pF)	C _{oss} typ. (pF)	Q _g typ. (nC)	Series	Internal Connections
		V _{DSS} (V)	V _{GSS} (V)	I _D (A)	P _D (W)							
(Continued from previous page) 	TK6A55DA	550	±30	5.5	35	1.48	600	4	70	12	π-MOSVII	(C)
	TK7A55D		±30	7	35	1.25	700	4	80	16	π-MOSVII	
	TK8A55DA		±30	7.5	40	1.07	800	4	100	16	π-MOSVII	
	TK9A55DA		±30	8.5	40	0.86	1050	5	100	20	π-MOSVII	
	TK10A55D		±30	10	45	0.72	1200	6	120	24	π-MOSVII	
	TK11A55D		±30	11	45	0.63	1350	6	135	25	π-MOSVII	
	TK12A55D		±30	12	45	0.57	1550	7	165	28	π-MOSVII	
	TK13A55DA		±30	12.5	45	0.48	1800	9	190	38	π-MOSVII	
	TK14A55D		±30	14	50	0.37	2300	10	250	40	π-MOSVII	
	TK16A55D		±30	16	50	0.33	2600	11	280	45	π-MOSVII	
	TK3A60DA	600	±30	2.5	30	2.8	380	2.5	45	9	π-MOSVII	
	TK4A60DA		±30	3.5	35	2.2	490	3	55	11	π-MOSVII	
	TK4A60DB		±30	3.7	35	2	540	3	60	11	π-MOSVII	
	TK4A60D		±30	4	35	1.7	600	4	70	12	π-MOSVII	
	TK5A60D		±30	5	35	1.43	700	4	80	16	π-MOSVII	
	TK6A60D		±30	6	40	1.25	800	4	100	16	π-MOSVII	
	TK8A60DA		±30	7.5	45	1	1050	5	100	20	π-MOSVII	
	TK9A60D		±30	9	45	0.83	1200	6	120	24	π-MOSVII	
	TK10A60D		±30	10	45	0.75	1350	6	135	25	π-MOSVII	
	TK11A60D		±30	11	45	0.65	1550	7	165	28	π-MOSVII	
	TK12A60D	±30	12	45	0.55	1800	9	190	38	π-MOSVII		
	TK13A60D	±30	13	50	0.43	2300	10	250	40	π-MOSVII		
	TK15A60D	±30	15	50	0.37	2600	11	280	45	π-MOSVII		
	TK2A65D	650	±30	2	30	3.26	380	2.5	45	9	π-MOSVII	
	TK3A65DA		±30	2.5	35	2.51	490	3	55	11	π-MOSVII	
	TK3A65D		±30	3	35	2.25	540	3	60	11	π-MOSVII	
	TK4A65DA		±30	3.5	35	1.9	600	4	70	12	π-MOSVII	
	TK5A65DA		±30	4.5	35	1.67	700	4	70	16	π-MOSVII	
	TK5A65D		±30	5	40	1.43	800	4	100	16	π-MOSVII	
	TK6A65D		±30	6	45	1.11	1050	5	100	20	π-MOSVII	
	TK7A65D		±30	7	45	0.98	1200	6	120	24	π-MOSVII	
	TK8A65D		±30	8	45	0.84	1350	6	135	25	π-MOSVII	
	TK11A65D		±30	11	45	0.7	1700	8	157	30	π-MOSVII	
	TK12A65D	±30	12	50	0.54	2300	10	200	40	π-MOSVII		
	TK13A65D	±30	13	50	0.47	2600	11	280	45	π-MOSVII		
	TK6A80E	800	±30	6	45	1.7	1350	10	110	32	π-MOSVIII	
	TK10A80E		±30	10	50	1	2000	15	150	46	π-MOSVIII	
	2SK3566	900	±30	2.5	40	6.4	470	10	50	12	π-MOSIV	(D)
	2SK3564		±30	3	40	4.3	700	15	75	17	π-MOSIV	
	2SK3798		±30	4	40	3.5	800	20	85	26	π-MOSIV	
	TK7A90E		±30	7	45	2	1350	10	110	32	π-MOSVIII	
	TK9A90E		±30	9	50	1.3	2000	15	150	46	π-MOSVIII	(C)

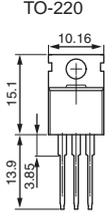
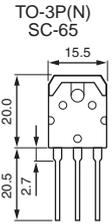
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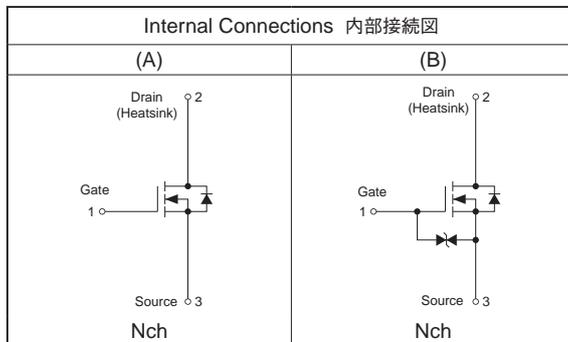
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Package	Part Number	Absolute Maximum Ratings				$R_{DS(ON)}$ max (Ω) V_{GS} = 10 V	C_{iss} typ. (pF)	C_{rss} typ. (pF)	C_{oss} typ. (pF)	Q_g typ. (nC)	Series	Internal Connections	
		V_{DSS} (V)	V_{GSS} (V)	I_D (A)	P_D (W)								
 TO-220 (mm)	TK13E25D	250	± 20	13	102	0.25	1100	8	66	25	π -MOSVII	(A)	
 TO-3P(N) SC-65 (mm)	TK40J20D	200	± 20	40	260	0.044	4300	30	280	100	π -MOSVII	(A)	
	TK70J20D		± 20	70	410	0.027	6950	50	450	160	π -MOSVII		
	TK30J25D	250	± 20	30	260	0.06	4300	30	250	100	π -MOSVII		
	TK60J25D		± 20	60	410	0.038	7000	44	400	160	π -MOSVII		
	TK50J30D	300	± 20	50	410	0.052	7000	50	345	160	π -MOSVII		
	TK15J50D	500	± 30	15	210	0.4	1800	9	190	38	π -MOSVII		
	TK20J50D		± 30	20	280	0.27	2600	11	280	45	π -MOSVII		
	TK12J55D	550	± 30	12	190	0.57	1550	7	165	28	π -MOSVII		
	TK16J55D		± 30	16	250	0.37	2300	10	250	40	π -MOSVII		
	TK19J55D		± 30	19	280	0.33	2600	11	280	45	π -MOSVII		
	2SK3633	800	± 30	7	150	1.7	1500	25	140	35	π -MOSIV		(B)
	TK10J80E		± 30	10	250	1	2000	15	150	46	π -MOSVIII		
	TK7J90E	900	± 30	7	200	2	1350	10	110	32	π -MOSVIII		(A)
	TK9J90E		± 30	9	250	1.3	2000	15	150	46	π -MOSVIII		
2SK4207		± 30	13	150	0.95	2790	25	300	45	π -MOSIV	(B)		

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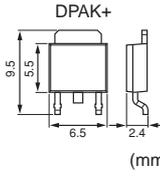
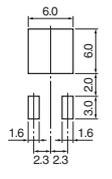
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Automotive MOSFETs / 車載 MOSFET

Automotive Power MOSFETs / 車載パワー MOSFET (Single N-Channel) / (シングルNチャンネル)

(1/2)

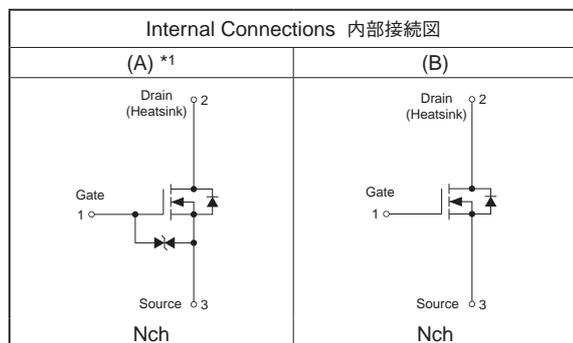
Package	Part Number	Absolute Maximum Ratings					R _{DS(ON)} max (mΩ)			Ciss typ. (pF)	Crss typ. (pF)	Coss typ. (pF)	Qg typ. (nC)	Series	Internal Connections	Land Pattern Examples (mm)
		V _{DSS} (V)	V _{GSS} (V)	I _D (A)	P _D (W)	T _{ch} (°C)	V _{Gs} = 10 V	V _{Gs} = 6 V	V _{Gs} = 4.5 V							
	TK15S04N1L *	40	±20	15	46	175	17.8	—	37	610	50	390	10	U-MOSVIII-H	(A)	
	TK20S04K3L		±20	20	38	175	14	26	—	820	110	190	18	U-MOSIV		
	TK35S04K3L		±20	35	58	175	10.3	15	—	1370	180	320	28	U-MOSIV		
	TK50S04K3L		±20	50	68	175	5.4	10	—	2010	255	435	42	U-MOSIV		
	TK65S04N1L *		±20	65	107	175	4.3	—	7.8	2550	130	1430	39	U-MOSVIII-H		
	TK100S04N1L *		±20	100	100	175	2.3	—	4.5	5490	220	3000	76	U-MOSVIII-H		
	TK1R4S04PB *	±20	120	180	175	1.35	1.9	—	5500	490	3400	103	U-MOSIX-H	(B)		
	TK8S06K3L	60	±20	8	25	175	54	80	—	400	40	80	10	U-MOSIV	(A)	
	TK20S06K3L		±20	20	38	175	29	40	—	780	75	136	18	U-MOSIV		
	TK25S06N1L *		±20	25	57	175	18.5	—	36.8	855	69	490	15	U-MOSVIII-H		
	TK30S06K3L		±20	30	58	175	18	30	—	1350	130	230	28	U-MOSIV		
	TK40S06N1L *		±20	40	88.2	175	10.5	—	18	1650	107	835	26	U-MOSVIII-H		
	TK45S06K3L		±20	45	68	175	10.5	16.4	—	1950	185	315	41	U-MOSIV		
	TK80S06K3L	±20	80	100	175	5.5	7.8	—	4200	400	650	85	U-MOSIV	(B)		
	TK90S06N1L *	100	±20	90	157	175	3.3	—	5.2	5400	350	2630	81	U-MOSVIII-H	(A)	
	TK7S10N1Z *		±20	7	50	175	48	—	—	470	36	260	7.1	U-MOSVIII-H		
	TK11S10N1L *		±20	11	65	175	28	—	50	850	67	370	15	U-MOSVIII-H		
	TK33S10N1L **		±20	33	125	175	9.7	—	16.2	2250	145	1010	33	U-MOSVIII-H		
	TK33S10N1Z *		±20	33	125	175	9.7	—	—	2050	140	1070	28	U-MOSVIII-H		
	TK55S10N1 *		±20	55	157	175	6.5	—	—	3280	210	1520	49	U-MOSVIII-H		

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*: New product / 新製品

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** : Under development / 開発中

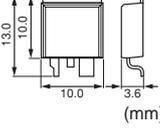
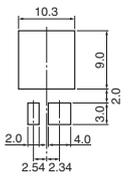
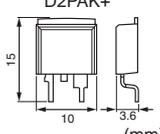
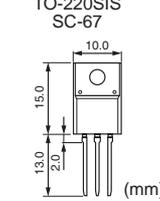


(*1) With protection Zener diode between gate and source.

(*1) ゲート・ソース間保護用ツェナーダイオードあり。

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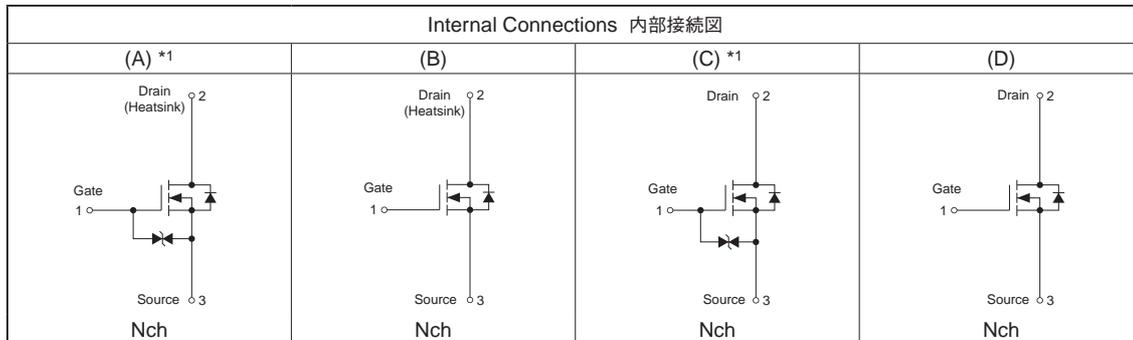
Package	Part Number	Absolute Maximum Ratings					R _{DS(ON)} max (mΩ)			Ciss typ. (pF)	Crss typ. (pF)	Coss typ. (pF)	Qg typ. (nC)	Series	Internal Connections	Land Pattern Examples (mm)
		V _{DSS} (V)	V _{GSS} (V)	I _D (A)	P _D (W)	T _{ch} (°C)	V _{GS} = 10 V	V _{GS} = 6 V	V _{GS} = 4.5 V							
 TO-220SM(W) (mm)	TK100F04K3	40	±20	100	180	175	3	—	—	4500	900	1100	102	U-MOSIV	(B)	
	TK100F04K3L		±20	100	180	175	3	4.5	—	4980	680	1100	105	U-MOSIV	(A)	
	TK1R4F04PB *		±20	160	205	175	1.35	1.9	—	5500	490	3400	103	U-MOSIX-H	(B)	
	TK200F04N1L *		±20	200	375	175	0.9	1.37	—	14920	650	7680	214	U-MOSVIII-H		
	TKR74F04PB *		±20	250	375	175	0.74	0.98	—	14200	1300	9100	227	U-MOSIX-H		
	TK100F06K3	±20	100	180	175	5	—	—	4500	600	800	98	U-MOSIV			
	TK130F06K3	±20	130	300	175	3.4	—	—	8400	1020	1420	170	U-MOSIV			
	TK80F08K3	75	±20	80	300	175	4.3	—	—	8200	770	1140	175	U-MOSIV		
	TK160F10N1 *	100	±20	160	375	175	2.4	—	—	8510	500	3960	121	U-MOSVIII-H		
	TK160F10N1L **	±20	160	375	175	2.4	3.9	—	10100	610	3900	122	U-MOSVIII-H			
 D2PAK+ (mm)	TK1R5R04PB **	40	±20	160	205	175	1.5	2.06	—	5500	490	3400	103	U-MOSIX-H	(B)	
	 TO-220SIS SC-67 (mm)	TK50A04K3	40	±20	50	42	175	3.5	—	—	4500	900	1100	102	U-MOSIV	(D)
TK80A04K3L		±20		80	48	175	2.4	3.5	—	9400	1200	1900	190	U-MOSIV	(C)	

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** : Under development / 開発中



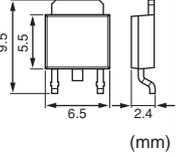
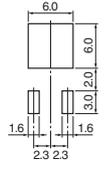
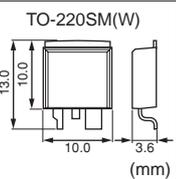
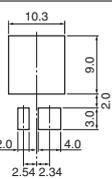
(*1) With protection Zener diode between gate and source.

(*1) ゲート・ソース間保護用ツェナーダイオードあり。

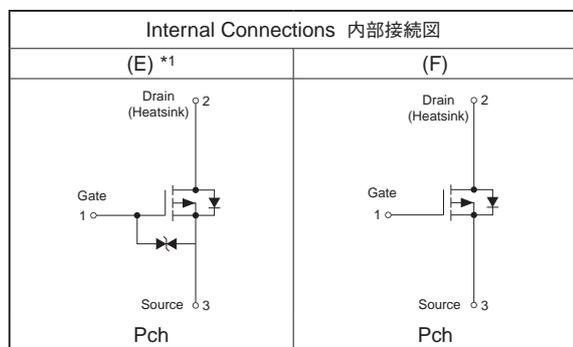
・ The internal connection diagrams only show the general configurations of the circuits.

・ 内部接続図はイメージ図です。

(Single P-Channel) / (シングルPチャンネル)

Package	Part Number	Absolute Maximum Ratings					R _{DS(ON)} max (mΩ)			C _{iss} typ. (pF)	C _{rss} typ. (pF)	C _{oss} typ. (pF)	Q _g typ. (nC)	Series	Internal Connections	Land Pattern Examples (mm)
		V _{DSS} (V)	V _{GSS} (V)	I _D (A)	P _D (W)	T _{ch} (°C)	V _{Gs} = 10 V	V _{Gs} = 6 V	V _{Gs} = 4.5 V							
 <p>DPAK+</p> <p>(mm)</p>	TJ10S04M3L	-40	-20/+10	-10	27	175	44	62	—	930	90	140	19	U-MOSVI	(E)	
	TJ20S04M3L		-20/+10	-20	41	175	22.2	32	—	1850	180	250	37	U-MOSVI		
	TJ40S04M3L		-20/+10	-40	68	175	9.1	13	—	4140	410	510	83	U-MOSVI		
	TJ60S04M3L		-20/+10	-60	90	175	6.3	9.4	—	6510	570	780	125	U-MOSVI		
	TJ80S04M3L		-20/+10	-80	100	175	5.2	7.9	—	7770	740	970	158	U-MOSVI		
	TJ8S06M3L	-60	-20/+10	-8	27	175	104	130	—	890	60	100	19	U-MOSVI		
	TJ15S06M3L		-20/+10	-15	41	175	50	63	—	1770	130	180	36	U-MOSVI		
	TJ30S06M3L		-20/+10	-30	68	175	21.8	28	—	3950	270	360	80	U-MOSVI		
	TJ50S06M3L		-20/+10	-50	90	175	13.8	17.4	—	6290	410	560	124	U-MOSVI		
	TJ60S06M3L		-20/+10	-60	100	175	11.2	14.5	—	7760	530	690	156	U-MOSVI		
TJ15S10M3	-100	-20/+10	-15	75	175	130	—	—	3200	135	190	69	U-MOSVI	(F)		
 <p>TO-220SM(W)</p> <p>(mm)</p>	TJ100F04M3L	-40	-20/+10	-100	250	175	3.6	5.4	—	9500	1000	1550	250	U-MOSVI	(E)	
	TJ200F04M3L		-20/+10	-200	375	175	1.8	2.6	—	12800	1150	2400	460	U-MOSVI	(F)	
	TJ100F06M3L	-60	-20/+10	-100	250	175	7.1	10.7	—	9000	700	1100	250	U-MOSVI	(E)	
	TJ150F06M3L		-20/+10	-150	300	175	5.6	6.1	—	12500	880	1750	420	U-MOSVI		

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- ・ ご購入の前に、お客様が希望される当社製品のRoHS適合情報を担当営業に必ずご確認ください。



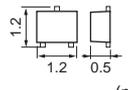
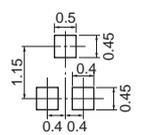
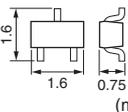
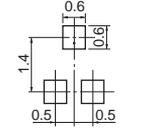
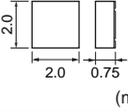
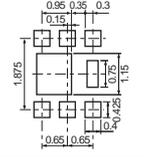
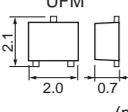
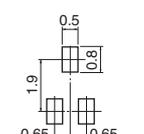
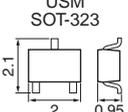
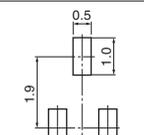
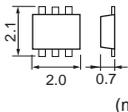
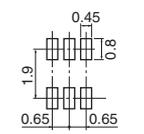
(*1) With protection Zener diode between gate and source.

(*1) ゲート・ソース間保護用ツェナーダイオードあり。

- ・ The internal connection diagrams only show the general configurations of the circuits.
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Automotive Small-Package Series / 車載小型パッケージシリーズ
(Single N-Channel) / (シングルNチャンネル)

(1/2)

Package	Part Number	Absolute Maximum Ratings					R _{DS(ON)} max (mΩ)						Ciss typ. (pF)	Crss typ. (pF)	Coss typ. (pF)	Qg typ. (nC)	Series	Internal Connections	Land Pattern Examples (mm)	
		V _{DS} (V)	V _{GSS} (V)	I _b (A)	P _b (W)	T _{ch} (°C)	V _{GSS} = 10 V	V _{GSS} = 6.0 V	V _{GSS} = 4.5 V	V _{GSS} = 4.0 V	V _{GSS} = 2.5 V	V _{GSS} = 1.8 V								V _{GSS} = 1.5 V
 VESM SOT-723 (mm)	SSM3K35MFV	20	±10	0.18	0.15	150	—	—	—	3000	4000	—	8000	9.5	4.1	9.5	—	π-MOSVI	(C)	
	SSM3K36MFV		±10	0.5	0.15	150	—	—	660	—	850	1140	1520	46	7.3	10.8	1.23	U-MOSIII		
	SSM3K56MFV *		±8	0.8	0.15	150	—	—	235	—	300	480	840	55	6	16	1	U-MOSVII-H		
	SSM3K44MFV	30	±20	0.1	0.15	150	—	—	—	4000	7000	—	—	8.5	5.3	9.4	—	π-MOSVI	(C)	
 SSM SOT-416 (mm)	SSM3K35FS	20	±10	0.18	0.1	150	—	—	—	3000	4000	—	8000	9.5	4.1	9.5	—	π-MOSVI	(C)	
	SSM3K36FS		±10	0.5	0.15	150	—	—	660	—	850	1140	1520	46	7.3	10.8	1.23	U-MOSIII		
	SSM3K56FS		±8	0.8	0.15	150	—	—	235	—	300	480	840	55	6	16	1	U-MOSVII-H		
	SSM3K44FS	30	±20	0.1	0.15	150	—	—	—	4000	7000	—	—	8.5	5.3	9.4	—	π-MOSVI	(C)	
	SSM3K72KFS *	60	±20	0.3	0.15	150	1500	—	1750	—	—	—	—	26	1.3	5.5	0.39	U-MOSVII-H	(C)	
 UDFN6B SOT-1220 (mm)	SSM6K504NU *	30	±20	9	1.25	150	19.5	—	26	—	—	—	620	42	110	4.8	U-MOSVII-H	(E)		
	SSM6K513NU *		±20	15	2.5	150	8.9	—	12	—	—	—	—	1130	52	350	7.5			U-MOSIX-H
	SSM6K514NU *	40	±20	12	2.5	150	11.6	—	17.3	—	—	—	1110	26	245	7.5	U-MOSIX-H			
	SSM6K341NU **	60	±20	6	2.5	175	36	—	51	—	—	—	550	35	300	9.3	U-MOSVIII-H			
	SSM6K361NU **	100	±20	3.5	2.5	175	69	—	92	—	—	—	430	22	160	3.2	U-MOSVIII-H			
 UFM (mm)	SSM3K36TU	20	±10	0.5	0.5	150	—	—	—	850	1140	1520	46	7.3	10.8	1.23	U-MOSIII	(C)		
	SSM3K122TU		±10	2	0.5	150	—	—	—	123	161	211	304	195	29	35	3.4			U-MOSIII
	SSM3K121TU		±10	3.2	0.5	150	—	—	—	48	63	93	140	400	60	68	5.9			U-MOSIII
	SSM3K123TU	±10	4.2	0.5	150	—	—	—	28	32	43	66	1010	150	162	13.6	U-MOSIII	(B)		
	SSM3K127TU	±12	2	0.5	150	—	—	—	123	167	286	—	123	18	43	1.5	U-MOSIII	(A)		
	SSM3K116TU	30	±12	2.2	0.5	150	—	—	100	—	135	—	245	33	41	—	U-MOSIII			
	SSM3K131TU	±20	6	0.5	150	27.6	—	41.5	—	—	—	—	450	77	120	10.1	U-MOSIV			
	SSM3K2615TU *	60	±20	2	0.5	150	300	—	—	440	—	—	—	150	25	70	6	π-MOSV		(B)
 USM SOT-323 (mm)	SSM3K16FU	20	±10	0.1	0.15	150	—	—	—	3000	4000	—	15000	9.3	4.5	9.8	—	π-MOSVI	(C)	
	SSM3K17FU	50	±7	0.1	0.15	150	—	—	—	20000	40000	—	—	7	3	7	—	π-MOSV		
	SSM3K7002KFU *	60	±20	0.3	0.15	150	1500	—	1750	—	—	—	—	26	1.3	5.5	0.39	U-MOSVII-H		
 UF6 (mm)	SSM6K404TU	20	±10	3	0.5	150	—	—	—	55	70	100	147	400	60	68	5.9	U-MOSIII	(E)	
	SSM6K403TU		±10	4.2	0.5	150	—	—	—	28	32	43	66	1050	160	175	16.8	U-MOSIII		
	SSM6K406TU	30	±20	4.4	0.5	150	25	—	38.5	—	—	—	490	105	143	12.4	U-MOSIV			
	SSM6K407TU	60	±20	2	0.5	150	300	—	—	440	—	—	—	150	25	70	6	π-MOSV		

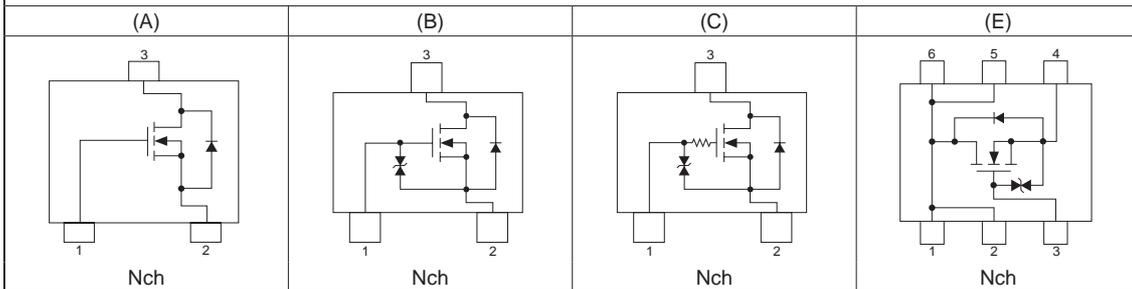
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*: New product / 新製品

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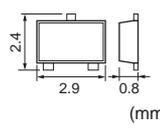
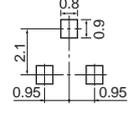
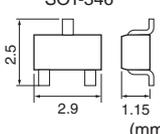
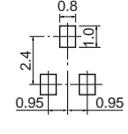
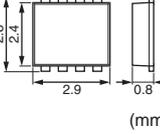
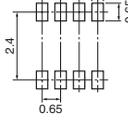
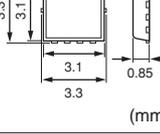
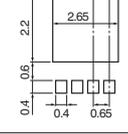
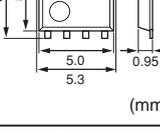
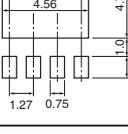
** : Under development / 開発中

Internal Connections 内部接続図 (Top View)



• The internal connection diagrams only show the general configurations of the circuits.

• 内部接続図はイメージ図です。

Package	Part Number	Absolute Maximum Ratings					R _{DS(ON)} max (mΩ)						C _{iss} typ. (pF)	C _{rss} typ. (pF)	C _{oss} typ. (pF)	Q _g typ. (nC)	Series	Internal Connections	Land Pattern Examples (mm)		
		V _{DSS} (V)	V _{GSS} (V)	I _D (A)	P _D (W)	T _{ch} (°C)	V _{GS} = 10 V	V _{GS} = 6.0 V	V _{GS} = 4.5 V	V _{GS} = 4.0 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V								V _{GS} = 1.5 V	
 <p>SOT-23F (mm)</p>	SSM3K336R	30	±20	3	1	150	95	—	140	—	—	—	126	8	26	1.7	U-MOSVII-H	(A)			
	SSM3K329R		±12	3.5	1	150	—	—	—	126	170	289	—	123	18	43	1.5			U-MOSIII	
	SSM3K333R		±20	6	1	150	28	—	42	—	—	—	—	436	28	77	3.4			U-MOSVII-H	
	SSM3K335R		±20	6	1	150	38	—	56	—	—	—	—	340	20	60	2.7			U-MOSVII-H	
	SSM3K337R	60	±20	2	1	150	150	—	176	200	—	—	—	120	7.2	33	3			U-MOSIV	
	SSM3K2615R *		±20	2	1	150	300	—	—	440	—	—	—	150	25	70	6			π-MOSV	
	SSM3K318R *		±20	2.5	1	150	107	—	145	—	—	—	—	235	23	31	7			U-MOSIV	
	SSM3K341R *		±20	6	1.2	175	—	—	51	69	—	—	—	550	35	300	9.3			U-MOSVIII-H	
SSM3K361R *	100	±20	3.5	1.2	175	—	—	92	—	—	—	—	430	22	160	3.2	U-MOSVIII-H				
 <p>S-Mini SOT-346 (mm)</p>	SSM3K15F	30	±20	0.1	0.2	150	—	—	—	4000	7000	—	—	7.8	3.6	8.8	—	π-MOSVI	(C)		
	SSM3K7002KF *	60	±20	0.4	0.27	150	—	—	1.75	—	—	—	—	26	1.3	5.5	0.39	U-MOSVII-H			
 <p>PS-8 (mm)</p>	TPCP8011	40	±20	5	1.96 ₍₁₎	175	31.8	51.2	—	—	—	—	—	505	66	115	11.8	U-MOSIV	(P)		
	TPCP8010		±20	6	1.96 ₍₁₎	175	23.8	38.4	—	—	—	—	—	600	75	132	13.1	U-MOSIV			
	TPCP8009		±20	10	2.01 ₍₁₎	175	11.8	19.5	—	—	—	—	—	1250	165	265	25.1	U-MOSIV			
	TPCP8013	60	±20	4	1.96 ₍₁₎	175	51.8	77.9	—	—	—	—	—	515	48	86	12	U-MOSIV			
	TPCP8012		±20	8	2.01 ₍₁₎	175	20.2	29.1	—	—	—	—	—	1160	120	200	26.6	U-MOSIV			
 <p>TSON Advance (mm)</p>	TPCC8069	40	±20	30	46.8	175	8.1	14.1	—	—	—	—	1640	200	340	34	U-MOSIV	(P)			
	TPCC8070	60	±20	30	46.8	175	13.5	21.3	—	—	—	—	1600	150	260	34	U-MOSIV				
 <p>SOP Advance (mm)</p>	TPCA8085	40	±20	40	55	175	5.7	10.4	—	—	—	—	—	2050	250	410	41	U-MOSIV	(P)		
	TPH4R304NC (2) **		±20	40	55	175	4.3	—	8.8	—	—	—	—	—	2450	145	1380	35			U-MOSVIII-H
	TPCA8083		±20	60	84	175	3.3	5.6	—	—	—	—	—	—	4540	530	900	83			U-MOSIV
	TPCA8086	60	±20	35	55	175	11.2	16.6	—	—	—	—	—	—	1990	170	290	41			U-MOSIV
	TPCA8084		±20	60	84	175	5.3	8	—	—	—	—	—	—	4480	400	670	83			U-MOSIV

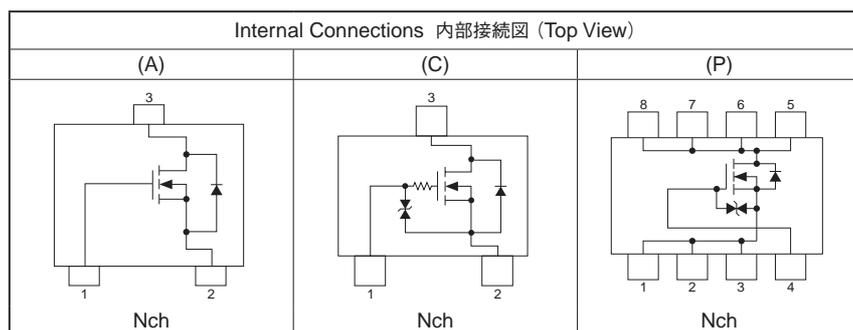
Note (1): Device mounted on a glass board. t = 5 seconds. / ガラスエポキシ基板。t = 5 秒。

*: New product / 新製品

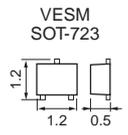
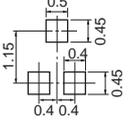
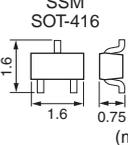
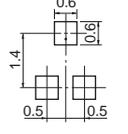
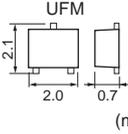
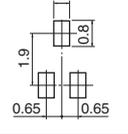
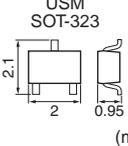
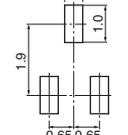
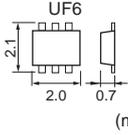
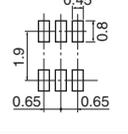
(2): Wettable Flank / 端子先端にメッキ処理あり

** : Under development / 開発中

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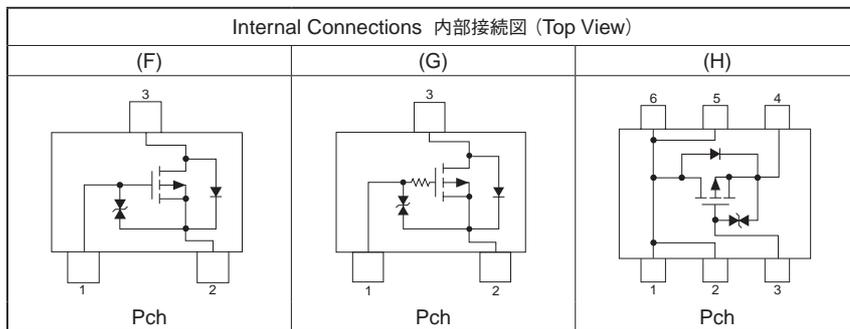


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Package	Part Number	Absolute Maximum Ratings					R _{DS(ON)} max (mΩ)							Ciss typ. (pF)	Crss typ. (pF)	Coss typ. (pF)	Qg typ. (nC)	Series	Internal Connections	Land Pattern Examples (mm)
		V _{DSS} (V)	V _{GSS} (V)	I _D (A)	P _D (W)	T _{ch} (°C)	V _{Gs} = 10 V	V _{Gs} = 6.0 V	V _{Gs} = 4.5 V	V _{Gs} = 4.0 V	V _{Gs} = 2.5 V	V _{Gs} = 1.8 V	V _{Gs} = 1.5 V							
 VESM SOT-723 (mm)	SSM3J35MFV	-20	±10	-0.1	0.15	150	-	-	-	8000	11000	-	22000	12.2	6.5	10.4	-	π-MOSVI	(G)	
	SSM3J36MFV		±8	-0.33	0.15	150	-	-	1310	-	-	2700	3600	43	6.1	10.3	1.2	U-MOSIII		
	SSM3J56MFV		±8	-0.8	0.5	150	-	-	390	-	480	660	900	100	10	16	1.6	U-MOSVI		
	SSM3J15FV	-30	±20	-0.1	0.15	150	-	-	-	12000	32000	-	-	9.1	3.5	8.6	-	π-MOSVI	(G)	
 SSM SOT-416 (mm)	SSM3J35FS	-20	±10	-0.1	0.1	150	-	-	-	8000	11000	-	22000	12.2	6.5	10.4	-	π-MOSVI	(G)	
	SSM3J36FS		±8	-0.33	0.15	150	-	-	1310	-	-	2700	3600	43	6.1	10.3	1.2	U-MOSIII		
	SSM3J15FS	-30	±20	-0.1	0.1	150	-	-	-	12000	32000	-	-	9.1	3.5	8.6	-	π-MOSVI		
 UFM (mm)	SSM3J36TU	-20	±8	-0.33	0.5	150	-	-	1310	-	-	2700	3600	43	6.1	10.3	1.2	U-MOSIII	(G)	
	SSM3J112TU	-30	±20	-1.1	0.5	150	390	-	-	790	-	-	-	86	14	25	-	U-MOSII	(F)	
	SSM3J118TU		±20	-1.4	0.5	150	240	-	-	480	-	-	-	137	20	39	-	U-MOSII		
	SSM3J117TU		±20	-2	0.5	150	117	-	-	225	-	-	-	280	45	80	-	U-MOSII		
 USM SOT-323 (mm)	SSM3J16FU	-20	±10	-0.1	0.15	150	-	-	-	8000	12000	-	45000	11	3.7	10	-	π-MOSVI	(G)	
	SSM3J15FU	-30	±20	-0.1	0.15	150	-	-	-	12000	32000	-	-	9.1	3.5	8.6	-	π-MOSVI		
	SSM3J09FU		±20	-0.2	0.15	150	2700	-	-	4200	-	-	-	22	5	14	-	π-MOSVI		
 UF6 (mm)	SSM6J50TU	-20	±10	-2.5	0.5	150	-	-	64	-	100	-	-	800	120	160	-	U-MOSIV	(H)	
	SSM6J402TU	-30	±20	-2	0.5	150	117	-	-	225	-	-	-	280	45	80	5.3	U-MOSIII		
	SSM6J410TU		±20	-2.1	0.5	150	216	-	-	393	-	-	-	120	21	32	2.9	U-MOSIII		
	SSM6J401TU		±20	-2.5	0.5	150	73	-	-	145	-	-	-	730	90	110	16	U-MOSIII		

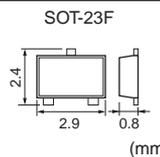
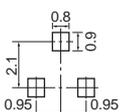
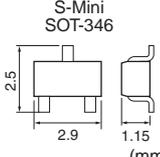
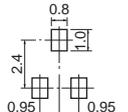
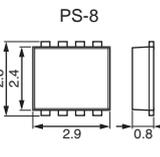
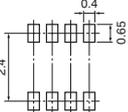
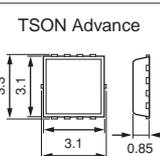
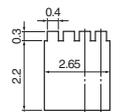
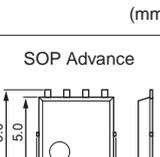
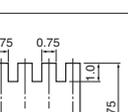
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Package	Part Number	Absolute Maximum Ratings					R _{DS(ON)} max (mΩ)						Ciss typ. (pF)	Crss typ. (pF)	Coss typ. (pF)	Qg typ. (nC)	Series	Internal Connections	Land Pattern Examples (mm)	
		V _{DSS} (V)	V _{GSS} (V)	I _D (A)	P _D (W)	T _{ch} (°C)	V _{Gs} = 10 V	V _{Gs} = 6.0 V	V _{Gs} = 4.5 V	V _{Gs} = 4.0 V	V _{Gs} = 2.5 V	V _{Gs} = 1.8 V								V _{Gs} = 1.5 V
 <p>SOT-23F (mm)</p>	SSM3J356R *	-60	-20/+10	-2	1	150	300	—	360	400	—	—	—	330	25	40	8.3	U-MOSVI	(F)	
	SSM3J351R **		-20/+10	-2.5	1	150	150	—	200	—	—	—	—	491	TBD	TBD	TBD	U-MOSVI		
 <p>S-Mini SOT-346 (mm)</p>	SSM3J15F	-30	±20	-0.1	0.2	150	—	—	—	12000	32000	—	—	9.1	3.5	8.6	—	π-MOSVI	(G)	
	SSM3J168F **	-60	±20	-0.2	0.6	150	2	—	2.6	10	—	—	—	30	TBD	TBD	TBD	U-MOSIII		
 <p>PS-8 (mm)</p>	TPCP8109	-40	-20/+10	-4.5	1.96 (1)	175	52.3	76.8	—	—	—	—	—	810	85	130	18	U-MOSVI	(Q)	
	TPCP8107		-20/+10	-8	2.01 (1)	175	18	26.8	—	—	—	—	—	2160	238	292	44.6	U-MOSVI		
	TPCP8111	-60	-20/+10	-3	1.96 (1)	175	117	158.4	—	—	—	—	—	760	60	90	17	U-MOSVI		
	TPCP8110	-60	-20/+10	-5	2.01 (1)	175	39.5	53.2	—	—	—	—	—	2075	150	205	45	U-MOSVI		
 <p>TSON Advance (mm)</p>	TPCC8106	-40	-20/+10	-30	46.8	175	12.3	18.9	—	—	—	—	—	3100	320	390	66	U-MOSVI	(Q)	
	TPCC8107	-60	-20/+10	-25	46.8	175	30.5	42.9	—	—	—	—	—	2930	230	270	63	U-MOSVI		
 <p>SOP Advance (mm)</p>	TPCA8121	-30	-20/+10	-45	45	175	3	—	4	—	—	—	—	7420	1180	1440	190	U-MOSVI	(Q)	
	TPCA8124	-40	-20/+10	-35	55	175	10.5	14.6	—	—	—	—	—	3570	370	450	77	U-MOSVI		
	TPCA8122	-40	-20/+10	-60	84	175	5	7.2	—	—	—	—	—	7340	770	980	152	U-MOSVI		
	TPCA8125	-60	-20/+10	-25	55	175	25.5	34.4	—	—	—	—	—	3650	260	320	78	U-MOSVI		
	TPCA8123	-60	-20/+10	-50	84	175	11.1	14.9	—	—	—	—	—	7000	540	680	163	U-MOSVI		

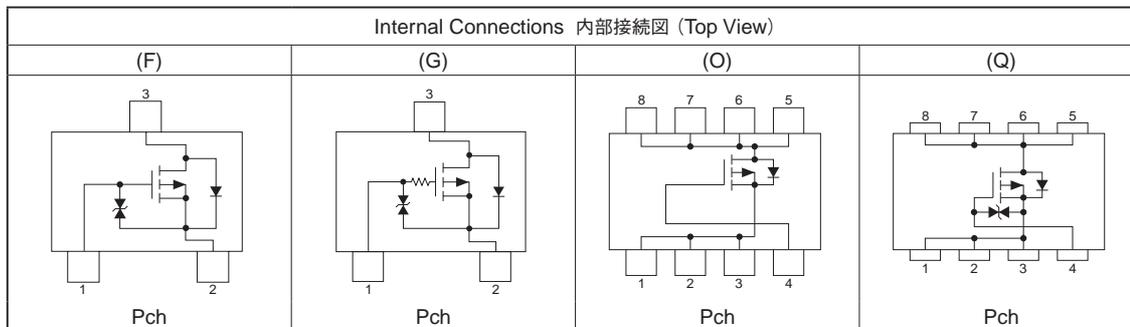
Note (1): Device mounted on a glass board. t = 5 seconds. / ガラスエポキシ基板。t = 5 秒。

*: New product / 新製品

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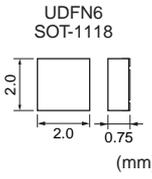
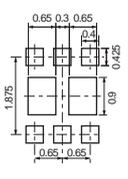
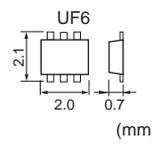
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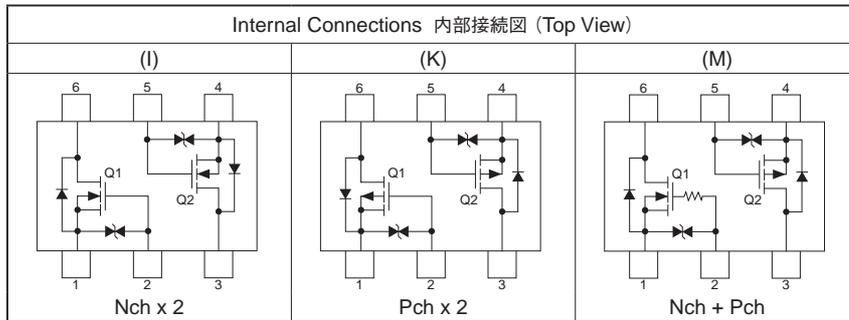
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Package	Polarity	Part Number	Absolute Maximum Ratings					R _{DS(ON)} max (mΩ)							C _{iss} typ. (pF)	C _{rss} typ. (pF)	C _{oss} typ. (pF)	Q _g typ. (nC)	Series	Internal Connections	Land Pattern Examples (mm)	
			V _{DSS} (V)	V _{GSS} (V)	I _b (A)	P _d (W)	T _{ch} (°C)	V _{Gs} = 10 V	V _{Gs} = 6.0 V	V _{Gs} = 4.5 V	V _{Gs} = 4.0 V	V _{Gs} = 2.5 V	V _{Gs} = 1.8 V	V _{Gs} = 1.5 V								
UDFN6 SOT-1118  (mm)	Nchx2	SSM6N55NU	30	±20	4	1	150	46	—	64	—	—	—	—	—	280	20	53	2.5	U-MOSVII-H	(I)	
		UF6  (mm)	Nchx2	SSM6N62TU **	20	±8	0.8	0.5	150	—	—	95	—	113	168	275	215	25	55	2	U-MOSVII-H	(I)
SSM6N39TU	±10			1.6	0.5	150	—	—	—	119	139	190	247	260	37	45	7.5	U-MOSIII				
SSM6N24TU	30			±12	0.5	0.5	150	—	—	145	—	180	—	—	245	33	41	—	U-MOSIII			
SSM6N40TU	±20			1.6	0.5	150	122	—	—	182	—	—	—	180	27	34	5.1	U-MOSIII				
Pchx2	SSM6P54TU		-20	±8	-1.2	0.5	150	—	—	—	—	228	350	555	331	39	48	7.7	U-MOSIV	(K)		
	SSM6P39TU		±8	-1.5	0.5	150	—	—	—	213	294	430	—	250	35	43	6.4	U-MOSIII				
	SSM6P40TU		-30	±20	-1.4	0.5	150	226	—	—	403	—	—	—	120	21	32	2.9	U-MOSIII			
Nch + Pch	SSM6L39TU		20	±10	1.6	0.5	150	—	—	—	119	139	190	247	260	37	45	7.5	U-MOSIII	(M)		
	SSM6L12TU		-20	±8	-1.5	0.5	150	—	—	—	213	294	430	—	250	35	43	6.4	U-MOSIII			
			30	±12	0.5	0.5	150	—	—	145	—	180	—	—	245	33	41	—	U-MOSIII			
	SSM6L40TU		30	±20	1.6	0.5	150	122	—	—	182	—	—	—	180	27	34	5.1	U-MOSIII			
			-30	±20	-1.4	0.5	150	226	—	—	403	—	—	—	120	21	32	2.9	U-MOSIII			

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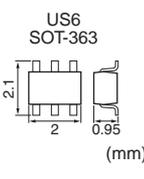
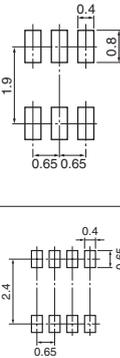
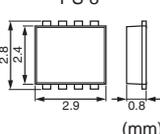
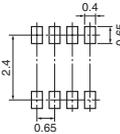
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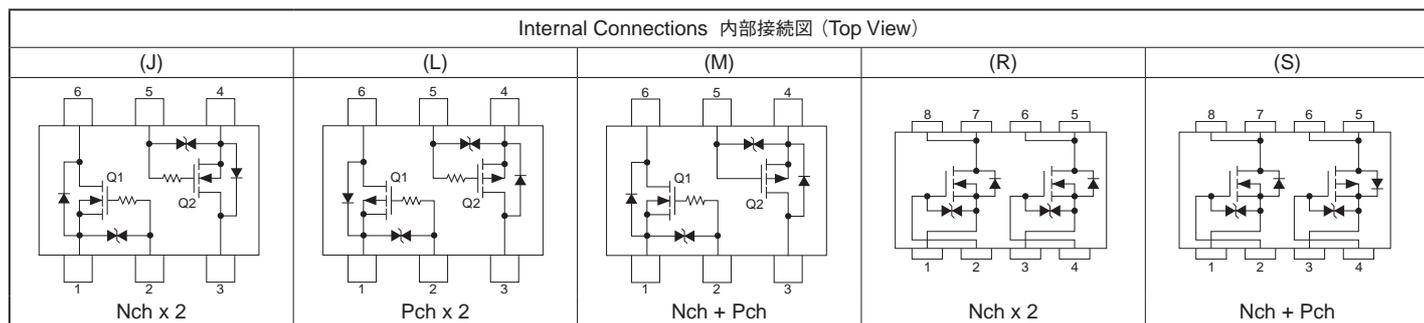
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Package	Polarity	Part Number	Absolute Maximum Ratings					R _{DS(ON)} max (mΩ)						Ciss typ. (pF)	Crss typ. (pF)	Coss typ. (pF)	Qg typ. (nC)	Series	Internal Connections	Land Pattern Examples (mm)
			V _{DSS} (V)	V _{GSS} (V)	I _D (A)	P _D (W)	T _{ch} (°C)	V _{Gs1} = 10 V	V _{Gs1} = 6.0 V	V _{Gs1} = 4.5 V	V _{Gs1} = 4.0 V	V _{Gs1} = 2.5 V	V _{Gs1} = 1.8 V							
 <p>US6 SOT-363 (mm)</p>	Nchx2	SSM6N35FU	20	±10	0.18	0.2	150	—	—	—	3000	4000	—	8000	9.5	4.1	9.5	—	π-MOSVI	
		SSM6N44FU	30	±20	0.1	0.2	150	—	—	—	4000	7000	—	—	8.5	5.3	9.4	—	π-MOSVI	
		SSM6N17FU	50	±7	0.1	0.2	150	—	—	—	20	40	—	—	7	3	7	—	π-MOSV	
		SSM6N7002KFU *	60	±20	0.3	0.5	150	1500	—	1750	—	—	—	—	26	1.3	5.5	0.39	U-MOSVII-H	
	Pchx2	SSM6P35FU	-20	±10	-0.1	0.2	150	—	—	—	8000	11000	—	22000	12.2	6.5	10.4	—	π-MOSVI	
		SSM6P15FU	-30	±20	-0.1	0.2	150	—	—	—	12000	32000	—	—	9.1	3.5	8.6	—	π-MOSVI	
Nch + Pch	SSM6L35FU	20	±10	0.18	0.2	150	—	—	—	3000	4000	—	8000	9.5	4.1	9.5	—	π-MOSVI		
		-20	±10	-0.1	0.2	150	—	—	—	8000	11000	—	22000	12.2	6.5	10.4	—	π-MOSVI		
 <p>PS-8 (mm)</p>	Nchx2	TPCP8207	40	±20	5	1.77 ⁽¹⁾	175	36.3	62.8	—	—	—	—	505	66	115	11.8	U-MOSIV		
		Nch + Pch	TPCP8407	40	±20	5	1.77 ⁽¹⁾	175	36.3	62.8	—	—	—	—	505	66	115	11.8		U-MOSIV
	-40			-20/ +10	-4	1.77 ⁽¹⁾	175	56.8	82.2	—	—	—	—	810	85	130	18	U-MOSVI		

Note (1): Device mounted on a glass board. t = 5 seconds. / ガラスエポキシ基板。t = 5 秒。

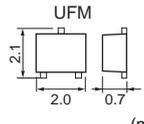
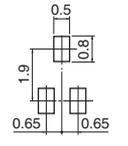
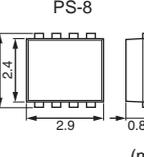
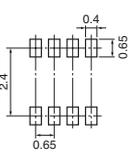
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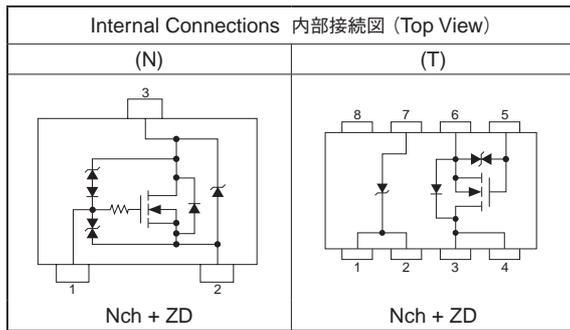
(Built-in Zener Diode) / (ZD混載品)

Package	Polarity	Part Number	Absolute Maximum Ratings					R _{DS(ON)} max (mΩ)						C _{iss} typ. (pF)	C _{rss} typ. (pF)	C _{oss} typ. (pF)	Q _g typ. (nC)	Series	Internal Connections	Land Pattern Examples (mm)	
			V _{DSS} (V)	V _{GSS} (V)	I _D (A)	P _D (W)	T _{ch} (°C)	V _{Gs1} = 10 V	V _{Gs1} = 6.0 V	V _{Gs1} = 4.5 V	V _{Gs1} = 4.0 V	V _{Gs1} = 2.5 V	V _{Gs1} = 1.8 V								V _{Gs1} = 1.5 V
 UFM (mm)	Nch + ZD	SSM3H137TU *	34	±20	2	1	150	—	—	280	295	—	—	—	119	8	40	3	U-MOSIV	(N)	
 PS-8 (mm)	Nch + ZD	TPCP8R01	60	±20	2	0.5	150	300	—	—	440	—	—	—	140	20	—	5	π-MOSV	(T)	

• Contact the Toshiba sales representative for information about RoHS compliance before you purchase any components.

*: New product / 新製品

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• The internal connection diagrams only show the general configurations of the circuits.

• 内部接続図はイメージ図です。

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