

Schottky Barrier Diode Silicon Epitaxial Planar

JDH2S02FS

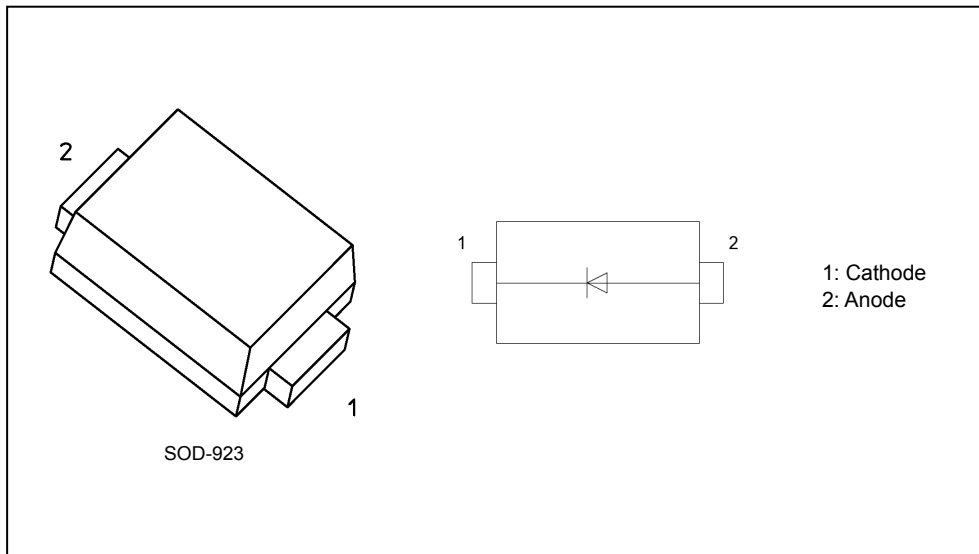
1. Applications

- UHF Detectors

2. Features

- Suitable for reducing the product size due to the use of a small two-pin package supporting high-density mounting

3. Packaging and Internal Circuit



4. Absolute Maximum Ratings (Note) (Unless otherwise specified, $T_a = 25\text{ }^\circ\text{C}$)

Characteristics	Symbol	Rating	Unit
Reverse voltage	V_R	10	V
Forward current	I_F	10	mA
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	-55 to 125	

Note: Using continuously under heavy loads (e.g. the application of high temperature/current/voltage and the significant change in temperature, etc.) may cause this product to decrease in the reliability significantly even if the operating conditions (i.e. operating temperature/current/voltage, etc.) are within the absolute maximum ratings.

Please design the appropriate reliability upon reviewing the Toshiba Semiconductor Reliability Handbook ("Handling Precautions"/"Derating Concept and Methods") and individual reliability data (i.e. reliability test report and estimated failure rate, etc).

Note: This device is sensitive to electrostatic discharge (ESD). Extreme ESD conditions should be using proper antistatic precautions for the worktable, operator, solder iron and so on.

Start of commercial production

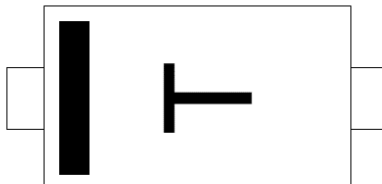
2024-05

5. Electrical Characteristics (Note) (Unless otherwise specified, $T_a = 25\text{ }^\circ\text{C}$)

Characteristics	Symbol	Test Condition	Min	Typ.	Max	Unit
Forward voltage	V_F	$I_F = 1\text{ mA}$	—	0.24	—	V
Forward current	I_F	$V_F = 0.5\text{ V}$	2	—	—	mA
Reverse current	I_R	$V_R = 0.5\text{ V}$	—	—	25	μA
Total capacitance	C_t	$V_R = 0.2\text{ V}, f = 1.0\text{ MHz}$	—	0.4	—	pF

Note: Signal level for capacitance measurement: $V_{sig} = 20\text{ mVrms}$

6. Marking



7. Characteristics Curves (Note)

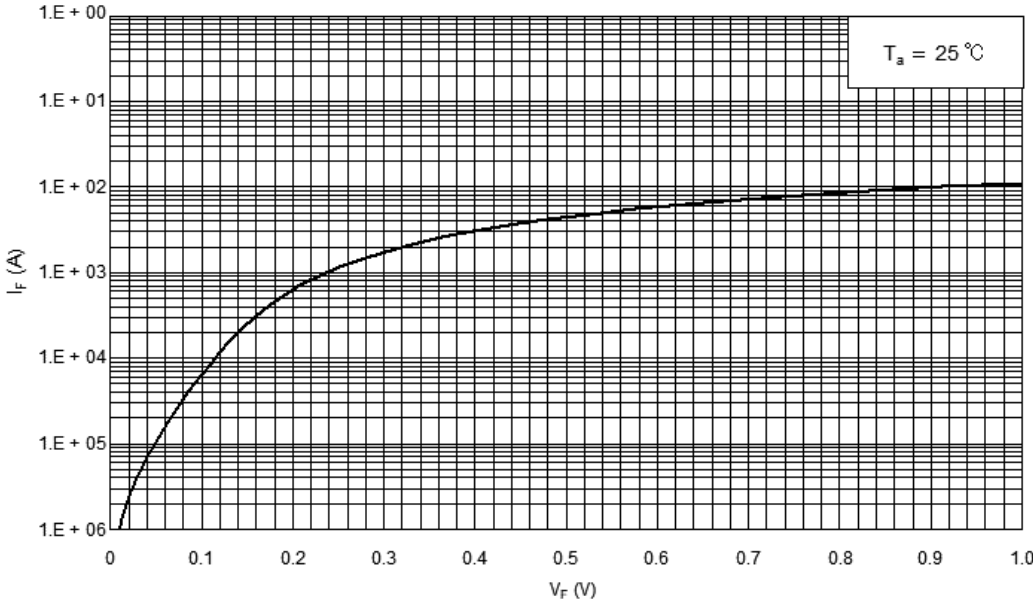


Fig. 7.1 $I_F - V_F$

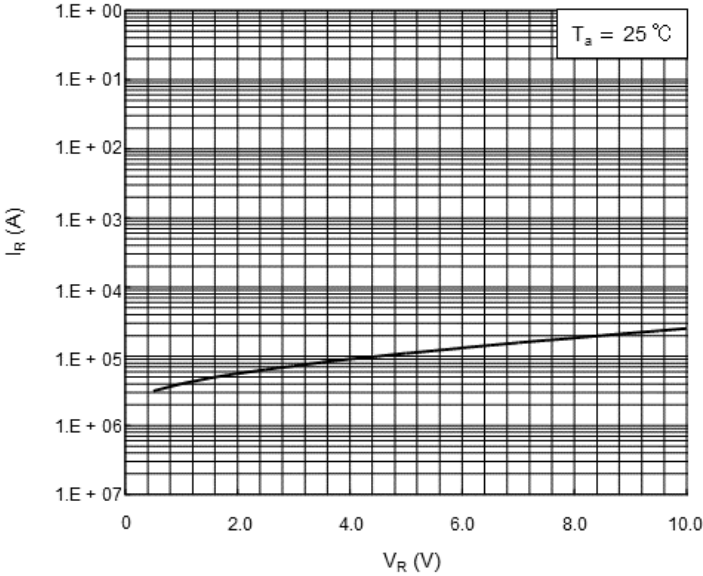


Fig. 7.2 $I_R - V_R$

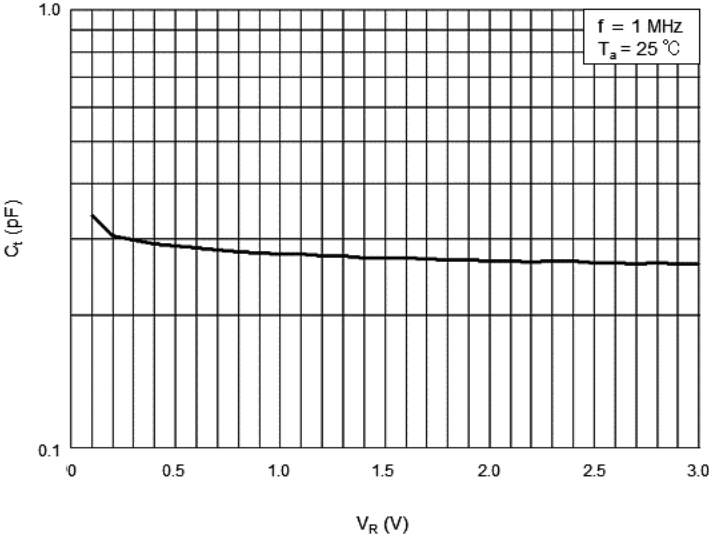
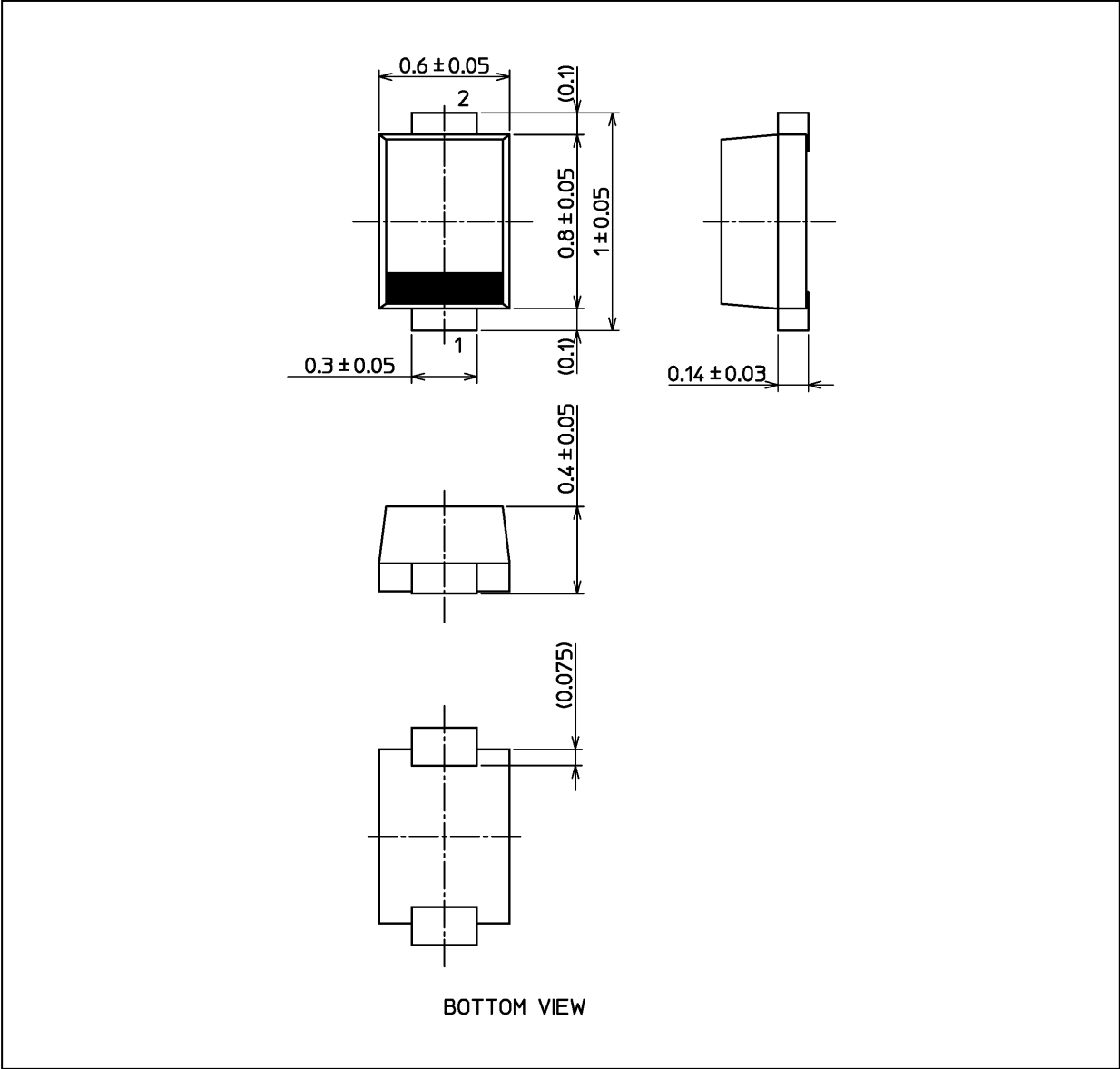


Fig. 7.3 $C_t - V_R$

Note: The above characteristics curves are presented for reference only and not guaranteed by production test, unless otherwise noted.

Package Dimensions

Unit: mm



Weight: 0.7 mg (typ.)

Package Name(s)
TOSHIBA: 1-1AH1A
Nickname: SOD-923

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