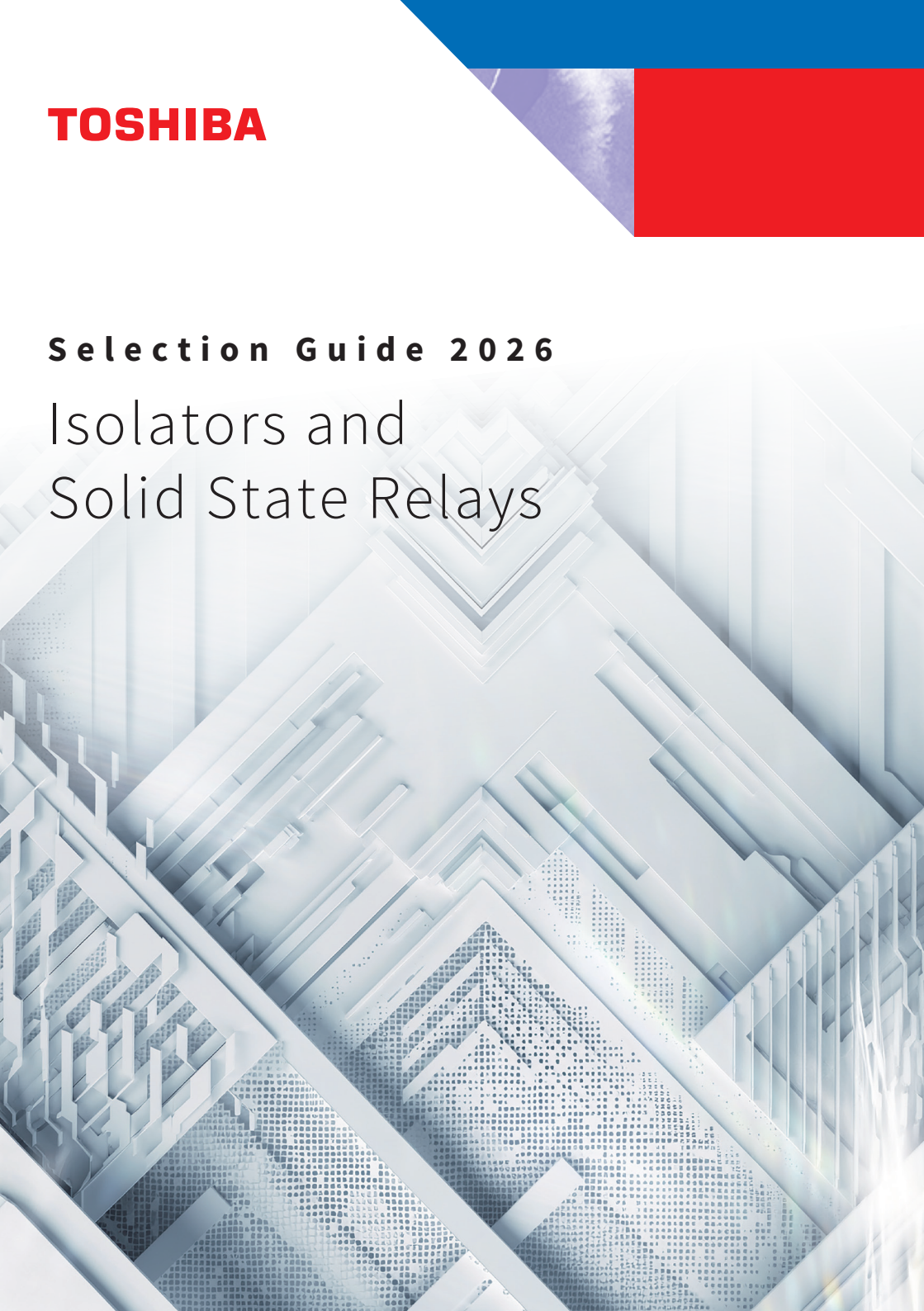
TOSHIBA

Selection Guide 2026

Isolators and Solid State Relays



Contents

1. Isolators 3 - 15

1-1 Photocouplers 3 - 14

1-1-1 IC Output

- Logic 3
- High Speed Logic 4 - 7
- IPM Driver 8 - 9
- IGBT / MOSFET Driver 10
- Smart Gate Driver 11
- Isolation Amplifiers / Delta-Sigma Modulators 12

1-1-2 Transistor Output 13 - 14

1-2 Digital Isolators

1-2-1 Standard Digital Isolators 15

2. Solid State Relays 16 - 21

2-1 Photorelays 16 - 20

- MOSFET Output 1-Form-A
- MOSFET Output 1-Form-B

2-2 Photovoltaic Output 21

2-3 Triac Output 21

3. Automotive Devices 22 - 24

- Photocouplers
- Photorelays
- Digital Isolators

4. Device Packages 25 - 35

- Dimensional Out Line (Surface Mount Type)
- Dimensional Out Line (Through Hole Type)
- Lead Form Options

5. Cross Reference 36 - 46

6. Part Naming Conventions 47

7. Part Number Index 48 - 50

1. Isolators

1-1 Photocouplers

1-1-1 IC Output

Logic

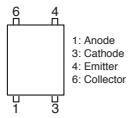
Open-collector Output Type

Part Number	Data Rate (Mbps)	Current Transfer Ratio CTR min (%) @Ta = 25 °C	Propagation Delay Time t_{pLH} max (µs)	Propagation Delay Time t_{pHL} max (µs)	Supply Voltage Operating Range V_{CC} (Note1) min (V)	Supply Voltage Operating Range V_{CC} (Note1) max (V)	High / Low -level Supply Current I_{CC} max (mA)	Common Mode Transient Immunity CM min (kV / µs)	Operating Temperature T_{opr} min (°C)	Operating Temperature T_{opr} max (°C)	Isolation Voltage BV_S min (Vrms)	Toshiba Package	Pin Configu-ration	Lead Form Option
TLP2301	0.02	50 (@I_F = 1 mA)	30	30	-	40	-	-	-55	125	3750	4pin SO6	(A)	-
TLP2701	0.02	50 (@I_F = 1 mA)	30	30	-	40	-	-	-55	125	5000	4pin SO6L	(A)	-
TLP2303	0.1	900 (@I_F = 0.5 mA)	90	20	4.5	18	1.5	+/-15	-40	125	3750	5pin SO6	(B)	-
TLP2703	0.1	900 (@I_F = 0.5 mA)	90	20	4.5	18	1.5	+/-15	-40	125	5000	SO6L	(C)	-
TLP109	1	20 (@I_F = 16 mA)	0.8	0.8	-	30	0.001	+/-5	-55	125	3750	5pin SO6	(D)	-
TLP2309	1	15 (@I_F = 10 mA)	1	1	2.7	20	0.001	+/-15	-40	110	3750	5pin SO6	(D)	-
TLP2719	1	15 (@I_F = 16 mA)	2	0.85	4.5	20	0.001	+/-10	-40	100	5000	SO6L	(E)	✓

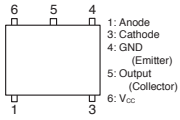
Note1: Recommended Operating Condition

Pin Configuration

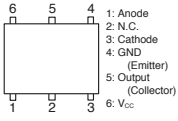
(A)



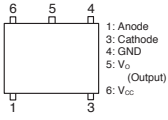
(B)



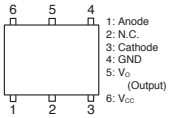
(C)



(D)



(E)



High Speed Logic

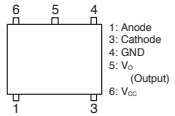
Open-collector Output Type

Part Number	Data Rate	Threshold LED Input Current	Propagation Delay Time		Supply Voltage Operating Range V_{CC} (Note1)		High / Low -level Supply Current	Common Mode Transient Immunity	Operating Temperature T_{opr}		Isolation Voltage	Toshiba Package	Pin Configu-ration	Lead Form Option
	(Mbps)	I_{FHL} max (mA)	t_{pLH} max (ns)	t_{pHL} max (ns)	min (V)	max (V)	I_{CC} max (mA)	CM min (kV / µs)	min (°C)	max (°C)	BV_S min (Vrms)			
TLP2309	1	10 (Note2)	1000	1000	2.7	20	0.001	+/-15	-40	110	3750	5pin SO6	(A)	-
TLP2719	1	10 (Note2)	2000	850	4.5	20	0.001	+/-10	-40	100	5000	SO6L	(D)	✓
TLP2304	1	5	550	400	4.5	30	1.3	+/-20	-40	125	3750	5pin SO6	(B)	-
TLP2704	1	5	550	400	4.5	30	1.3	+/-20	-40	125	5000	SO6L	(C)	✓
TLP2362	10	5	100	100	2.7	5.5	4	+/-20	-40	125	3750	5pin SO6	(B)	-
TLP2362B* ☆	10	5	100	100	2.7	5.5	1	+/-50	-40	125	3750	5pin SO6	(B)	-
TLP2762B* ☆	10	5	100	100	2.7	5.5	1	+/-50	-40	125	5000	SO6L	(C)	✓
TLP2363	15	2.4 (min 0.3)	80	80	2.7	5.5	4	+/-20	-40	105	3750	5pin SO6	(B)	-
TLP2368	20	5	60	60	2.7	5.5	4	+/-20	-40	125	3750	5pin SO6	(B)	-
TLP2368B* ☆	20	5	60	60	2.7	5.5	1	+/-50	-40	125	3750	5pin SO6	(B)	-
TLP2768A	20	5	60	60	2.7	5.5	4	+/-20	-40	125	5000	SO6L	(C)	✓
TLP2768B* ☆	20	5	60	60	2.7	5.5	1	+/-50	-40	125	5000	SO6L	(C)	✓

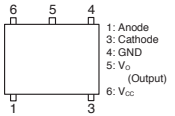
Note1: Recommended Operating Condition
Note2: Input on-state current ($I_{F(ON)}$) min (Recommended Operating Conditions)
*: Supported slow inputs to the LED and detector
☆ New Products

Pin Configuration

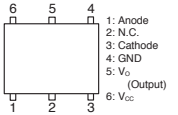
(A)



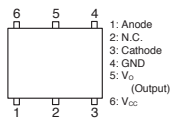
(B)



(C)



(D)



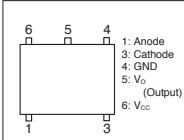
Totem-pole (Inverter) Output Type

Part Number	Data Rate	Threshold LED Input Current	Propagation Delay Time		Supply Voltage Operating Range V_{CC} / V_{DD} (Note1)		High / Low -level Supply Current	Common Mode Transient Immunity	Operating Temperature T_{opr}		Isolation Voltage	Toshiba Package	Pin Configu-ration	Lead Form Option
	(Mbps)	I_{FHL} max (mA)	t_{pLH} max (ns)	t_{pHL} max (ns)	min (V)	max (V)	I_{CC} / I_{DD} max (mA)	CM min (kV / µs)	min (°C)	max (°C)	BV_S min (Vrms)			
TLP2358	5	1.6	250	250	3	20	3	+/-20	-40	125	3750	5pin SO6	(A)	-
TLP2348	10	1.6	120	120	4.5	30	3	+/-30	-40	110	3750	5pin SO6	(A)	-
TLP2748	10	1.6	120	120	4.5	30	3	+/-30	-40	110	5000	SO6L	(B)	✓
TLP2261 (Note2)	15	1.6	80	80	2.7	5.5	2	+/-20	-40	125	5000	SO8L	(C)	(Note3)
TLP2361	15	1.6	80	80	2.7	5.5	1	+/-20	-40	125	3750	5pin SO6	(A)	-
TLP2761	15	1.6	80	80	2.7	5.5	1	+/-20	-40	125	5000	SO6L	(B)	✓
TLP2861L ☆	15	1.6	80	80	2.7	5.5	1	+/-20	-40	125	7500	SO8XL	(C)	-
TLP2366	20	3.5	55	55	2.7	5.5	3	+/-20	-40	125	3750	5pin SO6	(A)	-
TLP2766A	20	3.5	55	55	2.7	5.5	3	+/-20	-40	125	5000	SO6L	(B)	✓
TLP2367	50	4	20	20	2.7	5.5	2.5	+/-25	-40	125	3750	5pin SO6	(D)	-
TLP2767	50	4	20	20	2.7	5.5	2.5	+/-25	-40	125	5000	SO6L	(E)	✓

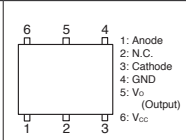
Note1: Recommended Operating Condition
Note2: Dual channel version
Note3: This product supports only SO8L(LF4) lead form option.
*: Supported slow inputs to the LED and detector
☆ New Products

Pin Configuration

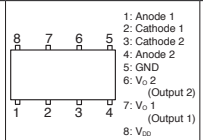
(A)



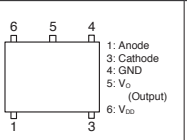
(B)



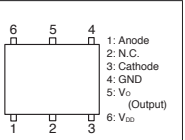
(C)



(D)



(E)



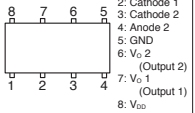
Totem-pole (Buffer) Output Type

Part Number	Data Rate	Threshold LED Input Current	Propagation Delay Time		Supply Voltage Operating Range V_{CC} / V_{DD} (Note1)		High / Low -level Supply Current	Common Mode Transient Immunity	Operating Temperature T_{opr}		Isolation Voltage	Toshiba Package	Pin Configu-ration	Lead Form Option
	(Mbps)	I_{FLH} max (mA)	t_{pLH} max (ns)	t_{pHL} max (ns)	min (V)	max (V)	I_{CC} / I_{DD} max (mA)	CM min (kV / μs)	min (°C)	max (°C)	BV_S min (Vrms)			
TLP2310	5	1	250	250	2.7	5.5	0.3	+/-25	-40	125	3750	5pin SO6	(B)	-
TLP2210 (Note2)	5	1.3	250	250	2.7	5.5	0.6	+/-25	-40	125	5000	SO8L	(A)	(Note3)
TLP2312	5	1.6	250	250	2.2	5.5	0.5	+/-20	-40	125	3750	5pin SO6	(B)	-
TLP2710	5	1	250	250	2.7	5.5	0.3	+/-25	-40	125	5000	SO6L	(C)	✓
TLP2355	5	1.6	250	250	3	20	3	+/-20	-40	125	3750	5pin SO6	(D)	-
TLP2345	10	1.6	120	120	4.5	30	3	+/-30	-40	110	3750	5pin SO6	(D)	-
TLP2745	10	1.6	120	120	4.5	30	3	+/-30	-40	110	5000	SO6L	(E)	✓
TLP2735	10	3	100	100	9	15	4.5	+/-25	-40	125	5000	SO6L	(C)	-
TLP2270 (Note2)	20	1	60	60	2.7	5.5	0.8	+/-20	-40	125	5000	SO8L	(A)	(Note3)
TLP2370	20	1	60	60	2.7	5.5	0.4	+/-20	-40	125	3750	5pin SO6	(B)	-
TLP2770	20	1	60	60	2.7	5.5	0.4	+/-20	-40	125	5000	SO6L	(C)	-
TLP2372	20	1.6	75	75	2.2	5.5	0.5	+/-20	-40	125	3750	5pin SO6	(B)	-

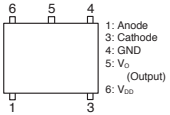
Note1: Recommended Operating Condition
Note2: Dual channel version
Note3: This product supports only SO8L(LF4) lead form option.

Pin Configuration

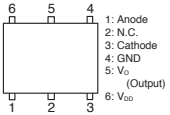
(A)



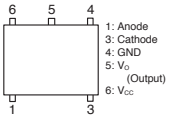
(B)



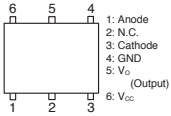
(C)



(D)



(E)



AC Input Type

Totem-pole (Inverter) Output Type

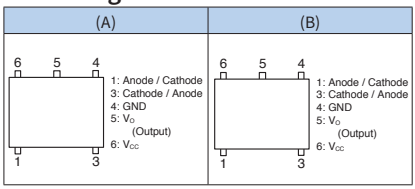
Part Number	Data Rate	Threshold LED Input Current	Propagation Delay Time		Supply Voltage Operating Range V_{CC} (Note1)		High / Low -level Supply Current	Common Mode Transient Immunity	Operating Temperature T_{opr}		Isolation Voltage	Toshiba Package	Pin Configu-ration	Lead Form Option
	(Mbps)	I_{FHL} max (mA)	t_{pLH} max (ns)	t_{pHL} max (ns)	min (V)	max (V)	I_{CC} max (mA)	CM min (kV / µs)	min (°C)	max (°C)	BV_S min (Vrms)			
TLP2398	5	2.3	250	250	3	20	3	+/-20	-40	125	3750	5pin SO6	(A)	-
TLP2391	10	2.5	100	100	2.7	5.5	1	+/-20	-40	125	3750	5pin SO6	(A)	-

Totem-pole (Buffer) Output Type

Part Number	Data Rate	Threshold LED Input Current	Propagation Delay Time		Supply Voltage Operating Range V_{CC} (Note1)		High / Low -level Supply Current	Common Mode Transient Immunity	Operating Temperature T_{opr}		Isolation Voltage	Toshiba Package	Pin Configu-ration	Lead Form Option
	(Mbps)	I_{FLH} max (mA)	t_{pLH} max (ns)	t_{pHL} max (ns)	min (V)	max (V)	I_{CC} max (mA)	CM min (kV / µs)	min (°C)	max (°C)	BV_S min (Vrms)			
TLP2395	5	2.3	250	250	3	20	3	+/-20	-40	125	3750	5pin SO6	(B)	-

Note1: Recommended Operating Condition

Pin Configuration



IPM Driver

Open-collector Output Type

Part Number	Data Rate	Threshold LED Input Current	Propagation Delay Time		Supply Voltage Operating Range V_{CC} (Note1)		High / Low -level Supply Current	Common Mode Transient Immunity	Operating Temperature T_{opr}		Isolation Voltage	Toshiba Package	Pin Configu-ration	Lead Form Option
	(Mbps)	I_{FHL} max (mA)	t_{pLH} max (ns)	t_{pHL} max (ns)	min (V)	max (V)	I_{CC} max (mA)	CM min (kV / µs)	min (°C)	max (°C)	BV_S min (Vrms)			
TLP2304	1	5	550	400	4.5	30	1.3	+/-20	-40	125	3750	5pin SO6	(A)	-
TLP2704	1	5	550	400	4.5	30	1.3	+/-20	-40	125	5000	SO6L	(B)	✓

Totem-pole (Inverter) Output Type

Part Number	Data Rate	Threshold LED Input Current	Propagation Delay Time		Supply Voltage Operating Range V_{CC} (Note1)		High / Low -level Supply Current	Common Mode Transient Immunity	Operating Temperature T_{opr}		Isolation Voltage	Toshiba Package	Pin Configu-ration	Lead Form Option
	(Mbps)	I_{FHL} max (mA)	t_{pLH} max (ns)	t_{pHL} max (ns)	min (V)	max (V)	I_{CC} max (mA)	CM min (kV / µs)	min (°C)	max (°C)	BV_S min (Vrms)			
TLP2358	5	1.6	250	250	3	20	3	+/-20	-40	125	3750	5pin SO6	(C)	-
TLP2348	10	1.6	120	120	4.5	30	3	+/-30	-40	110	3750	5pin SO6	(C)	-
TLP2748	10	1.6	120	120	4.5	30	3	+/-30	-40	110	5000	SO6L	(D)	✓

Totem-pole (Buffer) Output Type

Part Number	Data Rate	Threshold LED Input Current	Propagation Delay Time		Supply Voltage Operating Range V_{CC} (Note1)		High / Low -level Supply Current	Common Mode Transient Immunity	Operating Temperature T_{opr}		Isolation Voltage	Toshiba Package	Pin Configu-ration	Lead Form Option
	(Mbps)	I_{FLH} max (mA)	t_{pLH} max (ns)	t_{pHL} max (ns)	min (V)	max (V)	I_{CC} max (mA)	CM min (kV / µs)	min (°C)	max (°C)	BV_S min (Vrms)			
TLP2355	5	1.6	250	250	3	20	3	+/-20	-40	125	3750	5pin SO6	(E)	-
TLP2345	10	1.6	120	120	4.5	30	3	+/-30	-40	110	3750	5pin SO6	(E)	-
TLP2745	10	1.6	120	120	4.5	30	3	+/-30	-40	110	5000	SO6L	(F)	✓
TLP2735	10	3	100	100	9	15	4.5	+/-25	-40	125	5000	SO6L	(F)	-

Note1: Recommended Operating Condition

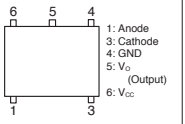
Open-collector Output Type

Part Number	Data Rate (Mbps)	Current Transfer Ratio CTR min (%) @Ta = 25 °C	Propagation Delay Time t_{pLH} max (ns)	Propagation Delay Time t_{pHL} max (ns)	Supply Voltage Operating Range V_{CC} (Note1) min (V)	Supply Voltage Operating Range V_{CC} (Note1) max (V)	High / Low -level Supply Current I_{CC} max (mA)	Common Mode Transient Immunity CM min (kV / μs)	Operating Temperature T_{opr} min (°C)	Operating Temperature T_{opr} max (°C)	Isolation Voltage BV_S min (Vrms)	Toshiba Package	Pin Configu-ration	Lead Form Option
TLP109(IGM)	1	25 (@I_F = 10 mA)	1000	1000	-	30	0.001	+/-10	-55	125	3750	5pin SO6	(G)	-
TLP2719	1	15 (@I_F = 16 mA)	2000	850	4.5	20	0.001	+/-10	-40	100	5000	SO6L	(H)	✓

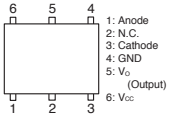
Note1: Recommended Operating Condition

Pin Configuration

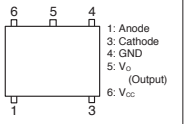
(A)



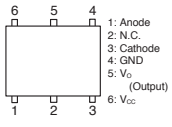
(B)



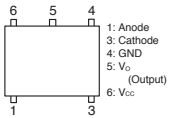
(C)



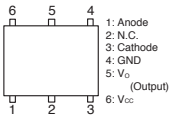
(D)



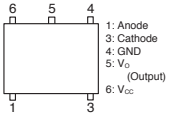
(E)



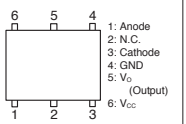
(F)



(G)



(H)



IGBT / MOSFET Driver

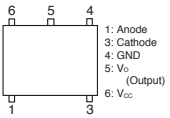
Totem-pole (Buffer) Output Type

Part Number	Output Current (Note2) I_{OPH} or I_{OPL} max (A)	Threshold LED Input Current I_{FLH} max (mA)	Propagation Delay Time t_{pLH} max (ns)	Propagation Delay Time t_{pHL} max (ns)	Supply Voltage Operating Range V_{CC} (Note1) min (V)	Supply Voltage Operating Range V_{CC} (Note1) max (V)	High / Low -level Supply Current I_{CC} max (mA)	Common Mode Transient Immunity CM min (kV / µs)	Operating Temperature T_{opr} min (°C)	Operating Temperature T_{opr} max (°C)	Isolation Voltage BV_S min (Vrms)	Toshiba Package	Pin Configu-ration	Lead Form Option
TLP155E	+/-0.6	7.5	200	200	10	30	3	+/-15	-40	100	3750	5pin SO6	(A)	-
TLP151A	+/-0.6	5	500	500	10	30	2	+/-20	-40	110	3750	5pin SO6	(A)	-
TLP5701	+/-0.6	5	500	500	10	30	2	+/-20	-40	110	5000	SO6L	(B)	✓
TLP5751	+/-1	4	150	150	15	30	3	+/-35	-40	110	5000	SO6L	(C)	✓
TLP5751H	+/-1	4	150	150	15	30	3	+/-35	-40	125	5000	SO6L	(C)	✓
TLP5771	+/-1	2	150	150	10	30	3	+/-35	-40	110	5000	SO6L	(C)	✓
TLP5771H	+/-1	2	150	150	10	30	3	+/-35	-40	125	5000	SO6L	(C)	✓
TLP5791H ☆	+/-1 (#)	5	500	500	10	30	2	+/-20	-40	125	5000	SO6L	(C)	✓
TLP5752	+/-2.5	4	150	150	15	30	3	+/-35	-40	110	5000	SO6L	(C)	✓
TLP5752H	+/-2.5	4	150	150	15	30	3	+/-35	-40	125	5000	SO6L	(C)	✓
TLP5772	+/-2.5	2	150	150	10	30	3	+/-35	-40	110	5000	SO6L	(C)	✓
TLP5772H	+/-2.5	2	150	150	10	30	3	+/-35	-40	125	5000	SO6L	(C)	✓
TLP152	+/-2.5	7.5	170	190	10	30	3	+/-20	-40	100	3750	5pin SO6	(A)	-
TLP5702	+/-2.5	5	200	200	15	30	3	+/-20	-40	110	5000	SO6L	(B)	✓
TLP5702H	+/-2.5	5	200	200	15	30	3	+/-50	-40	125	5000	SO6L	(B)	✓
TLP5705H	+/-5	5	200	200	15	30	3	+/-50	-40	125	5000	SO6L	(B)	✓
TLP5832	+/-2.5	5	200	200	15	30	3	+/-20	-40	110	5000	SO8L	(D)	-
TLP5754	+/-4	4	150	150	15	30	3	+/-35	-40	110	5000	SO6L	(C)	✓
TLP5754H	+/-4	4	150	150	15	30	3	+/-35	-40	125	5000	SO6L	(C)	✓
TLP5774	+/-4	2	150	150	10	30	3	+/-35	-40	110	5000	SO6L	(C)	✓
TLP5774H	+/-4	2	150	150	10	30	3	+/-35	-40	125	5000	SO6L	(C)	✓
TLP5814H ☆	+6.8/-4.8	3	150	130	13	23	3	+/-70	-40	125	5000	SO8L	(E)	✓
TLP5794H ☆	+6/-4 (#)	5	200	200	15	30	3	+/-50	-40	125	5000	SO6L	(C)	✓
TLP5795H ☆	+5.3/-4.5 (#)	3	150	150	15	30	3	+/-35	-40	125	5000	SO6L	(C)	✓
TLP5854L ★	+/-4	4	150	150	15	30	3	+/-35	-40	125	7500	SO8XL	(D)	-

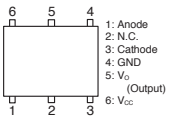
Note1: Recommended Operating Condition
Note2: Absolute Maximum Ratings
☆ New Products
★ Under Development (The specification is subject to change without notice.)
Typical Value

Pin Configuration

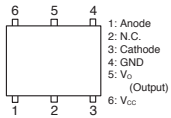
(A)



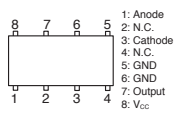
(B)



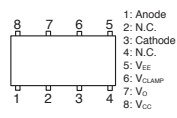
(C)



(D)



(E)



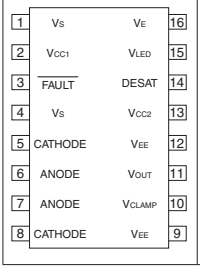
Smart Gate Driver

Part Number	Output Current (Note2) I_{OPH} or I_{OPL} max (A)	Threshold LED Input Current I_{FLH} max (mA)	Propagation Delay Time t_{pLH} max (ns)	Propagation Delay Time t_{pHL} max (ns)	Supply Voltage Operating Range V_{CC} (Note1) min (V)	Supply Voltage Operating Range V_{CC} (Note1) max (V)	High / Low -level Supply Current I_{CC} max (mA)	Common Mode Transient Immunity CM min (kV / μs)	Operating Temperature T_{opr} min (°C)	Operating Temperature T_{opr} max (°C)	Isolation Voltage BV_S min (Vrms)	Toshiba Package	Pin Configuration
TLP5222	+/-2.5	6	250	250	15	30	5	+/-25	-40	110	5000	SO16L	(A)
	• Non-rail to rail output • Active miller clamp • DESAT / UVLO protection and failure feedback • Auto reset												
TLP5214A	+/-4	6	150	150	15	30	3.8	+/-35	-40	110	5000	SO16L	(A)
	• Rail to rail output • Active miller clamp • DESAT / UVLO protection and failure feedback • LED reset												
TLP5212	+/-2.5	6	250	250	15	30	5	+/-25	-40	110	5000	SO16L	(A)
	• Non-rail to rail output • Active miller clamp • DESAT / UVLO protection and failure feedback • LED reset												
TLP5231	+/-2.5	3.5 (I_{FHL})	300	300	21.5	30	10.2	+/-25	-40	110	5000	SO16L	(B)
	• High current IGBT / MOSFET Pre-drive Coupler • Rail to rail output • Overlap control for MOSFET buffer • Over current / UVLO protection and failure feedback • LED reset												

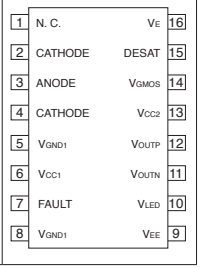
Note1: Recommended Operating Condition
Note2: Absolute Maximum Ratings

Pin Configuration

(A)



(B)



Isolation Amplifiers / Delta-Sigma Modulators

Analog Output

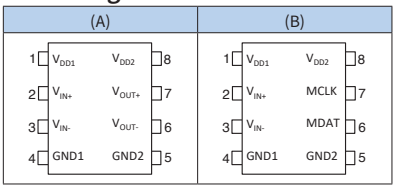
Part Number	Supply Voltage V_{DD1} (V) V_{DD2} (V) (Note1)	Supply Current max I_{DD1} (mA) I_{DD2} (mA)	Common Mode Transient Immunity CMTI typ. (kV / μs)	V_{OUT} Non-linearity NL_{200} typ. (%)	Gain G typ. @Ta = 25 °C (V / V)	Operating Temperature T_{opr} min (°C)	Operating Temperature T_{opr} max (°C)	Isolation Voltage BV_S min (Vrms)	Toshiba Package	Pin Configu-ration	Lead Form Option
TLP7820	4.5 to 5.5 3 to 5.5	12 10	20	0.02	8.2	-40	105	5000	SO8L	(A)	(Note2)
TLP7920	4.5 to 5.5 3 to 5.5	12 10	20	0.02	8.2	-40	105	5000	DIP8	(A)	✓

Digital Output

Part Number	Supply Voltage V_{DD1} (V) V_{DD2} (V) (Note1)	Supply Current max I_{DD1} (mA) I_{DD2} (mA)	Common Mode Transient Immunity CMTI typ. (kV / μs)	V_{OUT} Non-linearity INL @Ta = -40 to 85 °C (LSB)	Gain Error G_E typ. @Ta = 25 °C (%)	Operating Temperature T_{opr} min (°C)	Operating Temperature T_{opr} max (°C)	Isolation Voltage BV_S min (Vrms)	Toshiba Package	Pin Configu-ration	Lead Form Option
TLP7830	4.5 to 5.5 3 to 5.5	12 8	20	-15 to 15	0.1	-40	105	5000	SO8L	(B)	(Note2)
TLP7930	4.5 to 5.5 3 to 5.5	12 8	20	-15 to 15	0.1	-40	105	5000	DIP8	(B)	✓

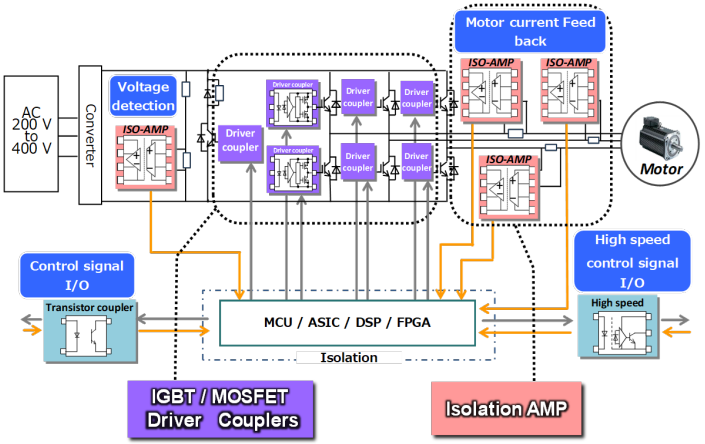
Note1: Recommended Operating Condition
Note2: This product supports only SO8L(LF4) lead form option.

Pin Configuration



D-IGBT, MOSFET based AC-Servo Amp / Inverter

Block diagram of Inverter



1-1-2 Transistor Output

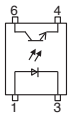
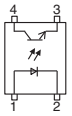
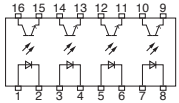
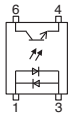
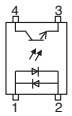
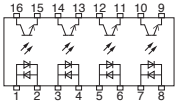
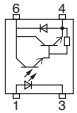
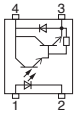
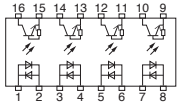
Part Number	Input Type	Function	Current Transfer Ratio CTR (I_C / I_F) @Ta = 25 °C			Collector -Emitter Voltage	Collector Current	Operating Temperature T_{opr}		Isolation Voltage	Toshiba Package	Pin Configu-ration	Lead Form Option
			min (%)	max (%)	Relevant Part	V_{CEO} max (V)	I_C max (A)	min (°C)	max (°C)	BVs min (Vrms)			
TLP185(SE	DC	General-purpose	50	600	☆1	80	0.05	-55	110	3750	4pin SO6	(A)	-
TLP291(SE			50	600	☆1	80	0.05	-55	110	3750	SO4	(B)	-
TLP291-4 (Note1)			50	400	☆3	80	0.05	-55	110	2500	SO16	(C)	-
TLP385			50	600	☆1	80	0.05	-55	110	5000	4pin SO6L	(A)	-
TLP785			50	600	☆1	80	0.05	-55	110	5000	DIP4 (TLP785)	(B)	✓
TLP183		Low I_F	50	600	☆1	80	0.05	-55	125	3750	4pin SO6	(A)	-
TLP293-4 (Note1)			50	600	☆4	80	0.05	-55	125	3750	SO16	(C)	-
TLP293			50	600	☆1	80	0.05	-55	125	3750	SO4	(B)	-
TLP383			50	600	☆3	80	0.05	-55	125	5000	4pin SO6L	(A)	-
TLP621M			50	600	☆1	80	0.05	-55	125	5000	DIP4	(B)	✓
TLP188		High V_{CEO}	50	600	☆3	350	0.05	-55	110	3750	4pin SO6	(A)	-
TLP388			50	600	☆3	350	0.05	-55	125	5000	4pin SO6L	(A)	-
TLP628M			50	600	☆3	350	0.05	-55	125	5000	DIP4	(B)	✓
TLP184(SE	AC	General-purpose	50	600	☆2	80	0.05	-55	110	3750	4pin SO6	(D)	-
TLP290(SE			50	600	☆2	80	0.05	-55	110	3750	SO4	(E)	-
TLP290-4 (Note1)			50	400	☆3	80	0.05	-55	110	2500	SO16	(F)	-
TLP182		Low I_F	50	600	☆2	80	0.05	-55	125	3750	4pin SO6	(D)	-
TLP292-4 (Note1)			50	600	☆4	80	0.05	-55	125	3750	SO16	(F)	-
TLP292			50	600	☆2	80	0.05	-55	125	3750	SO4	(E)	-
TLP620M			50	600	☆2	80	0.05	-55	125	5000	DIP4	(E)	✓
TLP187	DC	Darlington	1000	-	-	300	0.15	-55	110	3750	4pin SO6	(G)	-
TLP387			1000	-	-	300	0.15	-55	110	5000	4pin SO6L	(G)	-
TLP627M			1000	-	-	300	0.15	-55	110	5000	DIP4	(H)	✓
TLP295-4 (Note1)		Low I_F / High Speed	100	700	-	80	0.05	-55	125	3750	SO16	(I)	-
TLP294-4 (Note1)	AC		100	700	-	80	0.05	-55	125	3750	SO16	(I)	-

Current Transfer Ratio Rank

Rank		Selectable Rank										General
		Y	GR	GB	BL	YH	GRL	GRH	BLL	LA	LGB	Blank
Current Transfer Ratio (%)	min	50	100	100	200	75	100	150	200	50	100	50
	max	150	300	600	600 (Note2)	150	200	300	400	600	600	600 (Note2)
Relevant Part	☆1	○	○	○	○	○	○	○	○			○
	☆2	○	○	○	○							○
	☆3			○								○
	☆4			○						○	○	○
Marking of Classification (Note3)		YE, Y+	GR, G, G+	GB, GR, G, G+, BL, B	BL, B	Y+	G	G+	B	LA, LB	LB	Blank, YE, Y+, GR, GB, G, G+, BL, B

Note1: 4-Channel version
Note2: 400 % (max); TLP290-4, TLP291-4
Note3: Depend on the product variety, the package is not marked some characters in this table.

Pin Configuration

(A)	(B)	(C)	(D)	(E)
				
(F)	(G)	(H)	(I)	
				

1-2 Digital Isolators

1-2-1 Standard Digital Isolators

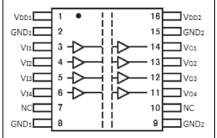
Part Number	Number of channels Forward: Reverse	Default output logic	Enabled / Disabled control	Propagation Delay t_{pLH} / t_{pHL} (Note1)	Supply Voltage Operating Range V_{DD} (Note2)		Operating Temperature T_{opr}		Withstand Isolation Voltage BVs	Toshiba Package	Pin Configuration	Lead Form Option
				max (ns)	min (V)	max (V)	min (°C)	max (°C)	min (Vrms)			
DCL540C01A ☆	4:0	Low	-	21	2.25	5.5	-40	125	5000	SOIC16-W	(A)	-
DCL540D01A ☆	4:0	High	-	21	2.25	5.5	-40	125	5000	SOIC16-W	(A)	-
DCL540L01A ☆	4:0	Low	Output Enable	21	2.25	5.5	-40	125	5000	SOIC16-W	(B)	-
DCL540H01A ☆	4:0	High	Output Enable	21	2.25	5.5	-40	125	5000	SOIC16-W	(B)	-
DCL541A01A ☆	3:1	Low	Input Disable	21	2.25	5.5	-40	125	5000	SOIC16-W	(C)	-
DCL541B01A ☆	3:1	High	Input Disable	21	2.25	5.5	-40	125	5000	SOIC16-W	(C)	-
DCL541L01A ☆	3:1	Low	Output Enable	21	2.25	5.5	-40	125	5000	SOIC16-W	(D)	-
DCL541H01A ☆	3:1	High	Output Enable	21	2.25	5.5	-40	125	5000	SOIC16-W	(D)	-
DCL542L01A ☆	2:2	Low	Output Enable	21	2.25	5.5	-40	125	5000	SOIC16-W	(E)	-
DCL542H01A ☆	2:2	High	Output Enable	21	2.25	5.5	-40	125	5000	SOIC16-W	(E)	-
DCL520C00 ☆	2:0	Low	-	21	2.25	5.5	-40	125	3000	SOIC8-N	(F)	-
DCL520D00 ☆	2:0	High	-	21	2.25	5.5	-40	125	3000	SOIC8-N	(F)	-
DCL521C00 ☆	1:1	Low	-	21	2.25	5.5	-40	125	3000	SOIC8-N	(G)	-
DCL521D00 ☆	1:1	High	-	21	2.25	5.5	-40	125	3000	SOIC8-N	(G)	-
DCL341L0B ☆	3:1	Low	Output Enable	63	2.25	5.5	-40	125	3000	SSOP16	(D)	-
DCL341H0B ☆	3:1	High	Output Enable	63	2.25	5.5	-40	125	3000	SSOP16	(D)	-
DCL340L0B ☆	4:0	Low	Output Enable	63	2.25	5.5	-40	125	3000	SSOP16	(B)	-
DCL340H0B ☆	4:0	High	Output Enable	63	2.25	5.5	-40	125	3000	SSOP16	(B)	-
DCL342L0B ☆	2:2	Low	Output Enable	63	2.25	5.5	-40	125	3000	SSOP16	(E)	-
DCL342H0B ☆	2:2	High	Output Enable	63	2.25	5.5	-40	125	3000	SSOP16	(E)	-
DCL320C00 ☆	2:0	Low	-	63	2.25	5.5	-40	125	3000	SOIC8-N	(F)	-
DCL320D00 ☆	2:0	High	-	63	2.25	5.5	-40	125	3000	SOIC8-N	(F)	-
DCL321C00 ☆	1:1	Low	-	63	2.25	5.5	-40	125	3000	SOIC8-N	(G)	-
DCL321D00 ☆	1:1	High	-	63	2.25	5.5	-40	125	3000	SOIC8-N	(G)	-

☆ New Products

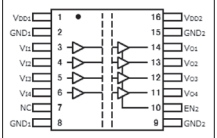
Note1: V_{DD} = 2.25 to 2.75 V, T_{opr} = -40 to 125 °C, Note2: Recommended Operating Condition, Note3: SOIC16-W(P-SOP16-0811-1.27-002)

Pin Configuration

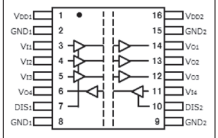
(A)



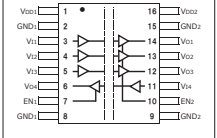
(B)



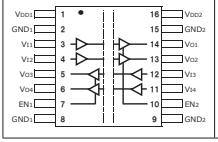
(C)



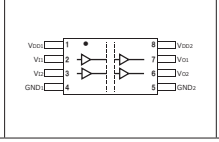
(D)



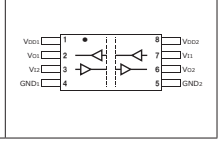
(E)



(F)



(G)



2. Solid State Relays

2-1 Photorelays

MOSFET Output 1-Form-A

Part Number	OFF-state Output Terminal Voltage	ON-state Current	Terminal Capacitance	ON-state Resistance	Trigger LED Current	Turn-on time	Turn-off time	Operating Temperature		Isolation Voltage	Toshiba Package	Pin Configuration	Lead Form Option
								Topr					
	V_{OFF} max (V)	I_{ON} max (A)	C_{OFF} typ. (pF)	R_{ON} max (Ω)	I_{FT} max (mA)	t_{ON} max (ms)	t_{OFF} max (ms)	min (°C)	max (°C)	BV_S min (Vrms)			
TLP3146	30	3.3	450	0.05	3	2	1	-40	110	1500	2.54SOP4	(A)	-
TLP3553A	30	4	450	0.05	3	3	1	-40	110	2500	DIP4	(A)	✓
TLP3106A	30	4.5	1200	0.03	3	2	0.5	-40	110	1500	2.54SOP6	(C)	-
TLP3543A	30	5	1100	0.04	3	5	0.5	-40	110	2500	DIP6	(C)	✓
TLP3123	40	1	300	0.13	3	3	0.5	-40	85	1500	2.54SOP4	(A)	-
TLP241A	40	2	300	0.15	3	5	1	-40	85	5000	DIP4	(A)	✓
TLP175A	60	0.1	10	50	1	5	5	-40	85	3750	4pin SO6	(B)	-
TLP170A	60	0.4	130	2	1	8	3	-40	85	1500	2.54SOP4	(A)	-
TLP171A	60	0.4	130	2	0.2	10	5	-40	85	1500	2.54SOP4	(A)	-
TLP240A	60	0.5	130	2	3	3	1	-40	85	5000	DIP4	(A)	✓
TLP170AM	60	0.7	100	0.3	1	6	1	-40	85	3750	4pin SO6	(B)	-
TLP176AM	60	0.7	100	2	3	3	0.5	-40	110	3750	4pin SO6	(B)	-
TLP3640A ☆	60	1	95	0.3	3	0.5	0.2	-40	110	3750	SO4	(A)	-
TLP3122A	60	1.4	100	0.25	3	3	1	-40	110	3750	4pin SO6	(B)	-
TLP3127	60	1.7	250	0.13	3	3	0.5	-40	85	1500	2.54SOP4	(A)	-
TLP3147	60	2.5	240	0.1	3	2	0.5	-40	110	1500	2.54SOP4	(A)	-
TLP3555A	60	3	250	0.1	3	2	1	-40	110	2500	DIP4	(A)	✓
TLP3545A	60	4	640	0.06	3	5	0.5	-40	110	2500	DIP6	(C)	✓
TLP3107A	60	4	750	0.04	3	2	0.5	-40	110	1500	2.54SOP6	(C)	-
TLP3547	60	5	850	0.05	5	5	1	-40	85	2500	DIP8	(D)	✓
TLP241BP* ☆	80	1.4	130	0.28	3	1.4	0.5	-40	110	5000	DIP4	(A)	✓
TLP3149	100	1.5	160	0.2	3	2	0.5	-40	110	1500	2.54SOP4	(A)	-
TLP3556A	100	2	110	0.2	3	2	0.5	-40	110	2500	DIP4	(A)	✓
TLP241B	100	2	300	0.2	3	3	0.5	-40	110	5000	DIP4	(A)	✓
TLP3109A	100	3	460	0.065	3	2	0.5	-40	110	1500	2.54SOP6	(C)	-
TLP3823	100	3	720	0.15	5	5	1	-40	110	2500	DIP8	(D)	✓
TLP3546A	100	3.5	450	0.08	3	5	0.5	-40	110	2500	DIP6	(C)	✓
TLP170D	200	0.2	90	8	1	8	3	-40	85	1500	2.54SOP4	(A)	-
TLP171D	200	0.2	90	8	0.2	10	5	-40	85	1500	2.54SOP4	(A)	-

*Protect Function : Over Temperature Protection 145°C (typ.), Over Voltage Protection
☆ New Products

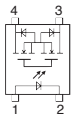
MOSFET Output 1-Form-A

Part Number	OFF-state Output Terminal Voltage	ON-state Current	Terminal Capacitance	ON-state Resistance	Trigger LED Current	Turn-on time	Turn-off time	Operating Temperature		Isolation Voltage	Toshiba Package	Pin Configuration	Lead Form Option
								Topr					
	V_{OFF} max (V)	I_{ON} max (A)	C_{OFF} typ. (pF)	R_{ON} max (Ω)	I_{FT} max (mA)	t_{ON} max (ms)	t_{OFF} max (ms)	min (°C)	max (°C)	BV_S min (Vrms)			
TLP176D	200	0.2	100	8	3	1.5	1	-40	85	1500	2.54SOP4	(A)	-
TLP240D	200	0.25	80	8	3	3	1	-40	85	5000	DIP4	(A)	✓
TLP3145	200	0.4	100	2	3	0.5	0.5	-40	110	1500	2.54SOP4	(A)	-
TLP3558A	200	0.7	110	2	3	1	0.5	-40	110	2500	DIP4	(A)	✓
TLP3825	200	1.5	400	0.5	5	5	1	-40	110	2500	DIP8	(D)	✓
TLP240G	350	0.1	30	50	3	2	1	-40	85	5000	DIP4	(A)	✓
TLP170G	350	0.1	35	50	1	5	3	-40	85	1500	2.54SOP4	(A)	-
TLP170GM	350	0.11	30	50	1	2	1	-40	85	3750	4pin SO6	(B)	-
TLP172GM	350	0.11	30	50	3	1	0.5	-40	110	3750	4pin SO6	(B)	-
TLP171GA	400	0.1	70	35	0.2	10	5	-40	85	1500	2.54SOP4	(A)	-
TLP172GAM	400	0.11	30	65	3	1	0.5	-40	110	3750	4pin SO6	(B)	-
TLP176GA	400	0.12	70	35	3	1	1	-40	85	1500	2.54SOP4	(A)	-
TLP223GA	400	0.12	53	35	2	1	0.5	-40	110	5000	DIP4	(A)	✓
TLP240GA	400	0.12	80	35	3	2	1	-40	85	5000	DIP4	(A)	✓
TLP3548	400	0.4	410	5	1	1	1	-40	85	2500	DIP8	(D)	✓
TLP171J	600	0.07	75	60	0.2	10	5	-40	85	1500	2.54SOP4	(A)	-
TLP170J	600	0.09	75	60	1	8	3	-40	85	1500	2.54SOP4	(A)	-
TLP223J	600	0.09	53	60	2	0.5	0.2	-40	110	5000	DIP4	(A)	✓
TLP240J	600	0.09	75	60	3	2	1	-40	85	5000	DIP4	(A)	✓
TLP3549	600	0.6	4300	2	5	3	1	-40	85	2500	DIP8	(D)	✓
TLX9150M ☆	900	0.05	60	250	3	1	1	-40	125	5000	SO12L-T	(E)	-
TLX9152M ☆	900	0.05	60	250	3	1	1	-40	125	5000	SO16L-T	(F)	-
TLX9161T ☆	1500	0.05	60	500	3	1	1	-40	125	5000	SO12L-T	(E)	-
TLX9160T	1500	0.05	100	250	3	1	1	-40	125	5000	SO16L-T	(F)	-
TLX9165T ☆	1800	0.05	100	340	3	1	1	-40	125	5000	10pin SO16L-T	(G)	-

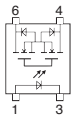
☆ New Products

Pin Configuration

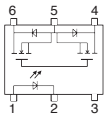
(A)



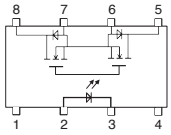
(B)



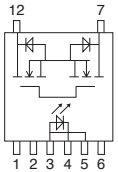
(C)



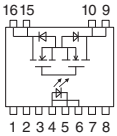
(D)



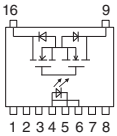
(E)



(F)



(G)



MOSFET Output 1-Form-A

Part Number	OFF-state Output Terminal Voltage	ON-state Current	Terminal Capacitance	ON-state Resistance	Trigger LED Current	Turn-on time	Turn-off time	Operating Temperature		Isolation Voltage	Toshiba Package	Pin Configuration	Lead Form Option
								Topr					
	V_{OFF} max (V)	I_{ON} max (A)	C_{OFF} typ. (pF)	R_{ON} max (Ω)	I_{FT} max (mA)	t_{ON} max (ms)	t_{OFF} max (ms)	min (°C)	max (°C)	BV_S min (Vrms)			
TLP3330	20	0.16	1	8	3	0.2	0.3	-40	85	1000	USOP4	(A)	-
TLP3350	20	0.2	0.8	5	3	0.2	0.2	-40	85	1000	USOP4	(A)	-
TLP3450	20	0.2	0.8	5	3	0.2	0.2	-40	110	500	VSON4	(A)	-
TLP3450S ☆	20	0.16	0.6	8.5	3	0.08	0.12	-40	110	500	S-VSON4T	(A)	-
TLP3431	20	0.45	5	1.2	3	0.4	0.4	-40	110	500	VSON4	(A)	-
TLP3431S ☆	1.2	0.45	20	1	5	0.2	0.1	-40	110	500	S-VSON4T	(A)	-
TLP3303	20	0.9	40	0.22	3	2	1	-40	85	1000	USOP4	(A)	-
TLP3403	20	1	40	0.22	3	2	1	-40	110	500	VSON4	(A)	-
TLP3406S	30	1.5	120	0.2	3	2	1	-40	110	500	S-VSON4	(A)	-
TLP3480	30	4.5	450	0.05	3	5	1	-40	110	500	P-SON4	(A)	-
TLP3342	40	0.1	0.3	20	3	0.2	0.2	-40	85	1000	USOP4	(A)	-
TLP3442	40	0.1	0.3	20	3	0.2	0.2	-40	110	500	VSON4	(A)	-
TLP3340	40	0.12	0.45	14	3	0.2	0.3	-40	85	1000	USOP4	(A)	-
TLP3440S	40	0.12	0.45	14	3	0.2	0.3	-40	110	500	S-VSON4T	(A)	-
TLP3440	40	0.12	0.45	14	3	0.2	0.3	-40	110	500	VSON4	(A)	-
TLP3341	40	0.14	0.7	10	3	0.2	0.2	-40	85	1000	USOP4	(A)	-
TLP3441	40	0.14	0.7	10	3	0.2	0.2	-40	110	500	VSON4	(A)	-
TLP3414	40	0.25	5	3	3	0.3	0.3	-40	110	500	VSON4	(A)	-
TLP3414S ☆	40	0.25	40	1	5	0.25	0.25	-40	110	500	S-VSON4T	(A)	-
TLP3315	40	0.3	10	1.5	3	0.5	0.3	-40	85	1000	USOP4	(A)	-
TLP3375	50	0.3	12	1.5	3	0.5	0.4	-40	85	1000	USOP4	(A)	-
TLP3475	50	0.3	12	1.5	3	0.5	0.4	-40	110	500	VSON4	(A)	-
TLP3351	60	0.12	0.7	15	3	0.2	0.2	-40	85	1000	USOP4	(A)	-
TLP3451	60	0.12	0.7	15	3	0.2	0.2	-40	110	500	VSON4	(A)	-
TLP3475S	60	0.4	12	1.5	3	0.5	0.3	-40	110	500	S-VSON4	(A)	-
TLP3476S	60	0.4	12	1.5	3	0.25	0.2	-40	110	500	S-VSON4T	(A)	-
TLP3312	60	0.4	20	1.5	3	0.5	0.5	-40	85	1000	USOP4	(A)	-
TLP3412	60	0.4	20	1.5	3	0.5	0.5	-40	110	500	VSON4	(A)	-
TLP3407S	60	1	80	0.3	3	2	0.3	-40	110	500	S-VSON4	(A)	-
TLP3481	60	3	250	0.1	3	5	1	-40	110	500	P-SON4	(A)	-
TLP3487* ☆	60	2	200	0.13	3	3	0.5	-40	110	500	P-SON4	(A)	-
TLP3491* ☆	60	2	200	0.13	3	3	0.5	-40	110	500	P-SON4	(A)	-
TLP3475W ☆	60	0.4	12	1.5	3	0.25	0.2	-40	110	300	WSON4	(A)	-
TLP3306	75	0.4	30	1.5	3	2	1	-40	85	1000	USOP4	(A)	-
TLP3317	80	0.12	5	12	3	0.5	0.2	-40	85	1000	USOP4	(A)	-
TLP3417	80	0.12	5	12	3	0.5	0.2	-40	110	500	VSON4	(A)	-
TLP3319	80	0.2	6.5	8	3	0.4	0.4	-40	85	1000	USOP4	(A)	-
TLP3419	80	0.2	6.5	8	3	0.4	0.4	-40	110	500	VSON4	(A)	-
TLP3320	100	0.1	6	14	3	0.3	0.3	-40	85	1000	USOP4	(A)	-
TLP3420	100	0.1	6	14	3	0.3	0.3	-40	110	500	VSON4	(A)	-
TLP3409S	100	0.65	50	0.6	3	2	0.3	-40	110	500	S-VSON4	(A)	-
TLP3482	100	2	170	0.2	3	3	1	-40	110	500	P-SON4	(A)	-
TLP3483	200	0.35	75	8	3	1	1	-40	110	500	P-SON4	(A)	-
TLP3484	400	0.18	60	35	3	1	1	-40	110	500	P-SON4	(A)	-

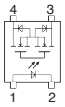
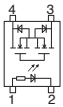
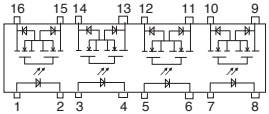
☆ New Products,
*IOFF(max): @Test condition
TLP3487: 10nA @VOFF=60V, Ta=25°C
TLP3491: 1nA @VOFF=40V, Ta=25°C, 10nA @VOFF=20V, Ta=50°C, 1μA @VOFF=60V, Ta=25°C

MOSFET Output 1-Form-A

Part Number	OFF-state Output Terminal Voltage V_{OFF} max (V)	ON-state Current I_{ON} max (A)	Terminal Capacitance C_{OFF} typ. (pF)	ON-state Resistance R_{ON} max (Ω)	Operating Voltage V_{FON} max (V)	Turn-on time t_{ON} max (ms)	Turn-off time t_{OFF} max (ms)	Operating Temperature T_{opr} min (°C)	Operating Temperature T_{opr} max (°C)	Isolation Voltage BV_S min (Vrms)	Toshiba Package	Pin Configuration	Lead Form Option
TLP3403R	20	1	40	0.22	3	2	1	-40	110	500	VSONR4	(B)	-
TLP3403SRHA	20	1.5	120	0.2	3	2	0.2	-40	125	500	S-VSON4T	(B)	-
TLP3406SRH4	30	0.9	120	0.2	3	2	0.2	-40	110	300	S-VSON16T	(C)	-
TLP3406SRL	30	1.5	120	0.2	1.6	2	0.2	-40	110	500	S-VSON4T	(B)	-
TLP3406SRH	30	1.5	120	0.2	3	2	0.2	-40	110	500	S-VSON4T	(B)	-
TLP3406SRHA	30	1.5	120	0.2	3	2	0.2	-40	125	500	S-VSON4T	(B)	-
TLP3475R	50	0.3	12	1.5	3	0.5	0.4	-40	110	500	VSONR4	(B)	-
TLP3475SRHA4	60	0.25	20 (max)	1.5	3	0.5	0.2	-40	125	300	S-VSON16T	(C)	-
TLP3412SRHA4	60	0.25	20 (max)	1.5	3	0.5	0.2	-40	125	300	S-VSON16T	(C)	-
TLP3475SRHA	60	0.4	12	1.5	3	0.5	0.2	-40	125	500	S-VSON4T	(B)	-
TLP3412R	60	0.4	20	1.5	3	0.5	0.5	-40	110	500	VSONR4	(B)	-
TLP3412SRA	60	0.4	20 (max)	1.5	3	1	0.5	-40	125	500	S-VSON4T	(B)	-
TLP3412SRB* ☆	60	0.4	20 (max)	1.5	3	1	0.5	-40	135	500	S-VSON4T	(B)	-
TLP3412SRLA	60	0.4	20 (max)	1.5	1.6	0.35	0.15	-40	125	500	S-VSON4T	(B)	-
TLP3412SRLB* ☆	60	0.4	20 (max)	1.5	1.6	0.35	0.15	-40	135	500	S-VSON4T	(B)	-
TLP3412SRH	60	0.4	20 (max)	1.5	3	0.5	0.2	-40	110	500	S-VSON4T	(B)	-
TLP3412SRHA	60	0.4	20 (max)	1.5	3	0.5	0.2	-40	125	500	S-VSON4T	(B)	-
TLP3412SRHB* ☆	60	0.4	20 (max)	1.5	3	0.5	0.2	-40	135	500	S-VSON4T	(B)	-
TLP3407SRA4	60	0.6	80	0.3	3	20	1	-40	125	300	S-VSON16T	(C)	-
TLP3407SR	60	1	80	0.3	3	20	1	-40	110	500	S-VSON4T	(B)	-
TLP3407SRA	60	1	80	0.3	3	20	1	-40	125	500	S-VSON4T	(B)	-
TLP3407SRB* ☆	60	1	80	0.3	3	20	1	-40	135	500	S-VSON4T	(B)	-
TLP3407SRH	60	1	80	0.3	3	2	0.2	-40	110	500	S-VSON4T	(B)	-
TLP3407SRL	60	1	80	0.3	1.6	1	0.2	-40	110	500	S-VSON4T	(B)	-

☆ New Products
*VFON(max): @Test condition
TLP3412SRB: 3.3V @ION=48mA, Ta=135°C
TLP3412SRLB: 1.6V @ION=48mA, Ta=135°C
TLP3412SRHB: 4.5V @ION=48mA, Ta=135°C
TLP3407SRB: 3.3V @ION=100mA, Ta=135°C

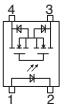
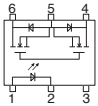
Pin Configuration

(A)	(B)	(C)
		

MOSFET Output 1-Form-B

Part Number	OFF-state Output Terminal Voltage	ON-state Current	Terminal Capacitance	ON-state Resistance	Trigger LED Current	Turn-on time	Turn-off time	Operating Temperature		Isolation Voltage	Toshiba Package	Pin Configu-ration	Lead Form Option
								T_{opr}					
	V_{OFF} max (V)	I_{ON} max (A)	C_{OFF} typ. (pF)	R_{ON} max (Ω)	I_{FC} max (mA)	t_{ON} max (ms)	t_{OFF} max (ms)	min (°C)	max (°C)	BV_S min (Vrms)			
TLP4176A	60	0.5	100	2.5	3	1	3	-40	105	1500	2.54SOP4	(A)	-
TLP4590A	60	1.2	550	0.6	2	2	3	-40	110	5000	DIP6	(B)	✓
TLP4176G	350	0.12	65	25	3	1	3	-40	85	1500	2.54SOP4	(A)	-

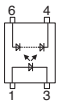
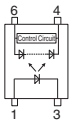
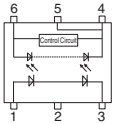
Pin Configuration

(A)	(B)
	

2-2 Photovoltaic Output

Part Number	Feature	Short-circuit current I_{SC} min (μA)	Open voltage V_{OC} min (V)	Turn-on time t_{on} max (ms)	Turn-off time t_{off} max (ms)	Operating Temperature T_{opr} min (°C)	Operating Temperature T_{opr} max (°C)	Isolation Voltage BV_S min (Vrms)	Toshiba Package	Pin Configuration	Lead Form Option
TLP3905	Without internal shunt resistor	12	7	-	-	-40	125	3750	4pin SO6	(A)	-
TLP3906	Built-in discharging circuit	12	7	1	1	-40	125	3750	4pin SO6	(B)	-
TLP3910	Built-in discharging circuit	12	14	1	0.5	-40	125	5000	SO6L	(C)	-

Pin Configuration

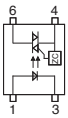
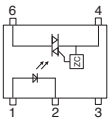
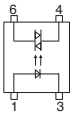
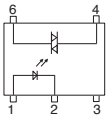
(A)	(B)	(C)
		

2-3 Triac Output

Part Number	Output Type (Note1)	Trigger LED Current I_{FT} max (mA)	Off-state Output Terminal Voltage V_{DRM} max (V)	On-state RMS Current $I_{T(RMS)}$ max (mA)	Inhibit Voltage V_{IH} max (V)	Peak on-state Voltage V_{TM} max (V)	Operating Temperature T_{opr} min (°C)	Operating Temperature T_{opr} max (°C)	Isolation Voltage BV_S min (Vrms)	Toshiba Package	Pin Configuration	Lead Form Option
TLP266J	ZC	10	600	70	30	2.8	-40	100	3750	4pin SO6	(A)	-
TLP268J	ZC	3	600	70	30	2.8	-40	100	3750	4pin SO6	(A)	-
TLP3062A	ZC	10	600	100	20	3	-40	100	5000	5pin DIP6	(B)	✓
TLP3083	ZC	5	800	100	20	3	-40	100	5000	5pin DIP6	(B)	✓
TLP265J	NZC	10	600	70	-	2.8	-40	100	3750	4pin SO6	(C)	-
TLP267J	NZC	3	600	70	-	2.8	-40	100	3750	4pin SO6	(C)	-
TLP3052A	NZC	10	600	100	-	3	-40	100	5000	5pin DIP6	(D)	✓
TLP3073	NZC	5	800	100	-	3	-40	100	5000	5pin DIP6	(D)	✓

Note1: ZC: Zero crossing functionary, NZC: Non zero crossing functionary

Pin Configuration

(A)	(B)	(C)	(D)
			

3. Automotive Devices

Photocouplers

IC Output

High Speed Logic Couplers (Open-collector)

Part Number	Data Rate (Mbps)	Threshold LED Input Current I_{FHL} max (mA)	Propagation Delay Time t_{pLH} max (ns)	Propagation Delay Time t_{pHL} max (ns)	Supply Voltage Operating Range V_{CC} (Note1) min (V)	Supply Voltage Operating Range V_{CC} (Note1) max (V)	High / Low -level Supply Current I_{CC} max (mA)	Common Mode Transient Immunity CM min (kV / μs)	Operating Temperature T_{opr} min (°C)	Operating Temperature T_{opr} max (°C)	Isolation Voltage BV_S min (Vrms)	Toshiba Package	Pin Configu-ration	AEC-Q101
TLX9304	1	5	550	400	4.5	20	1.3	+/-15	-40	125	3750	5pin SO6	(A)	#
TLX9378	10	5	100	100	4.5	5.5	1.3	+/-15	-40	125	3750	5pin SO6	(B)	#

High Speed Logic Coupler (Totem-pole (Buffer))

Part Number	Data Rate (Mbps)	Threshold LED Input Current I_{FLH} max (mA)	Propagation Delay Time t_{pLH} max (ns)	Propagation Delay Time t_{pHL} max (ns)	Supply Voltage Operating Range V_{DD} (Note1) min (V)	Supply Voltage Operating Range V_{DD} (Note1) max (V)	High / Low -level Supply Current I_{DD} max (mA)	Common Mode Transient Immunity CM min (kV / μs)	Operating Temperature T_{opr} min (°C)	Operating Temperature T_{opr} max (°C)	Isolation Voltage BV_S min (Vrms)	Toshiba Package	Pin Configu-ration	AEC-Q101
TLX9310	5	1	250	250	2.7	5.5	0.3	+/-25	-40	105	3750	5pin SO6	(C)	#

High Speed Logic Coupler (Totem-pole (Inverter))

Part Number	Data Rate (Mbps)	Threshold LED Input Current I_{FHL} max (mA)	Propagation Delay Time t_{pLH} max (ns)	Propagation Delay Time t_{pHL} max (ns)	Supply Voltage Operating Range V_{CC} (Note1) min (V)	Supply Voltage Operating Range V_{CC} (Note1) max (V)	High / Low -level Supply Current I_{CC} max (mA)	Common Mode Transient Immunity CM min (kV / μs)	Operating Temperature T_{opr} min (°C)	Operating Temperature T_{opr} max (°C)	Isolation Voltage BV_S min (Vrms)	Toshiba Package	Pin Configu-ration	AEC-Q101
TLX9376	20	4	35	35	4.5	5.5	1.7	+/-15	-40	125	3750	5pin SO6	(B)	#

Logic Coupler (Open-collector)

Part Number	Data Rate (Mbps)	Current Transfer Ratio CTR min (%) @Ta = 25 °C	Propagation Delay Time t_{pLH} max (ns)	Propagation Delay Time t_{pHL} max (ns)	Supply Voltage Operating Range V_{CC} (Note1) min (V)	Supply Voltage Operating Range V_{CC} (Note1) max (V)	High / Low -level Supply Current I_{CC} max (mA)	Common Mode Transient Immunity CM min (kV / μs)	Operating Temperature T_{opr} min (°C)	Operating Temperature T_{opr} max (°C)	Isolation Voltage BV_S min (Vrms)	Toshiba Package	Pin Configu-ration	AEC-Q101
TLX9309	1	15 (@I_F = 7 mA)	1000	800	-	30	-	+/-10	-40	125	3750	5pin SO6	(B)	#

Note1: Recommended Operating Condition
AEC-Q101 qualified

Transistor Output

Part Number	Input Type	Current Transfer Ratio CTR (IC / IF) @Ta = 25 °C			Collector-Emitter Voltage	Collector Current	Operating Temperature Topr		Isolation Voltage	Toshiba Package	Pin Configuration	AEC-Q101
		min (%)	max (%)	Relevant Part	VCEO max (V)	IC max (A)	min (°C)	max (°C)	BVS min (Vrms)			
TLX9291A	DC	50	600	☆1	80	0.05	-40	125	3750	SO4	(D)	#
TLX9185A	DC	50	600	☆1	80	0.05	-40	125	3750	4pin SO6	(D)	#
TLX9188	DC	50	600	☆1	200	0.05	-40	125	3750	4pin SO6	(D)	#
TLX9000	DC	100	900	-	40	0.05	-40	125	3750	SO4	(E)	#
TLX9300	DC	100	900	-	40	0.05	-40	125	3750	4pin SO6	(E)	#

Current Transfer Ratio Rank

Rank	Current Transfer Ratio (%)		Relevant Part	Marking of Classification
	min	max		
Blank	50	600	☆1	Blank, GB
GB	100	600	☆1	GB

Photovoltaic Output

Part Number	Short-circuit Current ISC min (μA) @Ta = 25 °C	Open Voltage VOC min (V) @Ta = 25 °C	Operating Temperature Topr min (°C)	Operating Temperature Topr max (°C)	Isolation Voltage BVS min (Vrms)	Toshiba Package	Pin Configuration	AEC-Q101
TLX9905	12	7	-40	125	3750	4pin SO6	(F)	#
TLX9906	12	7	-40	125	3750	4pin SO6	(G)	#
TLX9909 ★	8	13.5	-40	125	3750	4pin SO6	(F)	#
TLX9910 ☆	8	13.5	-40	125	3750	4pin SO6	(G)	#
TLX9920 ☆	8	13.5	-40	125	5000	SO6L	(H)	#

Photorelays

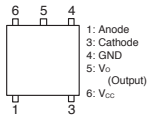
MOSFET Output 1-Form-A

Part Number	OFF-state Output Terminal Voltage VOFF max (V)	ON-state Current ION max (A)	Terminal Capacitance COFF typ. (pF)	ON-state Resistance RON max (Ω)	Trigger LED Current IFT max (mA)	Operating Temperature Topr min (°C)	Operating Temperature Topr max (°C)	Isolation Voltage BVS min (Vrms)	Toshiba Package	Pin Configuration	AEC-Q101
TLX9175J	600	0.015	8	335	3	-55	105	3750	4pin SO6	(I)	#
TLX9176J ☆	600	0.015	8	400	3	-55	105	3750	4pin SO6	(I)	#
TLX9150M ☆	900	0.05	60	250	3	-40	125	5000	SO12L-T	(K)	#
TLX9152M ☆	900	0.05	60	250	3	-40	125	5000	SO16L-T	(J)	#
TLX9161T ☆	1500	0.05	60	500	3	-40	125	5000	SO12L-T	(K)	#
TLX9160T	1500	0.05	100	250	3	-40	125	5000	SO16L-T	(J)	#
TLX9165T ☆	1800	0.05	100	340	3	-40	125	5000	10pin SO16L-T	(L)	#

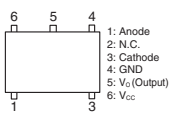
AEC-Q101 qualified
☆ New Products
★ Under Development (The specification is subject to change without notice.)

Pin Configuration

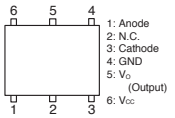
(A)



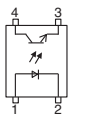
(B)



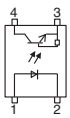
(C)



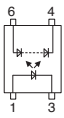
(D)



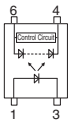
(E)



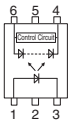
(F)



(G)

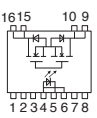


(H)

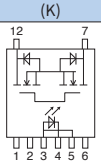


(I)

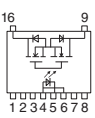
(J)



(K)



(L)



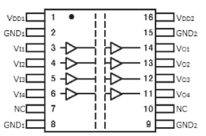
Digital Isolators

Part Number	Number of channels Forward: Reverse	Default output logic	Enabled / Disabled control	Propagation Delay t_{pLH} / t_{pHL} (Note1)	Supply Voltage Operating Range V_{DD} (Note2)		Operating Temperature T_{opr}		Withstand Isolation Voltage	Toshiba Package	Pin Configuration	Lead Form Option
				max (ns)	min (V)	max (V)	min (°C)	max (°C)	BV_S min (Vrms)			
DCM340C01 ☆	4:0	Low	-	19.2	3.0	5.5	-40	125	5000	SOIC16-W	(A)	-
DCM340D01 ☆	4:0	High	-	19.2	3.0	5.5	-40	125	5000	SOIC16-W	(A)	-
DCM340L01 ☆	4:0	Low	Output Enable	19.2	3.0	5.5	-40	125	5000	SOIC16-W	(B)	-
DCM340H01 ☆	4:0	High	Output Enable	19.2	3.0	5.5	-40	125	5000	SOIC16-W	(B)	-
DCM341A01 ☆	3:1	Low	Input Disable	19.2	3.0	5.5	-40	125	5000	SOIC16-W	(C)	-
DCM341B01 ☆	3:1	High	Input Disable	19.2	3.0	5.5	-40	125	5000	SOIC16-W	(C)	-
DCM341L01 ☆	3:1	Low	Output Enable	19.2	3.0	5.5	-40	125	5000	SOIC16-W	(D)	-
DCM341H01 ☆	3:1	High	Output Enable	19.2	3.0	5.5	-40	125	5000	SOIC16-W	(D)	-
DCM342L01 ☆	2:2	Low	Output Enable	19.2	3.0	5.5	-40	125	5000	SOIC16-W	(E)	-
DCM342H01 ☆	2:2	High	Output Enable	19.2	3.0	5.5	-40	125	5000	SOIC16-W	(E)	-
DCM320C00 ☆	2:0	Low	-	19.1	3.0	5.5	-40	125	3000	SOIC8-N	(F)	-
DCM320D00 ☆	2:0	High	-	19.1	3.0	5.5	-40	125	3000	SOIC8-N	(F)	-
DCM321C00 ☆	1:1	Low	-	19.1	3.0	5.5	-40	125	3000	SOIC8-N	(G)	-
DCM321D00 ☆	1:1	High	-	19.1	3.0	5.5	-40	125	3000	SOIC8-N	(G)	-
DCM340L0B ★	4:0	Low	Output Enable	TBD	3.0	5.5	-40	125	3000	SSOP16	(B)	-
DCM340H0B ★	4:0	High	Output Enable	TBD	3.0	5.5	-40	125	3000	SSOP16	(B)	-
DCM341L0B ★	3:1	Low	Output Enable	TBD	3.0	5.5	-40	125	3000	SSOP16	(C)	-
DCM341H0B ★	3:1	High	Output Enable	TBD	3.0	5.5	-40	125	3000	SSOP16	(C)	-
DCM342L0B ★	2:2	Low	Output Enable	TBD	3.0	5.5	-40	125	3000	SSOP16	(E)	-
DCM342H0B ★	2:2	High	Output Enable	TBD	3.0	5.5	-40	125	3000	SSOP16	(E)	-
DCM321CA0 ★	1:1	Low	-	TBD	3.0	5.5	-40	125	3000	SOIC8-N	(G)	-
DCM321DA0 ★	1:1	High	-	TBD	3.0	5.5	-40	125	3000	SOIC8-N	(G)	-
DCM320CA0 ★	2:0	Low	-	TBD	3.0	5.5	-40	125	3000	SOIC8-N	(F)	-
DCM320DA0 ★	2:0	High	-	TBD	3.0	5.5	-40	125	3000	SOIC8-N	(F)	-

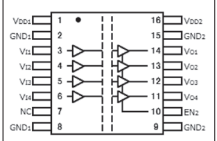
☆ New Products
★ Under Development (The specification is subject to change without notice.)
Note1: V_{DD} = 3.3 to 3.6 V, T_{opr} = -40 to 125 °C
Note2: Recommended Operating Condition
Note3: SSOP16(P-SSOP16-0405-0.64-001)

Pin Configuration

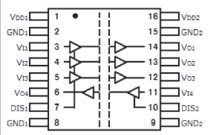
(A)



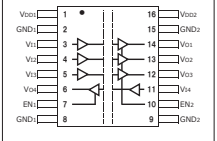
(B)



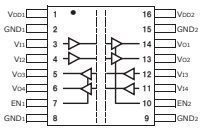
(C)



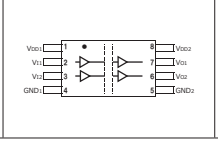
(D)



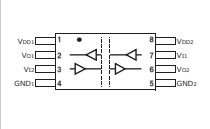
(E)



(F)



(G)

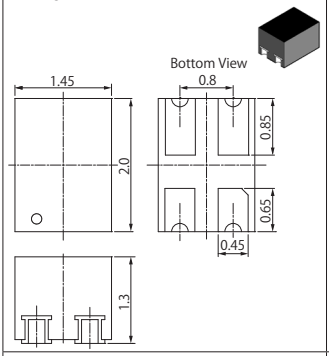


4. Device Packages

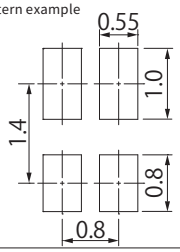
Dimensional Out Line (Surface Mount Type)

S-VSON4T (1.45 x 2.0)

Package dimension unit: mm

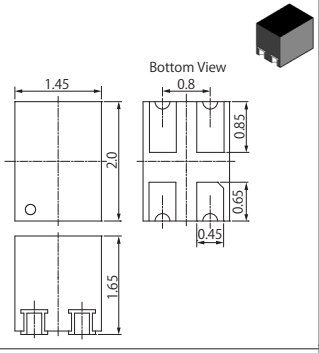


Land pattern example unit: mm

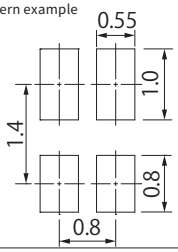


S-VSON4 (1.45 x 2.0)

Package dimension unit: mm

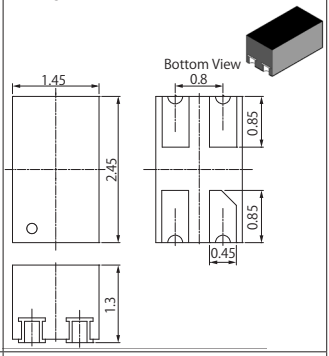


Land pattern example unit: mm

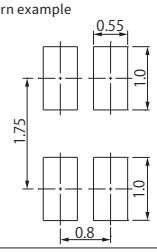


VSON4 (1.45 x 2.45)

Package dimension unit: mm

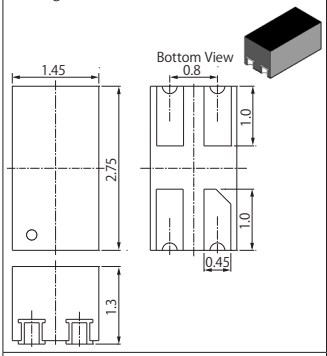


Land pattern example unit: mm

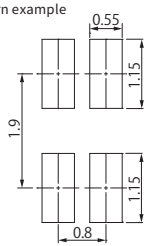


VSONR4 (1.45 x 2.75)

Package dimension unit: mm

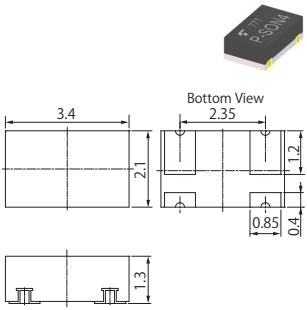


Land pattern example unit: mm

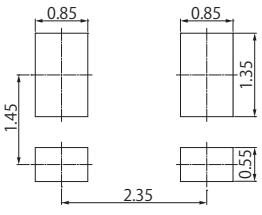


P-SON4 (3.4 x 2.1)

Package dimension unit: mm

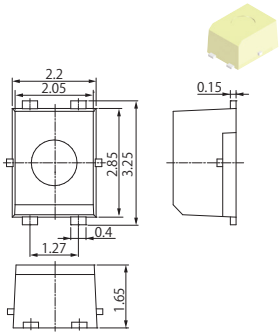


Land pattern example unit: mm

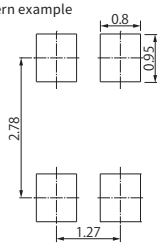


USOP4 (2.2 x 3.25)

Package dimension unit: mm

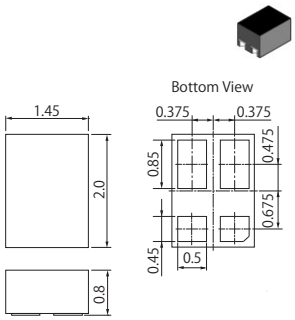


Land pattern example unit: mm

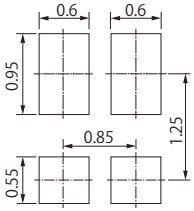


WSON4 (1.45 x 2.0)

Package dimension unit: mm

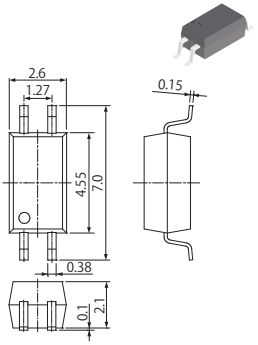


Land pattern example unit: mm

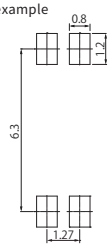


SO4 (2.6 x 7.0)

Package dimension unit: mm

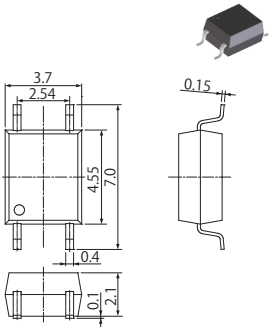


Land pattern example unit: mm

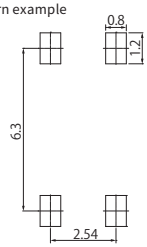


4pin SO6 (3.7 x 7.0)

Package dimension unit: mm

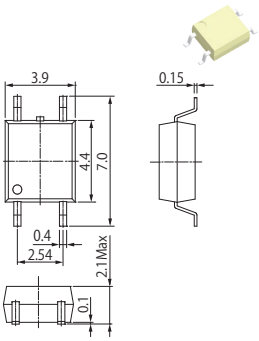


Land pattern example unit: mm

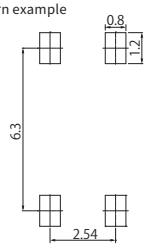


2.54SOP4 (3.9 x 7.0)

Package dimension unit: mm

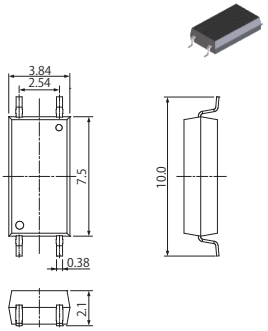


Land pattern example unit: mm



4pin SO6L (3.84 x 10.0)

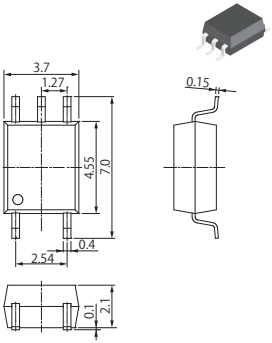
Package dimension unit: mm



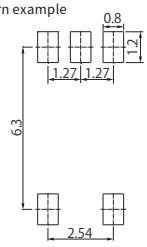
Land pattern example unit: mm

5pin SO6 (3.7 x 7.0)

Package dimension unit: mm

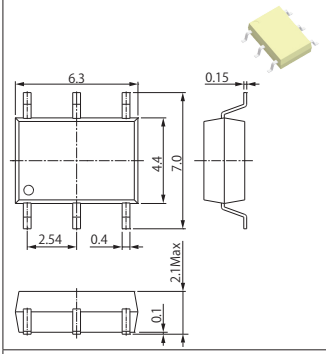


Land pattern example unit: mm

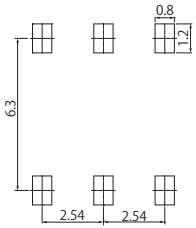


2.54SOP6 (6.3 x 7.0)

Package dimension unit: mm

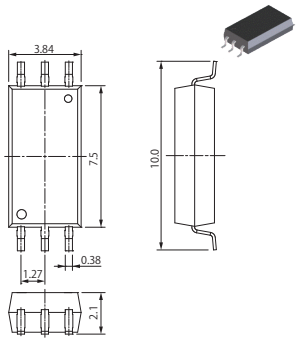


Land pattern example unit: mm



SO6L (3.84 x 10.0)

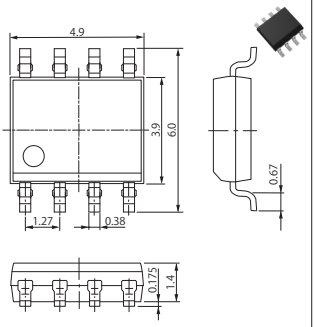
Package dimension unit: mm



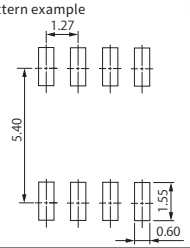
Land pattern example unit: mm

SOIC8-N (4.9 x 6.0)

Package dimension unit: mm

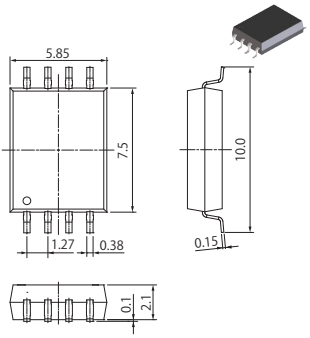


Land pattern example unit: mm

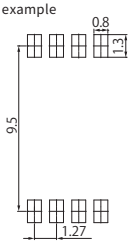


SO8L (5.85 x 10.0)

Package dimension unit: mm

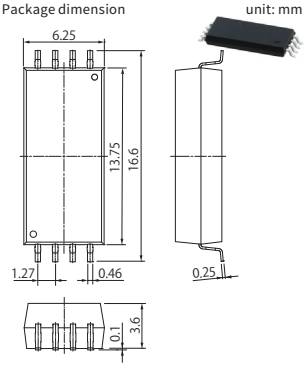


Land pattern example unit: mm

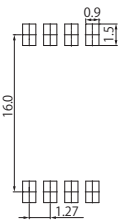


SO8XL (6.25 x 16.6)

Package dimension unit: mm

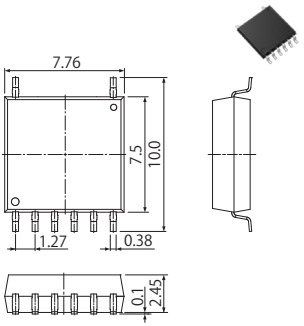


Land pattern example unit: mm

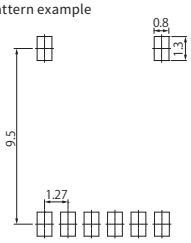


SO12L (7.76 x 10.0)

Package dimension unit: mm

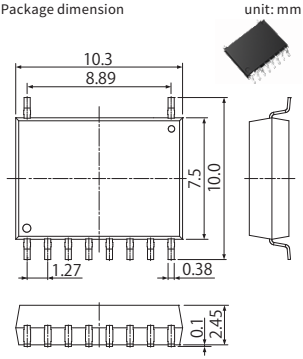


Land pattern example unit: mm

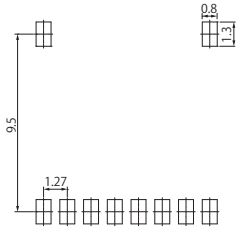


10pin SO16L-T (10.3 x 10.0)

Package dimension unit: mm

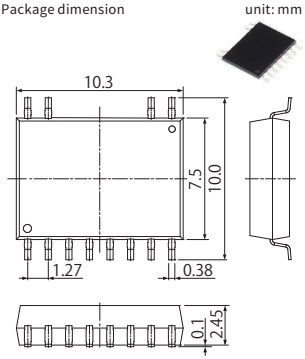


Land pattern example unit: mm

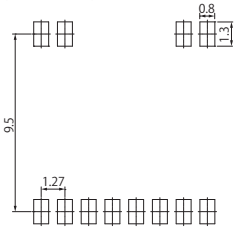


SO16L-T (10.3 x 10.0)

Package dimension unit: mm

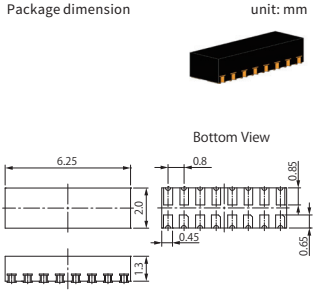


Land pattern example unit: mm

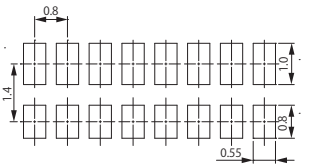


S-VSON16T (6.25 x 2.0)

Package dimension unit: mm

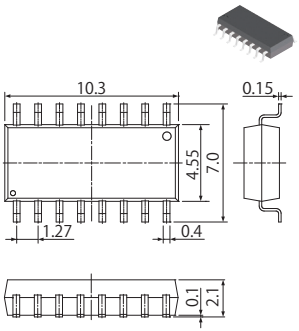


Land pattern example unit: mm

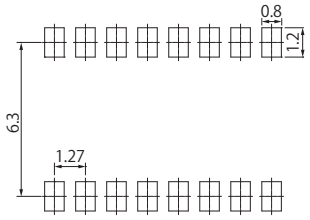


SO16 (10.3 x 7.0)

Package dimension unit: mm

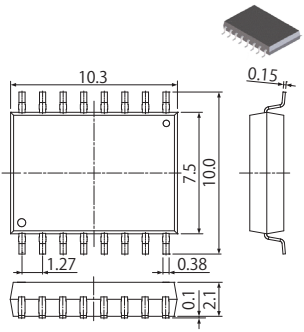


Land pattern example unit: mm

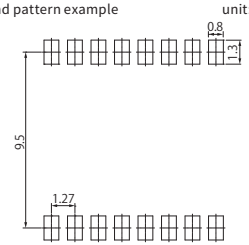


SO16L (10.3 x 10.0)

Package dimension unit: mm

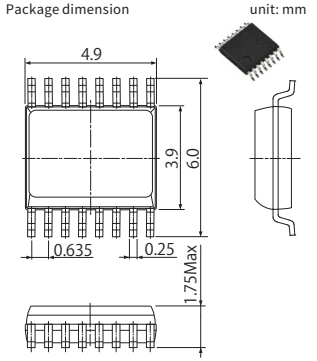


Land pattern example unit: mm

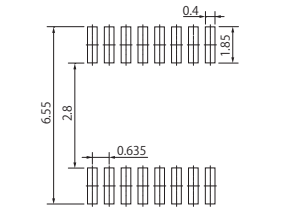


SSOP16(P-SSOP16-0405-0.64-001) (4.9 x 6.0)

Package dimension unit: mm

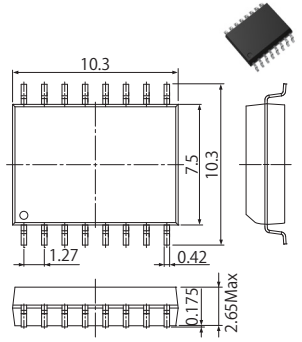


Land pattern example unit: mm

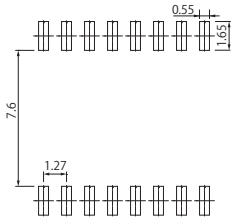


SOIC16-W(P-SOP16-0811-1.27-002) (10.3 x 10.3)

Package dimension unit: mm



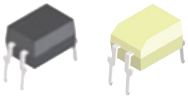
Land pattern example unit: mm

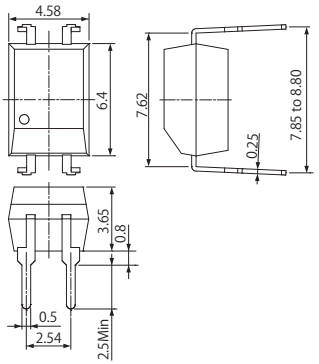


Dimensional Out Line (Through Hole Type)

DIP4 (4.58 x 7.62)

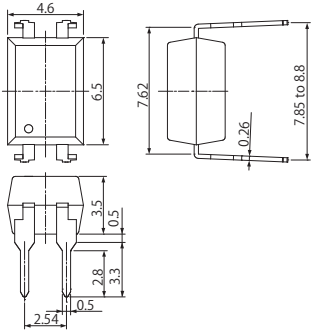
Package dimension unit: mm





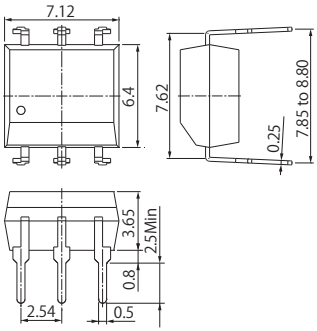
DIP4(TLP785) (4.6 x 7.62)

Package dimension unit: mm



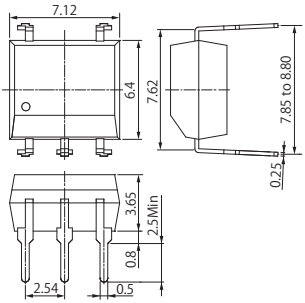
DIP6 (7.12 x 7.62)

Package dimension unit: mm



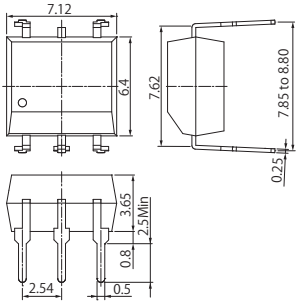
5pin DIP6 (7.12 x 7.62)

Package dimension unit: mm



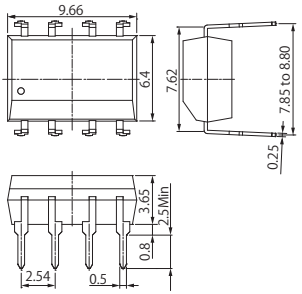
5pin DIP6(cut) (7.12 x 7.62)

Package dimension unit: mm



DIP8 (9.66 x 7.62)

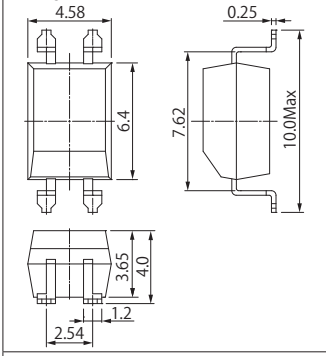
Package dimension unit: mm



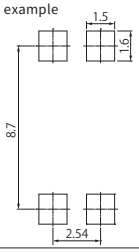
Lead Form Options

DIP4(LF1) / (TP1) (4.58 x 10.0)

Package dimension unit: mm

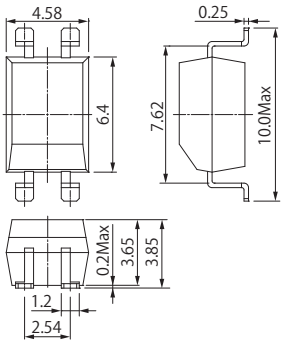


Land pattern example unit: mm

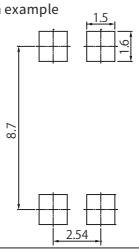


DIP4(LF5) / (TP5) (4.58 x 10.0)

Package dimension unit: mm

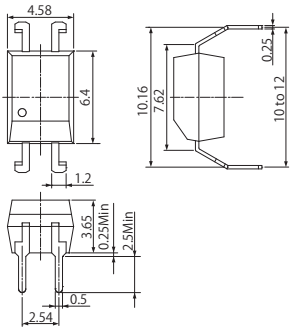


Land pattern example unit: mm



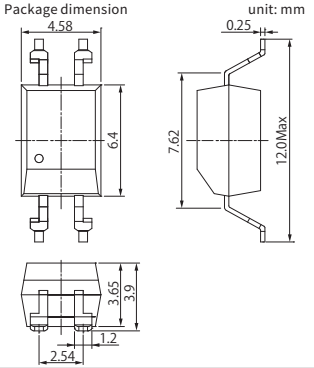
DIP4(LF2) (4.58 x 10.16)

Package dimension (DIP4 F type) unit: mm

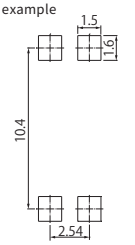


DIP4(LF4) / (TP4) (4.58 x 12.0)

Package dimension unit: mm

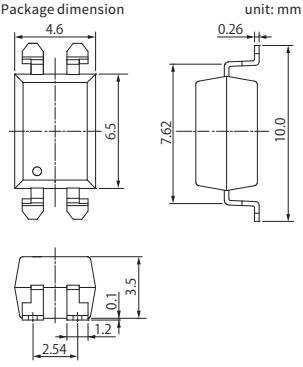


Land pattern example unit: mm

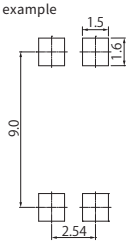


DIP4(TLP785) (LF6) / (TP6) (4.6 x 10.0)

Package dimension unit: mm

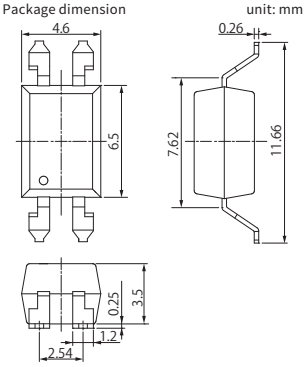


Land pattern example unit: mm

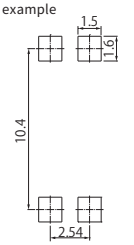


DIP4(TLP785F) (LF7) / (TP7) (4.6 x 11.66)

Package dimension unit: mm

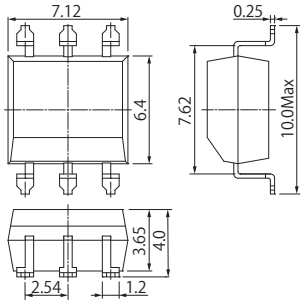


Land pattern example unit: mm

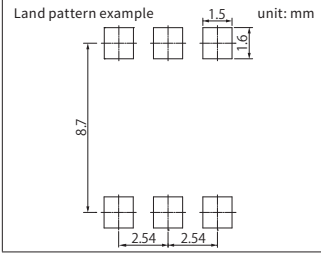


DIP6(LF1) / (TP1) (7.12 x 10.0)

Package dimension unit: mm

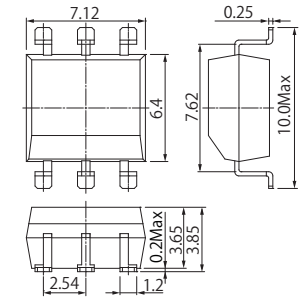


Land pattern example unit: mm

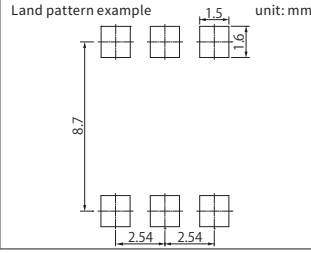


DIP6(LF5) / (TP5) (7.12 x 10.0)

Package dimension unit: mm

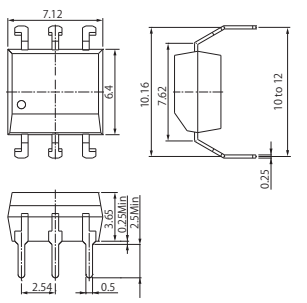


Land pattern example unit: mm



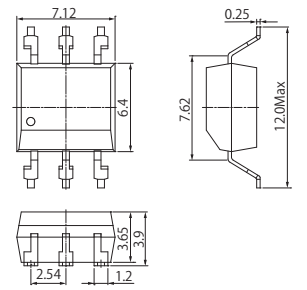
DIP6(LF2) (7.12 x 10.16)

Package dimension (DIP6 F type) unit: mm

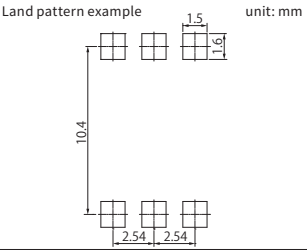


DIP6(LF4) / (TP4) (7.12 x 12.0)

Package dimension unit: mm

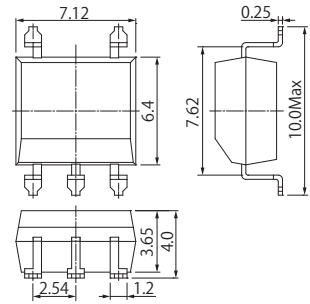


Land pattern example unit: mm

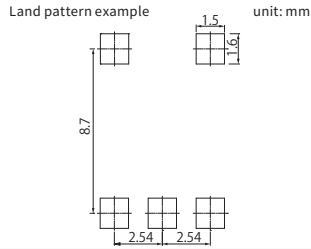


5pin DIP6(LF1) / (TP1) (7.12 x 10.0)

Package dimension unit: mm

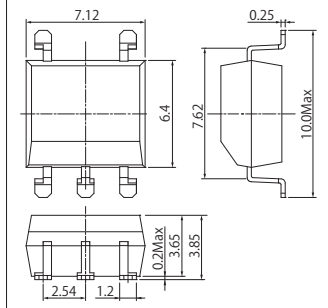


Land pattern example unit: mm

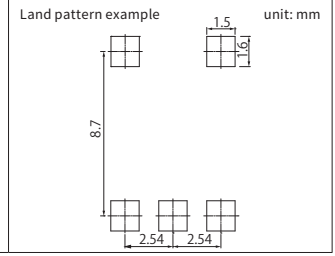


5pin DIP6(LF5) / (TP5) (7.12 x 10.0)

Package dimension unit: mm

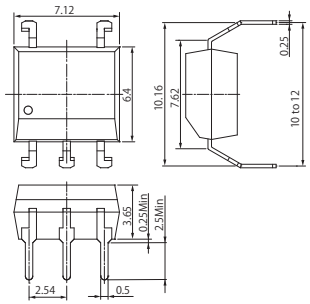


Land pattern example unit: mm



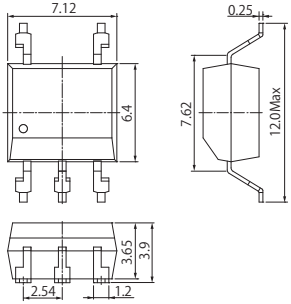
5pin DIP6(LF2) (7.12 x 10.16)

Package dimension (5pin DIP6 F type) unit: mm

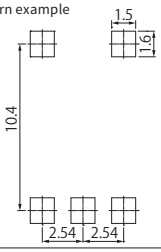


5pin DIP6(LF4) / (TP4) (7.12 x 12.0)

Package dimension unit: mm

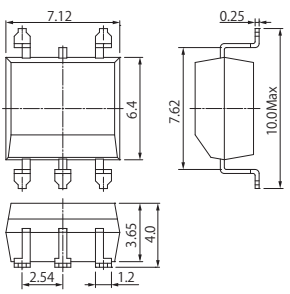


Land pattern example unit: mm

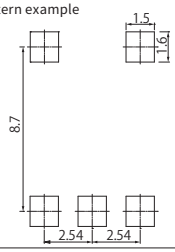


5pin DIP6(cut)(LF1) / (TP1) (7.12 x 10.0)

Package dimension unit: mm

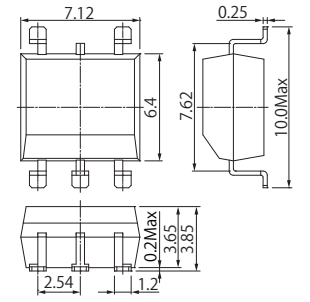


Land pattern example unit: mm

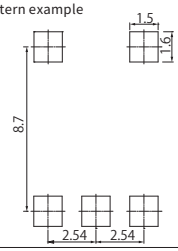


5pin DIP6(cut)(LF5) / (TP5) (7.12 x 10.0)

Package dimension unit: mm

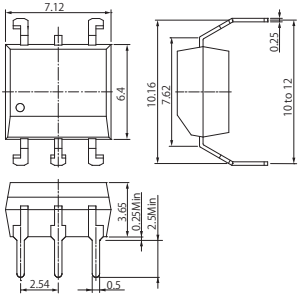


Land pattern example unit: mm



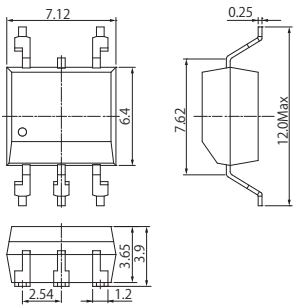
5pin DIP6(cut)(LF2) (7.12 x 10.16)

Package dimension unit: mm (5pin DIP6(cut) F type)

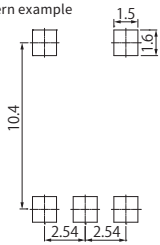


5pin DIP6(cut)(LF4) / (TP4) (7.12 x 12.0)

Package dimension unit: mm

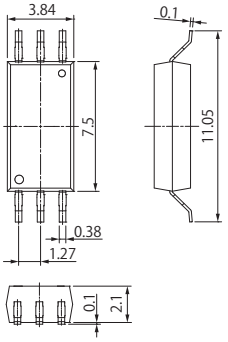


Land pattern example unit: mm

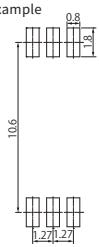


SO6L(LF4) (3.84 x 11.05)

Package dimension unit: mm

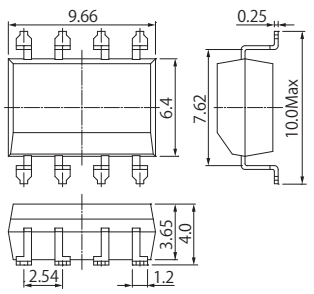


Land pattern example unit: mm

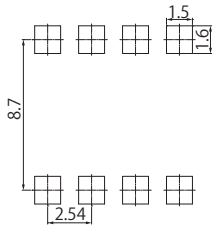


DIP8(LF1) / (TP1) (9.66 x 10.0)

Package dimension unit: mm

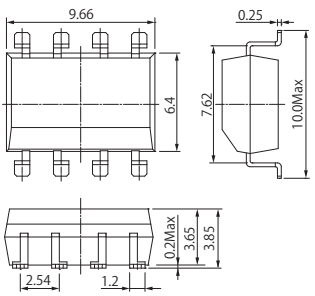


Land pattern example unit: mm

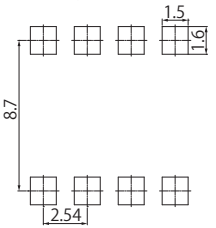


DIP8(LF5) / (TP5) (9.66 x 10.0)

Package dimension unit: mm

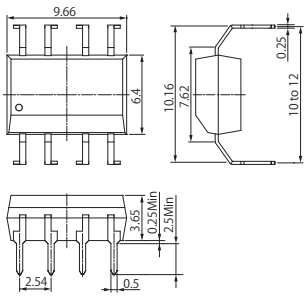


Land pattern example unit: mm



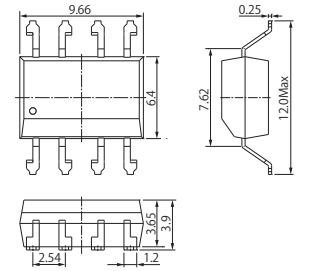
DIP8(LF2) (9.66 x 10.16)

Package dimension (DIP8 F type) unit: mm

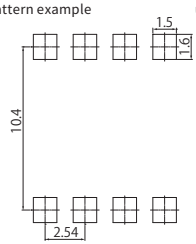


DIP8(LF4) / (TP4) (9.66 x 12.0)

Package dimension unit: mm

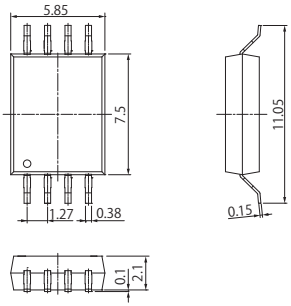


Land pattern example unit: mm

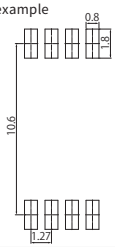


SO8L(LF4) (5.85 x 11.05)

Package dimension unit: mm



Land pattern example unit: mm



5. Cross Reference

IGBT / MOSFET Driver Photocouplers

Manufacturer	Competitor's Product	Toshiba			
	Part Number	Part Number	Compatible Level **(Note:1)**	Peak Current	Package
BROADCOM	ACNW3130	TLP5752H	3	2.5 A	SO6L
	ACNW3190	TLP5754H	4	4 A	SO6L
	ACPL-3130	TLP5752H	4	2.5 A	SO6L
	ACPL-330J	TLP5214A	2	4 A	SO16L
		TLP5212		2.5 A	
	ACPL-331J	TLP5214A	2	4 A	SO16L
		TLP5212		2.5 A	
	ACPL-332J	TLP5214A	1	4 A	SO16L
		TLP5212		2.5 A	
	ACPL-333J	TLP5222 ☆	1	2.5 A	SO16L
	ACPL-339J	TLP5231	1	2 A	SO16L
	ACPL-H312	TLP5832	1	2.5 A	SO8L
	ACPL-H342	TLP5772	3	2.5 A	SO6L
	ACPL-J313	TLP5752H	4	2.5 A	SO6L
	ACPL-K312	TLP5832	2	2.5 A	SO8L
	ACPL-K342	TLP5772(LF4)	3	2.5 A	SO6L(LF4)
	ACPL-P302	TLP5701	2	0.6 A	SO6L
	ACPL-P314	TLP5701	2	0.6 A	SO6L
	ACPL-P340	TLP5751	1	1 A	SO6L
	ACPL-P341	TLP5754	1	4 A	SO6L
	ACPL-P343	TLP5754	1	4 A	SO6L
	ACPL-P345	TLP5751	1	1 A	SO6L
	ACPL-P346	TLP5752	1	2.5 A	SO6L
	ACPL-P347	TLP5751	2	1 A	SO6L
	ACPL-P349	TLP5752	2	2.5 A	SO6L
	ACPL-T350	TLP5752H	4	2.5 A	SO6L
	ACPL-W302	TLP5701(LF4)	2	0.6 A	SO6L(LF4)
	ACPL-W314	TLP5701(LF4)	2	0.6 A	SO6L(LF4)
	ACPL-W340	TLP5751(LF4)	1	1 A	SO6L(LF4)
	ACPL-W341	TLP5754(LF4)	1	4 A	SO6L(LF4)
	ACPL-W343	TLP5754(LF4)	1	4 A	SO6L(LF4)
	ACPL-W345	TLP5751(LF4)	1	1 A	SO6L(LF4)
	ACPL-W346	TLP5752(LF4)	1	2.5 A	SO6L(LF4)
	ACPL-W347	TLP5751(LF4)	2	1 A	SO6L(LF4)
	ACPL-W349	TLP5752(LF4)	2	2.5 A	SO6L(LF4)
	HCNW3120	TLP5752H	3	2.5 A	SO6L
	HCPL-0302	TLP151A	3	0.6 A	5pin SO6
	HCPL-0314	TLP151A	3	0.6 A	5pin SO6
	HCPL-3020	TLP5771H	4	1 A	SO6L
	HCPL-3120	TLP5752H	4	2.5 A	SO6L
	HCPL-3140	TLP5771H	4	1 A	SO6L
	HCPL-314J	TLP5701 x 2 pcs	4	0.6 A	SO6L
	HCPL-3150	TLP5771H	4	1 A	SO6L
	HCPL-315J	TLP5701 x 2 pcs	4	0.6 A	SO6L
	HCPL-316J	TLP5214A	2	4 A	SO16L
		TLP5212		2.5 A	
	HCPL-3180	TLP5752H	3	2.5 A	SO6L
	HCPL-J312	TLP5752H	4	2.5 A	SO6L
	HCPL-J314	TLP5771H	4	1 A	SO6L
	HCPL-T250	TLP5752H	4	2.5 A	SO6L

☆ New Products

Note:1

1: Package and characteristics are almost same
2: Almost same package but similar characteristics
3: Almost same characteristics but different package
4: Different package and similar characteristics

Manufacturer	Competitor's Product	Toshiba			
	Part Number	Part Number	Compatible Level **(Note:1)**	Peak Current	Package
Fairchild	FOD3120	TLP5752H	4	2.5 A	SO6L
	FOD3150	TLP5771	4	1 A	SO6L
	FOD3182	TLP5774	4	4 A	SO6L
	FOD8314	TLP5772	2	2.5 A	SO6L
	FOD8332	TLP5214A	1	4 A	SO16L
		TLP5212		2.5 A	
Renesas	PS9301L	TLP5701	1	0.6 A	SO6L
	PS9302L	TLP5832	2	2.5 A	SO8L
	PS9305L	TLP5832	1	2.5 A	SO8L
	PS9307L	TLP5701	1	0.6 A	SO6L
	PS9308L	TLP5702	2	2.5 A	SO6L
	PS9331L	TLP5702	2	2.5 A	SO6L
	PS9402	TLP5214A	2	4 A	SO16L
		TLP5212		2.5 A	
	PS9505	TLP5752H	4	2.5 A	SO6L
	PS9506	TLP5771H	4	1 A	SO6L
	PS9531	TLP5752H	4	2.5 A	SO6L
	PS9552	TLP5752H	4	2.5 A	SO6L
	PS9553	TLP5771H	4	1 A	SO6L
	PS9801	TLP151A	3	0.6 A	5pin SO6
SHARP	PC923	TLP5771H	4	1 A	SO6L
	PC924	TLP5771H	4	1 A	SO6L
	PC925	TLP5752H	4	2.5 A	SO6L
	PC928	TLP5214A	4	4 A	SO16L
		TLP5212		2.5 A	
	PC929	TLP5214A	4	4 A	SO16L
		TLP5212		2.5 A	
TI	UCC23525CDWYR	TLP5754H	1	4 A	SO6L
	UCC23513DWYR	TLP5754H	1	4 A	SO6L
	UCC23513BDWYR	TLP5774H	1	4 A	SO6L
	UCC23313DWYR	TLP5754H	1	4 A	SO6L
	UCC23313BDWYR	TLP5774H	1	4 A	SO6L
	UCC23113DWYR	TLP5754H	1	4 A	SO6L
	UCC23511DWYR	TLP5752H	1	2.5 A	SO6L
	UCC23511BDWYR	TLP5772H	1	2.5 A	SO6L
Novosense	NSI6801B-DSWFR	TLP5774H	1	4 A	SO6L
	NSI6801B-DSPR	TLP5774H	3	4 A	SO6L
	NSI6801C-DSWFR	TLP5754H	1	4 A	SO6L
	NSI6801C-DSPR	TLP5754H	3	4 A	SO6L
	NSI6801TB-DDBR	TLP5774H	3	4 A	SO6L
	NSI6801TC-DDBR	TLP5754H	3	4 A	SO6L
	NSI6801LC-DDBR	TLP5754H	3	4 A	SO6L
	NSI68515LC	TLP5214A	1	4 A	SO16L
	NSI68515AC	TLP5222	2	2.5 A	SO16L
	NSI68515RC	TLP5212	1	2.5 A	SO16L
	NSI68515UC	TLP5214A	4	4 A	SO16L

Note:1
1: Package and characteristics are almost same
2: Almost same package but similar characteristics
3: Almost same characteristics but different package
4: Different package and similar characteristics

High Speed and IPM Driver Photocouplers

Manufacturer	Competitor's Product	Toshiba			
	Part Number	Part Number	Compatible Level **(Note:1)**	Data Rate (typ.)	Package
BROADCOM	ACPL-071L	TLP2366	3	20 Mbps	5pin SO6
	ACPL-074L	TLP2261	3	15 Mbps	SO8L(LF4)
	ACPL-K24L	TLP2210	4	5 Mbps	SO8L(LF4)
	ACPL-K43T	TLX9309	3	1 Mbps	5pin SO6
	ACPL-K44T	TLX9309	4	1 Mbps	5pin SO6
	ACPL-K49T	TLX9309	3	1 Mbps	5pin SO6
	ACPL-K71T	TLX9376	4	20 Mbps	5pin SO6
	ACPL-K72T	TLX9378	4	10 Mbps	5pin SO6
	ACPL-K74T	TLX9376	4	20 Mbps	5pin SO6
	ACPL-K75T	TLX9378	4	10 Mbps	5pin SO6
	ACPL-M21L	TLP2312	1	5 Mbps	5pin SO6
	ACPL-M43T	TLX9309	1	1 Mbps	5pin SO6
	ACPL-M46T	TLX9304	1	1 Mbps	5pin SO6
	ACPL-M483	TLP2348	1	10 Mbps	5pin SO6
	ACPL-M484	TLP2345	1	10 Mbps	5pin SO6
	ACPL-M49T	TLX9309	3	1 Mbps	5pin SO6
	ACPL-M60L	TLP2363	1	15 Mbps	5pin SO6
	ACPL-M61L	TLP2361	1	15 Mbps	5pin SO6
	ACPL-M61T	TLX9378	1	10 Mbps	5pin SO6
	ACPL-M62L	TLP2363	1	15 Mbps	5pin SO6
	ACPL-M71T	TLX9376	1	20 Mbps	5pin SO6
	ACPL-M72T	TLX9376	2	20 Mbps	5pin SO6
	ACPL-M75L	TLP2366	2	20 Mbps	5pin SO6
	ACPL-P454	TLP2704	2	1 Mbps	SO6L
	ACPL-P456	TLP2704	1	1 Mbps	SO6L
	ACPL-P480	TLP2710	2	5 Mbps	SO6L
	ACPL-P481	TLP2710	2	5 Mbps	SO6L
	ACPL-P483	TLP2748	2	10 Mbps	SO6L
	ACPL-P484	TLP2745	2	10 Mbps	SO6L
	ACPL-P611	TLP2768A	2	20 Mbps	SO6L
	ACPL-W21L	TLP2710(LF4)	2	5 Mbps	SO6L(LF4)
	ACPL-W454	TLP2704(LF4)	2	1 Mbps	SO6L(LF4)
	ACPL-W456	TLP2704(LF4)	1	1 Mbps	SO6L(LF4)
	ACPL-W480	TLP2710(LF4)	2	5 Mbps	SO6L(LF4)
	ACPL-W481	TLP2710(LF4)	2	5 Mbps	SO6L(LF4)
	ACPL-W483	TLP2748(LF4)	2	10 Mbps	SO6L(LF4)
	ACPL-W484	TLP2745(LF4)	2	10 Mbps	SO6L(LF4)
	ACPL-W50L	TLP2719(LF4)	2	1 Mbps	SO6L(LF4)
	ACPL-W60L	TLP2768A(LF4)	1	20 Mbps	SO6L(LF4)
	ACPL-W611	TLP2768A(LF4)	2	20 Mbps	SO6L(LF4)
	ACPL-W61L	TLP2761(LF4)	1	15 Mbps	SO6L(LF4)
	ACPL-W70L	TLP2770	3	20 Mbps	SO6L
	HCPL-0201	TLP2355	4	5 Mbps	5pin SO6
	HCPL-0211	TLP2355	4	5 Mbps	5pin SO6
	HCPL-0454	TLP2304	4	1 Mbps	5pin SO6
	HCPL-0466	TLP2304	4	1 Mbps	5pin SO6
	HCPL-0600	TLP2368	4	20 Mbps	5pin SO6
	HCPL-0601	TLP2368	4	20 Mbps	5pin SO6
	HCPL-060L	TLP2368	4	20 Mbps	5pin SO6
	HCPL-0611	TLP2368	4	20 Mbps	5pin SO6
	HCPL-061A	TLP2368	4	20 Mbps	5pin SO6
	HCPL-061N	TLP2368	4	20 Mbps	5pin SO6
	HCPL-0630	TLP2261	4	15 Mbps	SO8L(LF4)
	HCPL-0631	TLP2261	4	15 Mbps	SO8L(LF4)
	HCPL-063A	TLP2261	2	15 Mbps	SO8L(LF4)
	HCPL-063L	TLP2261	4	15 Mbps	SO8L(LF4)
	HCPL-063N	TLP2261	4	15 Mbps	SO8L(LF4)
	HCPL-0661	TLP2261	4	15 Mbps	SO8L(LF4)
	HCPL-0708	TLP2368	4	20 Mbps	5pin SO6
	HCPL-0738	TLP2261	4	15 Mbps	SO8L(LF4)
	HCPL-2200	TLP2745	4	10 Mbps	SO6L
	HCPL-2201	TLP2745	4	10 Mbps	SO6L

Note:1
1: Package and characteristics are almost same
2: Almost same package but similar characteristics
3: Almost same characteristics but different package
4: Different package and similar characteristics

Manufacturer	Competitor's Product	Toshiba			
	Part Number	Part Number	Compatible Level **(Note:1)**	Data Rate (typ.)	Package
BROADCOM	HCPL-2202	TLP2745	4	10 Mbps	SO6L
	HCPL-2211	TLP2745	4	10 Mbps	SO6L
	HCPL-2212	TLP2745	4	10 Mbps	SO6L
	HCPL-2219	TLP2745	4	10 Mbps	SO6L
	HCPL-2601	TLP2363	4	15 Mbps	5pin SO6
	HCPL-2611	TLP2363	4	15 Mbps	5pin SO6
	HCPL-2630	TLP2261	4	15 Mbps	SO8L(LF4)
	HCPL-2631	TLP2261	4	15 Mbps	SO8L(LF4)
	HCPL-4502	TLP2719	3	1 Mbps	SO6L
	HCPL-4503	TLP2719	3	1 Mbps	SO6L
	HCPL-4504	TLP2719	3	1 Mbps	SO6L
	HCPL-4506	TLP2704	4	1 Mbps	SO6L
	HCPL-4661	TLP2261	4	15 Mbps	SO8L(LF4)
	HCPL-M452	TLP2309	2	1 Mbps	5pin SO6
	HCPL-M453	TLP2309	1	1 Mbps	5pin SO6
	HCPL-M454	TLP2309	1	1 Mbps	5pin SO6
	HCPL-M456	TLP2304	1	1 Mbps	5pin SO6
	HCPL-M600	TLP2363	1	15 Mbps	5pin SO6
	HCPL-M601	TLP2363	1	15 Mbps	5pin SO6
	HCPL-M611	TLP2363	1	15 Mbps	5pin SO6
Renesas	PS8101	TLP2309	3	1 Mbps	5pin SO6
	PS8302L	TLP2704	2	1 Mbps	SO6L
	PS8501	TLP2719	3	1 Mbps	SO6L
	PS8502	TLP2719	3	1 Mbps	SO6L
	PS8601	TLP2719	3	1 Mbps	SO6L
	PS8602	TLP2719	3	1 Mbps	SO6L
	PS8701	TLP2309	2	1 Mbps	5pin SO6
	PS8802-2	TLP2210	4	5 Mbps	SO8L(LF4)
	PS9113	TLP2304	4	1 Mbps	5pin SO6
	PS9115	TLP2366	2	20 Mbps	5pin SO6
	PS9117A	TLP2361	2	15 Mbps	5pin SO6
	PS9121	TLP2368	2	20 Mbps	5pin SO6
	PS9122	TLP2362	2	10 Mbps	5pin SO6
	PS9123	TLP2366	2	20 Mbps	5pin SO6
	PS9124	TLP2362	2	10 Mbps	5pin SO6
	PS9151	TLP2366	1	20 Mbps	5pin SO6
	PS9213	TLP2304	4	1 Mbps	5pin SO6
	PS9214	TLP2362	4	10 Mbps	5pin SO6
	PS9303L	TLP2745	2	10 Mbps	SO6L
	PS9313L	TLP2704	4	1 Mbps	SO6L
	PS9317L	TLP2770	2	20 Mbps	SO6L
	PS9324L	TLP2768A	2	20 Mbps	SO6L
	PS9351L	TLP2770	1	20 Mbps	SO6L
	PS9513	TLP2704	3	1 Mbps	SO6L
	PS9587	TLP2363	4	15 Mbps	5pin SO6
	PS9617	TLP2363	4	15 Mbps	5pin SO6
	PS9817A-1	TLP2368	3	20 Mbps	5pin SO6
	PS9817A-2	TLP2261	3	15 Mbps	SO8L(LF4)
	PS9821-1	TLP2366	3	20 Mbps	5pin SO6
	PS9821-2	TLP2261	3	15 Mbps	SO8L(LF4)
	PS9822-1	TLP2304	3	1 Mbps	5pin SO6
	PS9822-2	TLP2210	4	5 Mbps	SO8L(LF4)
	PS9851-1	TLP2366	3	20 Mbps	5pin SO6
	PS9851-2	TLP2261	3	15 Mbps	SO8L(LF4)
SHARP	PC400T	TLP2358	4	100 kbps	5pin SO6
	PC410L	TLP2362	2	10 Mbps	5pin SO6
	PC410S	TLP2368	4	20 Mbps	5pin SO6
	PC411S	TLP2366	3	20 Mbps	5pin SO6
	PC456L	TLP2309	2	1 Mbps	5pin SO6
	PC457L	TLP2309	2	1 Mbps	5pin SO6
	PC4D10	TLP2261	4	15 Mbps	SO8L(LF4)
TI	ISOM8710	TLP2366	1	20 Mbps	5pin SO6
	ISOM8711	TLP2368B	1	20 Mbps	5pin SO6

Note:1
1: Package and characteristics are almost same
2: Almost same package but similar characteristics
3: Almost same characteristics but different package
4: Different package and similar characteristics

Isolation Amplifiers / Delta-Sigma Modulators

Manufacturer	Competitor's Product	Toshiba				
		Part Number	Compatible Level **(Note:1)**	Input Feature	Output Feature	Package
BROADCOM	HCPL-7800	TLP7920	4	differential	Analog, Differential	SO8L(LF4)
	HCPL-7800A	TLP7920	4	differential	Analog, Differential	SO8L(LF4)
	HCPL-7840	TLP7920	4	differential	Analog, Differential	SO8L(LF4)
	ACPL-C790	TLP7820	1	differential	Analog, Differential	SO8L(LF4)
	ACPL-C79A	TLP7820	1	differential	Analog, Differential	SO8L(LF4)
	ACPL-C79B	TLP7820	4	differential	Analog, Differential	SO8L(LF4)
	ACPL-7900	TLP7920	4	differential	Analog, Differential	SO8L(LF4)
	ACPL-790A	TLP7920	4	differential	Analog, Differential	SO8L(LF4)
	ACPL-790B	TLP7920	4	differential	Analog, Differential	SO8L(LF4)
	ACPL-C784	TLP7820	1	differential	Analog, Differential	SO8L(LF4)
	ACPL-C780	TLP7820	1	differential	Analog, Differential	SO8L(LF4)
	ACPL-C78A	TLP7820	1	differential	Analog, Differential	SO8L(LF4)
	ACPL-C870	TLP7820	4	differential	Analog, Differential	SO8L(LF4)
	ACPL-C87A	TLP7820	2	differential	Analog, Differential	SO8L(LF4)
	ACPL-C87B	TLP7820	2	differential	Analog, Differential	SO8L(LF4)
	HCPL-7860	TLP7930	4	differential	Digital,Internal CLK	SO8L(LF4)
	HCPL-786J	TLP7830	4	differential	Digital,Internal CLK	SO8L(LF4)
	ACPL-C797	TLP7830	4	differential	Digital,Internal CLK	SO8L(LF4)
	ACPL-7970	TLP7930	4	differential	Digital,Internal CLK	SO8L(LF4)
	ACPL-796J	TLP7830	4	differential	Digital,Internal CLK	SO8L(LF4)
	ACPL-798J	TLP7830	4	differential	Digital,Internal CLK	SO8L(LF4)
TI	AMC1100DWV	TLP7820	2	differential	Analog, Differential	SO8L(LF4)
	AMC1100DUB	TLP7920	4	differential	Analog, Differential	SO8L(LF4)
	AMC1200BDWV	TLP7820	2	differential	Analog, Differential	SO8L(LF4)
	AMC1200BDUB	TLP7920	4	differential	Analog, Differential	SO8L(LF4)
	AMC1203PSA	TLP7830	4	differential	Digital,Internal CLK	SO8L(LF4)
	AMC1203DUB	TLP7930	4	differential	Digital,Internal CLK	SO8L(LF4)
	AMC1203DW	TLP7830	4	differential	Digital,Internal CLK	SO8L(LF4)
	AMC1203BPSA	TLP7830	4	differential	Digital,Internal CLK	SO8L(LF4)
	AMC1203BDUB	TLP7930	4	differential	Digital,Internal CLK	SO8L(LF4)
	AMC1203BDW	TLP7830	4	differential	Digital,Internal CLK	SO8L(LF4)
	AMC1204DW	TLP7830	4	differential	Digital,Internal CLK	SO8L(LF4)
	AMC1204BDWV	TLP7830	2	differential	Digital,Internal CLK	SO8L(LF4)
	AMC1204BDW	TLP7830	4	differential	Digital,Internal CLK	SO8L(LF4)
	AMC1301	TLP7820	2	differential	Analog, Differential	SO8L(LF4)
	AMC1304	TLP7830	4	differential	Digital,Internal CLK	SO8L(LF4)
	AMC1305	TLP7830	4	differential	Digital,Internal CLK	SO8L(LF4)
Analog Devices	AD7400A	TLP7830	4	differential	Digital,Internal CLK	SO8L(LF4)
	AD7401A	TLP7830	4	differential	Digital,Internal CLK	SO8L(LF4)
	AD7402	TLP7830	2	differential	Digital,Internal CLK	SO8L(LF4)
	AD7403	TLP7830	2	differential	Digital,Internal CLK	SO8L(LF4)
	AD7405	TLP7830	4	differential	Digital,Internal CLK	SO8L(LF4)
Renesas	PS8551A	TLP7920	4	differential	Analog, Differential	SO8L(LF4)
	PS9551A	TLP7930	4	differential	Digital,Internal CLK	SO8L(LF4)

Note:1
1: Package and characteristics are almost same
2: Almost same package but similar characteristics
3: Almost same characteristics but different package
4: Different package and similar characteristics

Standard Digital Isolators

Manufacturer	Competitor's Product	Toshiba							
	Part Number	Part Number	Compatible Level **(Note:1)**	Total Channels	Reverse Channels	Data Rate (Mbps)	Control signal	Default State	Package
Skyworks	Si8640BA-B-IU	DCL540L01A ☆	3	4	0	150	output enable	L	SOIC16-W
	Si8640BB-B-IS	DCL540L01A ☆	1	4	0	150	output enable	L	SOIC16-W
	Si8640BB-B-IS1	DCL540L01A ☆	3	4	0	150	output enable	L	SOIC16-W
	Si8640BB-B-IU	DCL540L01A ☆	3	4	0	150	output enable	L	SOIC16-W
	Si8640BC-B-IS1	DCL540L01A ☆	3	4	0	150	output enable	L	SOIC16-W
	Si8640BD-B-IS	DCL540L01A ☆	1	4	0	150	output enable	L	SOIC16-W
	Si8640BD-B-IS2	DCL540L01A ☆	1	4	0	150	output enable	L	SOIC16-W
	Si8640BT-IS	DCL540L01A ☆	1	4	0	150	output enable	L	SOIC16-W
	Si8640EB-B-IU	DCL540H01A ☆	3	4	0	150	output enable	H	SOIC16-W
	Si8640EC-B-IS1	DCL540H01A ☆	3	4	0	150	output enable	H	SOIC16-W
	Si8640ED-B-IS	DCL540H01A ☆	1	4	0	150	output enable	H	SOIC16-W
	Si8640ED-B-IS2	DCL540H01A ☆	1	4	0	150	output enable	H	SOIC16-W
	Si8640ET-IS	DCL540H01A ☆	1	4	0	150	output enable	H	SOIC16-W
	Si8641BA-B-IU	DCL541L01A ☆	3	4	1	150	output enable	L	SOIC16-W
	Si8641BA-C-IU	DCL541L01A ☆	3	4	1	150	output enable	L	SOIC16-W
	Si8641BB-B-IS	DCL541L01A ☆	1	4	1	150	output enable	L	SOIC16-W
	Si8641BB-B-IS1	DCL541L01A ☆	3	4	1	150	output enable	L	SOIC16-W
	Si8641BB-B-IU	DCL541L01A ☆	3	4	1	150	output enable	L	SOIC16-W
	Si8641BC-B-IS1	DCL541L01A ☆	3	4	1	150	output enable	L	SOIC16-W
	Si8641BD-B-IS	DCL541L01A ☆	1	4	1	150	output enable	L	SOIC16-W
	Si8641BD-B-IS2	DCL541L01A ☆	1	4	1	150	output enable	L	SOIC16-W
	Si8641BT-IS	DCL541L01A ☆	1	4	1	150	output enable	L	SOIC16-W
	Si8641EB-B-IU	DCL541H01A ☆	3	4	1	150	output enable	H	SOIC16-W
	Si8641EC-B-IS1	DCL541H01A ☆	3	4	1	150	output enable	H	SOIC16-W
	Si8641ED-B-IS	DCL541H01A ☆	1	4	1	150	output enable	H	SOIC16-W
	Si8641ED-B-IS2	DCL541H01A ☆	1	4	1	150	output enable	H	SOIC16-W
	Si8641ET-IS	DCL541H01A ☆	1	4	1	150	output enable	H	SOIC16-W
	Si8642BB-B-IS	DCL542L01A ☆	1	4	2	150	output enable	L	SOIC16-W
	Si8642BD-B-IS	DCL542L01A ☆	1	4	2	150	output enable	L	SOIC16-W
	Si8642BD-B-IS2	DCL542L01A ☆	1	4	2	150	output enable	L	SOIC16-W
	Si8642BT-IS	DCL542L01A ☆	1	4	2	150	output enable	L	SOIC16-W
	Si8642ED-B-IS	DCL542H01A ☆	1	4	2	150	output enable	H	SOIC16-W
	Si8642ED-B-IS2	DCL542H01A ☆	1	4	2	150	output enable	H	SOIC16-W
	Si8642ET-IS	DCL542H01A ☆	1	4	2	150	output enable	H	SOIC16-W
	Si8645BA-B-IU	DCL540C01A ☆	3	4	0	150	without	L	SOIC16-W
	Si8645BA-C-IU	DCL540C01A ☆	3	4	0	150	without	L	SOIC16-W
	Si8645BB-B-IS	DCL540C01A ☆	1	4	0	150	without	L	SOIC16-W
	Si8645BB-B-IS1	DCL540C01A ☆	3	4	0	150	without	L	SOIC16-W
	Si8645BB-B-IU	DCL540C01A ☆	3	4	0	150	without	L	SOIC16-W
	Si8645BC-B-IS1	DCL540C01A ☆	3	4	0	150	without	L	SOIC16-W
	Si8645BD-B-IS	DCL540C01A ☆	1	4	0	150	without	L	SOIC16-W

☆ New Products

Note:1
1: Package and characteristics are almost same
2: Almost same package but similar characteristics
3: Almost same characteristics but different package
4: Different package and similar characteristics

Manufacturer	Competitor's Product	Toshiba							
	Part Number	Part Number	Compatible Level **(Note:1)**	Total Channels	Reverse Channels	Data Rate (Mbps)	Control signal	Default State	Package
Skyworks	Si8645BT-IS	DCL540C01A ☆	1	4	0	150	without	L	SOIC16-W
	Si8645ET-IS	DCL540D01A ☆	1	4	0	150	without	H	SOIC16-W
TI	ISO7240M	DCL540H01A ☆	1	4	0	150	output enable	H	SOIC16-W
	ISO7241M	DCL541B01A ☆	2	4	1	150	input disable	H	SOIC16-W
	ISO7641FM	DCL541A01A ☆	4	4	1	150	input disable	H	SOIC16-W
	ISO7641FCDW	DCL541A01A ☆	4	4	1	150	input disable	H	SOIC16-W
	ISO7641FMDW	DCL541A01A ☆	2	4	1	150	input disable	H	SOIC16-W
	ISO7740DBQ	DCL540H01A ☆	3	4	0	150	output enable	H	SOIC16-W
	ISO7740DW	DCL540H01A ☆	1	4	0	150	output enable	H	SOIC16-W
	ISO7740FDBQ	DCL540L01A ☆	3	4	0	150	output enable	L	SOIC16-W
	ISO7740FDW	DCL540L01A ☆	1	4	0	150	output enable	L	SOIC16-W
	ISO7741BDW	DCL541H01A ☆	1	4	1	150	output enable	H	SOIC16-W
	ISO7741DBQ	DCL541H01A ☆	3	4	1	150	output enable	H	SOIC16-W
	ISO7741DW	DCL541H01A ☆	1	4	1	150	output enable	H	SOIC16-W
	ISO7741FBDW	DCL541L01A ☆	1	4	1	150	output enable	L	SOIC16-W
	ISO7741FDW	DCL541L01A ☆	1	4	1	150	output enable	L	SOIC16-W
	ISO7741FDBQ	DCL541L01A ☆	3	4	1	150	output enable	L	SOIC16-W
	ISO6720FB-Q1	DCM320C00 ☆	2	2	0	50	without	L	SOIC8-N
	ISO6720B-Q1	DCM320D00 ☆	2	2	0	50	without	H	SOIC8-N
	ISO6721FB-Q1	DCM321C00 ☆	2	2	1	50	without	L	SOIC8-N
	ISO6721B-Q1	DCM321D00 ☆	2	2	1	50	without	H	SOIC8-N
	ISO6740F-Q1	DCM340L01 ☆	1	4	0	50	output enable	L	SOIC16-W
	ISO6740-Q1	DCM340H01 ☆	1	4	0	50	output enable	H	SOIC16-W
	ISO6741F-Q1	DCM341L01 ☆	1	4	1	50	output enable	L	SOIC16-W
	ISO6741-Q1	DCM341H01 ☆	1	4	1	50	output enable	H	SOIC16-W
	ISO6742F-Q1	DCM342L01 ☆	1	4	2	50	output enable	L	SOIC16-W
	ISO6742-Q1	DCM342H01 ☆	1	4	2	50	output enable	H	SOIC16-W
	ISO6721RFB-Q1	DCM321C00 ☆	2	2	1	50	without	L	SOIC8-N
	ISO6721RB-Q1	DCM321D00 ☆	2	2	1	50	without	H	SOIC8-N
	ISO6520F-Q1	DCM320C00 ☆	2	2	0	50	without	L	SOIC8-N
	ISO6520-Q1	DCM320D00 ☆	2	2	0	50	without	H	SOIC8-N
	ISO6521F-Q1	DCM321C00 ☆	2	2	1	50	without	L	SOIC8-N
	ISO6521-Q1	DCM321D00 ☆	2	2	1	50	without	H	SOIC8-N
	ISO7421A-Q1	DCM321D00 ☆	2	2	1	50	without	H	SOIC8-N
ADI	ADuM141D0BRZ	DCL541A01A ☆	1	4	1	150	input disable	H	SOIC16-W
	ADuM141E0BRZ	DCL541H01A ☆	2	4	1	150	output enable	H	SOIC16-W
	ADuM141D0BRWZ	DCL541A01A ☆	2	4	1	150	input disable	H	SOIC16-W
	ADuM141D0BRQZ	DCL541A01A ☆	1	4	1	150	input disable	H	SOIC16-W
	ADuM141E0BRQZ	DCL541L01A ☆	1	4	1	150	output enable	L	SOIC16-W
	ADuM241D0BRWZ	DCL541A01A ☆	1	4	1	150	input disable	H	SOIC16-W
	ADuM241E0BRWZ	DCL541L01A ☆	1	4	1	150	output enable	L	SOIC16-W
	ADuM241D0BRIZ	DCL541A01A ☆	2	4	1	150	input disable	H	SOIC16-W

☆ New Products

Note:1
1: Package and characteristics are almost same
2: Almost same package but similar characteristics
3: Almost same characteristics but different package
4: Different package and similar characteristics

Manufacturer	Competitor's Product	Toshiba							
	Part Number	Part Number	Compatible Level (Note:1)	Total Channels	Reverse Channels	Data Rate (Mbps)	Control signal	Default State	Package
ADI	ADuM241E0BRIZ	DCL541L01A ☆	2	4	1	150	output enable	L	SOIC16-W
	ADuM141D1BRZ	DCL541B01A ☆	3	4	1	150	input disable	H	SOIC16-W
	ADuM141E1BRZ	DCL541H01A ☆	4	4	1	150	output enable	H	SOIC16-W
	ADuM141D1BRWZ	DCL541B01A ☆	1	4	1	150	input disable	H	SOIC16-W
	ADuM141D1BRQZ	DCL541B01A ☆	2	4	1	150	input disable	H	SOIC16-W
	ADuM141E1BRWZ	DCL541H01A ☆	1	4	1	150	output enable	H	SOIC16-W
	ADuM141E1WBRWZ	DCL541H01A ☆	1	4	1	150	output enable	H	SOIC16-W
	ADuM141E0BRWZ	DCL541L01A ☆	1	4	1	150	output enable	L	SOIC16-W
	ADuM141E1BRQZ	DCL541H01A ☆	2	4	1	150	output enable	H	SOIC16-W
	ADuM141E1WBRQZ	DCL541H01A ☆	2	4	1	150	output enable	H	SOIC16-W
	ADuM241D1BRWZ	DCL541B01A ☆	1	4	1	150	input disable	H	SOIC16-W
	ADuM241E1BRWZ	DCL541H01A ☆	1	4	1	150	output enable	H	SOIC16-W
	ADuM241E1WBRWZ	DCL541H01A ☆	1	4	1	150	output enable	H	SOIC16-W
	ADuM241D1BRIZ	DCL541B01A ☆	1	4	1	150	input disable	H	SOIC16-W
	ADuM241E1BRIZ	DCL541H01A ☆	1	4	1	150	output enable	H	SOIC16-W
	ADuM140D0BRZ	DCL540C01A ☆	2	4	0	150	without	L	SOIC16-W
	ADuM140E0BRZ	DCL540L01A ☆	2	4	0	150	output enable	L	SOIC16-W
	ADuM140D0BRWZ	DCL540C01A ☆	2	4	0	150	without	L	SOIC16-W
	ADuM140D0BRQZ	DCL540C01A ☆	2	4	0	150	without	L	SOIC16-W
	ADuM140E0BRWZ	DCL540L01A ☆	1	4	0	150	output enable	L	SOIC16-W
	ADuM140E0BRQZ	DCL540L01A ☆	1	4	0	150	output enable	L	SOIC16-W
	ADuM240D0BRWZ	DCL540C01A ☆	3	4	0	150	without	L	SOIC16-W
	ADuM240E0BRWZ	DCL540L01A ☆	1	4	0	150	output enable	L	SOIC16-W
	ADuM240E0WBRWZ	DCL540L01A ☆	1	4	0	150	output enable	L	SOIC16-W
	ADuM240D0BRIZ	DCL540C01A ☆	3	4	0	150	without	L	SOIC16-W
	ADuM240E0BRIZ	DCL540L01A ☆	1	4	0	150	output enable	L	SOIC16-W
	ADuM140D1BRZ	DCL540D01A ☆	2	4	0	150	without	H	SOIC16-W
	ADuM140E1BRZ	DCL540H01A ☆	2	4	0	150	output enable	H	SOIC16-W
	ADuM140D1BRWZ	DCL540H01A ☆	2	4	0	150	output enable	H	SOIC16-W
	ADuM140D1BRQZ	DCL540D01A ☆	2	4	0	150	without	H	SOIC16-W
	ADuM140E1BRWZ	DCL540H01A ☆	1	4	0	150	output enable	H	SOIC16-W
	ADuM140E1WBRWZ	DCL540H01A ☆	1	4	0	150	output enable	H	SOIC16-W
	ADuM140E1BRQZ	DCL540H01A ☆	1	4	0	150	output enable	H	SOIC16-W
	ADuM240D1BRWZ	DCL540D01A ☆	3	4	0	150	without	H	SOIC16-W
	ADuM240E1BRWZ	DCL540H01A ☆	1	4	0	150	output enable	H	SOIC16-W
	ADuM240D1BRIZ	DCL540D01A ☆	3	4	0	150	without	H	SOIC16-W
	ADuM240E1BRIZ	DCL540H01A ☆	1	4	0	150	output enable	H	SOIC16-W

☆ New Products

Note:1
1: Package and characteristics are almost same
2: Almost same package but similar characteristics
3: Almost same characteristics but different package
4: Different package and similar characteristics

Photorelays (1-Form-A)

Manufacturer	Competitor's Product	Toshiba				
		Part Number	Compatible Level **(Note:1)**	OFF-state Output Terminal Voltage	ON-state Current	Package
Panasonic	AQV201	TLP241A	3	40 V	2 A	DIP4
	AQV202	TLP3545A	1	60 V	4 A	DIP6
	AQV204	TLP223GA	4	400 V	0.12 A	DIP4
	AQV210EH	TLP240G	4	350 V	0.1 A	DIP4
	AQV210S	TLP172GM	2	350 V	0.11 A	4pin SO6
	AQV212	TLP240A	3	60 V	0.5 A	DIP4
	AQV212S	TLP176AM	3	60 V	0.7 A	4pin SO6
	AQV214	TLP223GA	4	400 V	0.12 A	DIP4
	AQV214E	TLP223GA	4	400 V	0.12 A	DIP4
	AQV214EH	TLP223GA	4	400 V	0.12 A	DIP4
	AQV214H	TLP223GA	4	400 V	0.12 A	DIP4
	AQV214S	TLP172GAM	3	400 V	0.11 A	4pin SO6
	AQV215	TLP3546A	1	100 V	3.5 A	DIP6
	AQV215S	TLP3109A	1	100 V	3 A	2.54SOP6
	AQV216	TLP223J	4	600 V	0.09 A	DIP4
	AQV217S	TLP171D	3	200 V	0.2 A	2.54SOP4
	AQV219HAX C*9	TLX9150M	3	900V	0.05 A	SO12L-T
	AQV251G	TLP3543A	1	30 V	5 A	DIP6
	AQV252	TLP3545A	1	60 V	4 A	DIP6
	AQV252G	TLP3545A	1	60 V	4 A	DIP6
	AQV252G2S	TLP3107A	1	60 V	4 A	2.54SOP6
	AQV252G3S	TLP3107A	1	60 V	4 A	2.54SOP6
	AQV254	TLP223GA	4	400 V	0.12 A	DIP4
	AQV254H	TLP223GA	4	400 V	0.12 A	DIP4
	AQV255	TLP3546A	1	100 V	3.5 A	DIP6
	AQV255G3S	TLP3109A	1	100 V	3 A	2.54SOP6
	AQV255GS	TLP3109A	1	100 V	3 A	2.54SOP6
	AQV258	TLX9160T	3	1500 V	0.05 A	SO16L-T
	AQV258HAX C*9	TLX9160T	3	1500 V	0.05 A	SO16L-T
	AQW216HAX C*8	TLX9175J	3	600 V	0.015 A	4pin SO6
	AQY210S	TLP172GM	1	350 V	0.11 A	4pin SO6
	AQY211EH	TLP241A	1	40 V	2 A	DIP4
	AQY211G2S	TLP3127	1	60 V	1.7 A	2.54SOP4
	AQY212G2S	TLP3122A	1	60 V	1.4 A	4pin SO6
	AQY212GS	TLP3122A	1	60 V	1.4 A	4pin SO6
	AQY212S	TLP176AM	1	60 V	0.7 A	4pin SO6
	AQY214EH	TLP223GA	1	400 V	0.12 A	DIP4
	AQY214S	TLP172GAM	1	400 V	0.11 A	4pin SO6
	AQY216EH	TLP223J	1	600 V	0.09 A	DIP4
	AQY221N2S	TLP3440S	4	40 V	0.12 A	S-VSON4T
	AQY221N2V	TLP3440S	4	40 V	0.12 A	S-VSON4T
	AQY221R2S	TLP3475S	4	60 V	0.4 A	S-VSON4T
	AQY221R2V	TLP3414	4	40 V	0.25 A	VSON4
	AQY221R6T	TLP3406S	4	30 V	1.5 A	S-VSON4
	AQY222R2V	TLP3475S	4	60 V	0.4 A	S-VSON4T
	AQY225R1S	TLP3409S	4	100 V	0.65 A	S-VSON4
	AQY225R2S	TLP3419	4	80 V	0.2 A	VSON4
	AQY225R2V	TLP3417	4	80 V	0.12 A	VSON4
	AQY234S	TLP172GAM	1	400 V	0.11 A	4pin SO6
	AQY275	TLP241B	1	100 V	2 A	DIP4
IXYS	CPC1330	TLP223GA	1	400 V	0.12 A	DIP4
	CPC1393	TLP223J	1	600 V	0.09 A	DIP4
	LCA100	TLP223GA	3	400 V	0.12 A	DIP4
Renesas	PS7113-1A	TLP3546A	2	100 V	3.5 A	DIP6
	PS7141E-1A	TLP223GA	3	400 V	0.12 A	DIP4
	PS7160-1A	TLP223J	3	600 V	0.09 A	DIP4
	PS7206-1A	TLP176AM	1	60 V	0.7 A	4pin SO6
	PS7241E-1A	TLP172GAM	1	400 V	0.11 A	4pin SO6
	PS7341-1A	TLP223GA	3	400 V	0.12 A	DIP4
	PS7360-1A	TLP223J	3	600 V	0.09 A	DIP4
	PS7804-1A	TLP3475S	3	60 V	0.4 A	S-VSON4T

Note:1
1: Package and characteristics are almost same
2: Almost same package but similar characteristics
3: Almost same characteristics but different package
4: Different package and similar characteristics

Photorelays (1-Form-A)

Manufacturer	Competitor's Product	Toshiba				
		Part Number	Compatible Level **(Note:1)**	OFF-state Output Terminal Voltage	ON-state Current	Package
TOWARD	AB21RS	TLP176AM	1	60 V	0.7 A	4pin SO6
	AB26	TLP241A	1	40 V	2 A	DIP4
	AB30	TLP223GA	1	400 V	0.12 A	DIP4
	AB30S	TLP172GAM	1	400 V	0.11 A	4pin SO6
	AB31	TLP240G	2	350 V	0.1 A	DIP4
	AB31S	TLP172GM	2	350 V	0.11 A	4pin SO6
	AB34	TLP240D	1	200 V	0.25 A	DIP4
	AB34S	TLP176D	1	200 V	0.2 A	2.54SOP4
	AB37	TLP240A	1	60 V	0.5 A	DIP4
	AB37S	TLP176AM	1	60 V	0.7 A	4pin SO6
	AB38	TLP223J	1	600 V	0.09 A	DIP4
	AB38S	TLP170J	1	600 V	0.09 A	2.54SOP4
	AB45	TLP240A	1	60 V	0.5 A	DIP4
	AB45S	TLP176AM	1	60 V	0.7 A	4pin SO6
	AB47	TLP3556A	2	100 V	2 A	DIP4
	AB48	TLP3556A	1	100 V	2 A	DIP4
BROADCOM	ASSR-601J	TLX9160T	1	1500 V	0.05 A	SO16L-T

Photorelays (2-Form-A)

Manufacturer	Competitor's Product	Toshiba				
		Part Number	Compatible Level **(Note:1)**	OFF-state Output Terminal Voltage	ON-state Current	Package
Panasonic	AQW210	TLP240G x 2 pcs	4	350 V	0.1 A	DIP4
	AQW210EH	TLP223GA x 2 pcs	4	400 V	0.12 A	DIP4
	AQW210S	TLP172GM x 2 pcs	3	350 V	0.11 A	4pin SO6
	AQW212	TLP240A x 2 pcs	4	60 V	0.5 A	DIP4
	AQW212EH	TLP240A x 2 pcs	4	60 V	0.5 A	DIP4
	AQW212S	TLP176AM x 2 pcs	3	60 V	0.7 A	4pin SO6
	AQW214	TLP223GA x 2 pcs	3	400 V	0.12 A	DIP4
	AQW214EH	TLP223GA x 2 pcs	3	400 V	0.12 A	DIP4
	AQW214S	TLP172GAM x 2 pcs	4	400 V	0.11 A	4pin SO6
	AQW215	TLP3556A x 2 pcs	3	100 V	2 A	DIP4
	AQW216	TLP223J x 2 pcs	3	600 V	0.09 A	DIP4
	AQW216EH	TLP223J x 2 pcs	3	600 V	0.09 A	DIP4
	AQW217	TLP240D x 2 pcs	3	200 V	0.25 A	DIP4
	AQW223R2S	TLP240G x 2 pcs	4	350 V	0.1 A	DIP4
	AQW227N	TLP240D x 2 pcs	3	200 V	0.25 A	DIP4
IXYS	CPC2014N	TLP176AM x 2 pcs	3	60 V	0.7 A	4pin SO6
	CPC2017N	TLP176AM x 2 pcs	3	60 V	0.7 A	4pin SO6
	CPC2025N	TLP172GAM x 2 pcs	4	400 V	0.11 A	4pin SO6
	CPC2030N	TLP172GM x 2 pcs	4	350 V	0.11 A	4pin SO6
Renesas	PS7241-2A	TLP172GAM x 2 pcs	3	400 V	0.11 A	4pin SO6

Note:1
1: Package and characteristics are almost same
2: Almost same package but similar characteristics
3: Almost same characteristics but different package
4: Different package and similar characteristics

Photorelays (1-Form-B, 2-Form-B)

Manufacturer	Competitor's Product	Toshiba				
		Part Number	Compatible Level **(Note:1)**	OFF-state Output Terminal Voltage	ON-state Current	Package
Panasonic	AQY410S	TLP4176G	1	350 V	0.12 A	2.54SOP4
	AQY412S	TLP4176A	1	60 V	0.5 A	2.54SOP4
	AQY412SX	TLP4176A	1	60 V	0.5 A	2.54SOP4
	AQY412SZ	TLP4176A	1	60 V	0.5 A	2.54SOP4
	AQY414S	TLP4176G	2	350 V	0.12 A	2.54SOP4
IXYS	CPC1125N	TLP4176G	2	350 V	0.12 A	2.54SOP4
	CPC1130N	TLP4176G	1	350 V	0.12 A	2.54SOP4
	CPC1135N	TLP4176G	1	350 V	0.12 A	2.54SOP4
	CPC1150N	TLP4176G	1	350 V	0.12 A	2.54SOP4
	CPC1231N	TLP4176G	1	350 V	0.12 A	2.54SOP4
	LCB710	TLP4590A	1	60 V	1.2 A	DIP6

Note:1
1: Package and characteristics are almost same
2: Almost same package but similar characteristics
3: Almost same characteristics but different package
4: Different package and similar characteristics

- The information presented in this cross reference is based on TOSHIBA's selection criteria and should be treated as a suggestion only. Please carefully review the latest versions of all relevant information on the TOSHIBA products, including without limitation data sheets and validate all operating parameters of the TOSHIBA products to ensure that the suggested TOSHIBA products are truly compatible with your design and application.
- Please note that this cross reference is based on TOSHIBA's estimate of compatibility with other manufacturers' products, based on other manufacturers' published data, at the time the data was collected.
- TOSHIBA is not responsible for any incorrect or incomplete information. Information is subject to change at any time without notice.

6. Part Naming Conventions

3-Digit Part Numbering Example (Except Alphabetical Characters)

Example of Photocouplers

TLP 1 76 A
① ② ③ ④

① Photocoupler
② Package Type
1: SO6 / SOP
2: SO4 / SOP / SOP16 / DIP (2500 Vrms / 5000 Vrms)
3: SO6L / DIP (5000 Vrms)
4: DIP4 (5000 Vrms)
5: DIP (2500 Vrms)
6: DIP (5000 Vrms)
7: DIP (4000 Vrms)
③ Output Type
00 to 09: IC Output, Photorelay
10 to 19: IC Output
20 to 29: 4 / 8 / 16-pin multi-channel Photocoupler
30 to 39: 6 pin
40 to 49: Thyristor Output, Photorelay
50 to 59: IC Output
60 to 69: Triac Output
70 to 79: Photorelay
80 to 89: Transistor Output / Darlington Transistor Output
90 to 99: Transistor Output, Photorelay, Photovoltaic Output
④ Suffix
Withstand Voltage Level

(a) Photorelay	(b) Triac Output, Thyristor Output
A: 40 V, 60 V	G: 400 V
D: 200 V	J: 600 V
G: 350 V	L: 800 V
GA: 400 V	
J: 600 V	

4-Digit Part Numbering Example (Except Alphabetical Characters)

Example of Photocouplers

TLP 2 7 61 A
① ② ③ ④ ⑤

① Photocoupler
② Product category
2: IC Output (logic, IPM Drivers)
3: Photorelay (1-form-A) / Triac Output / Photovoltaic Output
4: Photorelay (except 1-form-A)
5: IC Output (Power Device Driver / Smart Gate Driver)
7: Isolation Amplifier
③ Package category

Number	Package Type		Product Category
	IC Output / Isolation Amplifier	Photorelay	Triac Output / Photovoltaic Output
0	SO4 / MFSOP6	-	Triac Output
1	SO8 (Dual ch.)	SOP	-
2	SO8L (Dual ch.), SO16L	SSOP	-
3	SO6	USOP	-
4	SO8 (Single ch.)	VSON, P-SON	-
5	-	DIP	-
6	DIP8 (Dual ch.)	-	-
7	SO6L	-	Triac Output
8	SO8L (Single ch.)	-	-
9	DIP8 (Single ch.)	-	Photovoltaic Output

④ Serial Number
⑤ Suffix

Part Naming Example for Digital Isolators

■Standard Digital Isolators

Example of Standard Digital Isolators

DC L 5 4 0 C 0 1
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

① Digital Isolators
② Output Type
L: Logic (Industrial)
M: Logic (Automotive)
③ Data rate
1: to 1 Mbps
2: to 10 Mbps
3: to 50 Mbps
4: to 100 Mbps
5: to 200 Mbps
④ Total Channel
2: 2 channel
4: 4 channel
⑤ Reverse channel
0: None
1: 1 channel
⑥ Control-pin (Default output)
L: Enable (Low)
H: Enable (High)
A: Disable (Low)
B: Disable (High)
C: None (Low)
D: None (High)
⑦ Option
0: None
⑧ Package Type
0: SOIC8-N
1: SOIC16-W

Part Naming Example for Automotive Devices

■Photocouplers (Output: Transistor, IC, Photovoltaic)

Example of Photocoupler

TLX 9 304
① ② ③

① Photocoupler (For Automotive Device)
② 9: For Automotive Device
③ Serial Number

■Photorelays

Example of Photorelay

TLX 9 175 J
① ② ③ ④

① Photorelay (For Automotive Device)
② 9: For Automotive Device
③ Serial Number
④ Withstand Voltage Level
J: 600 V
M: 900 V
T: 1500 V

Note: For those parts which do not follow the part naming convention shown above, see the appropriate datasheet.

7. Part Number Index

Part Number	Page
DCLxx	
DCL320C00	15
DCL320D00	15
DCL321C00	15
DCL321D00	15
DCL340H0B	15
DCL340L0B	15
DCL341H0B	15
DCL341L0B	15
DCL342H0B	15
DCL342L0B	15
DCL520C00	15
DCL520D00	15
DCL521C00	15
DCL521D00	15
DCL540C01A	15
DCL540D01A	15
DCL540L01A	15
DCL540H01A	15
DCL541A01A	15
DCL541B01A	15
DCL541L01A	15
DCL541H01A	15
DCL542L01A	15
DCL542H01A	15
DCM3xx	
DCM320C00	24
DCM320CA0	24
DCM320D00	24
DCM320DA0	24
DCM321C00	24
DCM321CA0	24
DCM321D00	24
DCM321DA0	24
DCM340C01	24
DCM340D01	24
DCM340H01	24
DCM340H0B	24
DCM340L01	24
DCM340L0B	24
DCM341A01	24
DCM341B01	24
DCM341H01	24
DCM341H0B	24
DCM341L01	24
DCM341L0B	24
DCM342H01	24
DCM342H0B	24
DCM342L01	24
DCM342L0B	24
TLP1xx	
TLP109	3
TLP109(IGM)	9
TLP151A	10
TLP152	10
TLP155E	10
TLP170A	16
TLP170AM	16
TLP170D	16
TLP170G	17
TLP170GM	17
TLP170J	17
TLP171A	16
TLP171D	16
TLP171GA	17
TLP171J	17
TLP172GAM	17
TLP172GM	17
TLP175A	16
TLP176AM	16
TLP176D	17
TLP176GA	17
TLP182	13
TLP183	13
TLP184(SE	13
TLP185(SE	13
TLP187	13
TLP188	13
TLP2xx	
TLP2210	6
TLP223GA	17
TLP223J	17
TLP2261	5
TLP2270	6
TLP2301	3
TLP2303	3
TLP2304	4, 8
TLP2309	3, 4
TLP2310	6
TLP2312	6
TLP2345	6, 8
TLP2348	5, 8
TLP2355	6, 8
TLP2358	5, 8
TLP2361	5
TLP2362	4
TLP2362B	4
TLP2363	4
TLP2366	5
TLP2367	5
TLP2368	4
TLP2368B	4
TLP2370	6
TLP2372	6
TLP2391	7

Part Number	Page
TLP2395	7
TLP2398	7
TLP240A	16
TLP240D	17
TLP240G	17
TLP240GA	17
TLP240J	17
TLP241A	16
TLP241B	16
TLP241BP	16
TLP265J	21
TLP266J	21
TLP267J	21
TLP268J	21
TLP2701	3
TLP2703	3
TLP2704	4, 8
TLP2710	6
TLP2719	3, 4, 9
TLP2735	6, 8
TLP2745	6, 8
TLP2748	5, 8
TLP2761	5
TLP2762B	4
TLP2766A	5
TLP2767	5
TLP2768A	4
TLP2768B	4
TLP2770	6
TLP2861L	5
TLP290(SE	13
TLP290-4	13
TLP291(SE	13
TLP291-4	13
TLP292	13

Part Number	Page
TLP292-4	13
TLP293	13
TLP293-4	13
TLP294-4	13
TLP295-4	13
TLP3xx	
TLP3052A	21
TLP3062A	21
TLP3073	21
TLP3083	21
TLP3106A	16
TLP3107A	16
TLP3109A	16
TLP3122A	16
TLP3123	16
TLP3127	16
TLP3145	17
TLP3146	16
TLP3147	16
TLP3149	16
TLP3303	18
TLP3306	18
TLP3312	18
TLP3315	18
TLP3317	18
TLP3319	18
TLP3320	19
TLP3330	18
TLP3340	18
TLP3341	18
TLP3342	18
TLP3350	18
TLP3351	18
TLP3375	18
TLP3403	18

Part Number	Page
TLP3403R	19
TLP3403SRHA	19
TLP3406S	18
TLP3406SRH	19
TLP3406SRH4	19
TLP3406SRHA	19
TLP3406SRL	19
TLP3407S	18
TLP3407SR	19
TLP3407SRA	19
TLP3407SRB	19
TLP3407SRA4	19
TLP3407SRH	19
TLP3407SRL	19
TLP3409S	19
TLP3412	18
TLP3412R	19
TLP3412SRA	19
TLP3412SRB	19
TLP3412SRH	19
TLP3412SRHA	19
TLP3412SRHB	19
TLP3412SRHA4	19
TLP3412SRLA	19
TLP3412SRLB	19
TLP3414	18
TLP3414S	18
TLP3417	18
TLP3419	18
TLP3420	19
TLP3431	18
TLP3431S	18
TLP3440	18
TLP3440S	18
TLP3441	18

Part Number	Page
TLP3442	18
TLP3450	18
TLP3451	18
TLP3475	18
TLP3475R	19
TLP3475S	18
TLP3475W	18
TLP3475SRHA	19
TLP3475SRHA4	19
TLP3476S	18
TLP3480	18
TLP3481	18
TLP3482	19
TLP3483	19
TLP3484	19
TLP3487	18
TLP3491	18
TLP3543A	16
TLP3545A	16
TLP3546A	16
TLP3547	16
TLP3548	17
TLP3549	17
TLP3553A	16
TLP3555A	16
TLP3556A	16
TLP3558A	17
TLP3640A	16
TLP3823	16
TLP3825	17
TLP383	13
TLP385	13
TLP387	13
TLP388	13
TLP3905	21
TLP3906	21
TLP3910	21
TLP4xx	
TLP4176A	20
TLP4176G	20
TLP4590A	20
TLP5xx	
TLP5212	11
TLP5214A	11
TLP5222	11
TLP5231	11
TLP5701	10
TLP5702	10
TLP5702H	10
TLP5705H	10
TLP5751	10
TLP5751H	10
TLP5752	10
TLP5752H	10
TLP5754	10
TLP5754H	10
TLP5771	10
TLP5771H	10
TLP5772	10
TLP5772H	10
TLP5774	10
TLP5774H	10
TLP5791H	10
TLP5794H	10
TLP5795H	10
TLP5814H	10
TLP5832	10
TLP5854L	10
TLP6xx	
TLP620M	13
TLP621M	13
TLP627M	13
TLP628M	13
TLP7xx	
TLP7820	12
TLP7830	12
TLP785	13
TLP7920	12
TLP7930	12
TLX9xx	
TLX9000	23
TLX9152M	17
TLX9150M	17
TLX9160T	23
TLX9175J	23
TLX9176J	23
TLX9185A	23
TLX9188	23
TLX9291A	23
TLX9300	23
TLX9304	22
TLX9309	22
TLX9310	22
TLX9376	22
TLX9378	22
TLX9905	23
TLX9906	23
TLX9909	23
TLX9910	23
TLX9920	23

RESTRICTIONS ON PRODUCT USE

Toshiba Corporation and its subsidiaries and affiliates are collectively referred to as “TOSHIBA”.
Hardware, software and systems described in this document are collectively referred to as “Product”.

- TOSHIBA reserves the right to make changes to the information in this document and related Product without notice.
- This document and any information herein may not be reproduced without prior written permission from TOSHIBA. Even with TOSHIBA's written permission, reproduction is permissible only if reproduction is without alteration/omission.
- Though TOSHIBA works continually to improve Product's quality and reliability, Product can malfunction or fail. Customers are responsible for complying with safety standards and for providing adequate designs and safeguards for their hardware, software and systems which minimize risk and avoid situations in which a malfunction or failure of Product could cause loss of human life, bodily injury or damage to property, including data loss or corruption. Before customers use the Product, create designs including the Product, or incorporate the Product into their own applications, customers must also refer to and comply with (a) the latest versions of all relevant TOSHIBA information, including without limitation, this document, the specifications, the data sheets and application notes for Product and the precautions and conditions set forth in the "TOSHIBA Semiconductor Reliability Handbook" and (b) the instructions for the application with which the Product will be used with or for. Customers are solely responsible for all aspects of their own product design or applications, including but not limited to (a) determining the appropriateness of the use of this Product in such design or applications; (b) evaluating and determining the applicability of any information contained in this document, or in charts, diagrams, programs, algorithms, sample application circuits, or any other referenced documents; and (c) validating all operating parameters for such designs and applications. **TOSHIBA ASSUMES NO LIABILITY FOR CUSTOMERS' PRODUCT DESIGN OR APPLICATIONS.**
- **PRODUCT IS NEITHER INTENDED NOR WARRANTED FOR USE IN EQUIPMENTS OR SYSTEMS THAT REQUIRE EXTRAORDINARILY HIGH LEVELS OF QUALITY AND/OR RELIABILITY, AND/OR A MALFUNCTION OR FAILURE OF WHICH MAY CAUSE LOSS OF HUMAN LIFE, BODILY INJURY, SERIOUS PROPERTY DAMAGE AND/OR SERIOUS PUBLIC IMPACT ("UNINTENDED USE").** Except for specific applications as expressly stated in this document, Unintended Use includes, without limitation, equipment used in nuclear facilities, equipment used in the aerospace industry, lifesaving and/or life supporting medical equipment, equipment used for automobiles, trains, ships and other transportation, traffic signaling equipment, equipment used to control combustions or explosions, safety devices, elevators and escalators, and devices related to power plant. **IF YOU USE PRODUCT FOR UNINTENDED USE, TOSHIBA ASSUMES NO LIABILITY FOR PRODUCT.** For details, please contact your TOSHIBA sales representative or contact us via our website.
- Do not disassemble, analyze, reverse-engineer, alter, modify, translate or copy Product, whether in whole or in part.
- Product shall not be used for or incorporated into any products or systems whose manufacture, use, or sale is prohibited under any applicable laws or regulations.
- The information contained herein is presented only as guidance for Product use. No responsibility is assumed by TOSHIBA for any infringement of patents or any other intellectual property rights of third parties that may result from the use of Product. No license to any intellectual property right is granted by this document, whether express or implied, by estoppel or otherwise.
- **ABSENT A WRITTEN SIGNED AGREEMENT, EXCEPT AS PROVIDED IN THE RELEVANT TERMS AND CONDITIONS OF SALE FOR PRODUCT, AND TO THE MAXIMUM EXTENT ALLOWABLE BY LAW, TOSHIBA (1) ASSUMES NO LIABILITY WHATSOEVER, INCLUDING WITHOUT LIMITATION, INDIRECT, CONSEQUENTIAL, SPECIAL, OR INCIDENTAL DAMAGES OR LOSS, INCLUDING WITHOUT LIMITATION, LOSS OF PROFITS, LOSS OF OPPORTUNITIES, BUSINESS INTERRUPTION AND LOSS OF DATA, AND (2) DISCLAIMS ANY AND ALL EXPRESS OR IMPLIED WARRANTIES AND CONDITIONS RELATED TO SALE, USE OF PRODUCT, OR INFORMATION, INCLUDING WARRANTIES OR CONDITIONS OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, ACCURACY OF INFORMATION, OR NONINFRINGEMENT.**
- GaAs (Gallium Arsenide) is used in Product. GaAs is harmful to humans if consumed or absorbed, whether in the form of dust or vapor. Handle with care and do not break, cut, crush, grind, dissolve chemically or otherwise expose GaAs in Product.
- Do not use or otherwise make available Product or related software or technology for any military purposes, including without limitation, for the design, development, use, stockpiling or manufacturing of nuclear, chemical, or biological weapons or missile technology products (mass destruction weapons). Product and related software and technology may be controlled under the applicable export laws and regulations including, without limitation, the Japanese Foreign Exchange and Foreign Trade Law and the U.S. Export Administration Regulations. Export and re-export of Product or related software or technology are strictly prohibited except in compliance with all applicable export laws and regulations.
- Please contact your TOSHIBA sales representative for details as to environmental matters such as the RoHS compatibility of Product. Please use Product in compliance with all applicable laws and regulations that regulate the inclusion or use of controlled substances, including without limitation, the EU RoHS Directive. **TOSHIBA ASSUMES NO LIABILITY FOR DAMAGES OR LOSSES OCCURRING AS A RESULT OF NONCOMPLIANCE WITH APPLICABLE LAWS AND REGULATIONS.**

TOSHIBA

Toshiba Electronic Devices & Storage Corporation
Toshiba Electronic Device Solutions Corporation

https://toshiba.semicon-storage.com/

2026 Rev. 1.0