



SWITCHING Diodes

• Applications

High speed switching

• Features

- 1) Extremely small surface mounting type.
- 2) High Speed.
- 3) High reliability.

• Construction

Silicon epitaxial planar

SOD-523



Maximum Ratings and Electrical Characteristics, Single Diode @T_A=25°C

Parameter	Symbol	Limits	Unit
Peak reverse voltage	V _{RM}	90	V
DC reverse voltage	V _R	80	V
Peak forward current	I _{FM}	225	mA
Mean rectifying current	I _O	100	mA
Surge current (1s)	I _{surge}	500	mA
Junction temperature	T _j	125	°C
Operating/Storage temperature	T _{stg}	-55~+125	°C

Electrical Ratings @T_A=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V _F			1.2	V	I _F =100mA
Reverse current	I _R			0.1	μA	V _R =80V
Capacitance between terminals	C _T			3.0	pF	V _R =0.5V, f=1MHZ
Reverse recovery time	t _{rr}			4	ns	V _R =6V, I _F =10mA, R _L =100 Ω



ELECTRICAL CHARACTERISTIC CURVES

($T_a = 25^\circ\text{C}$)

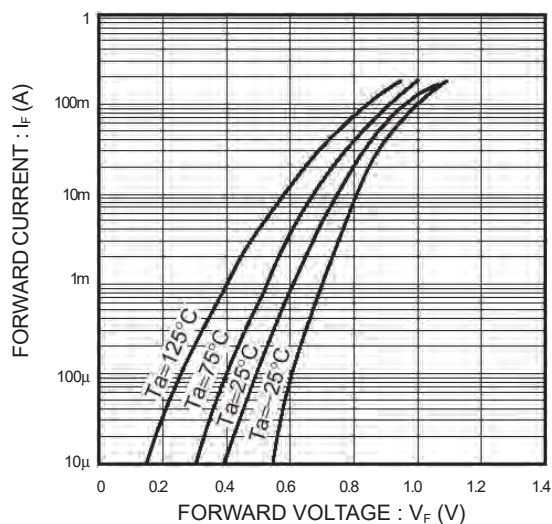


Fig.1 Forward characteristics

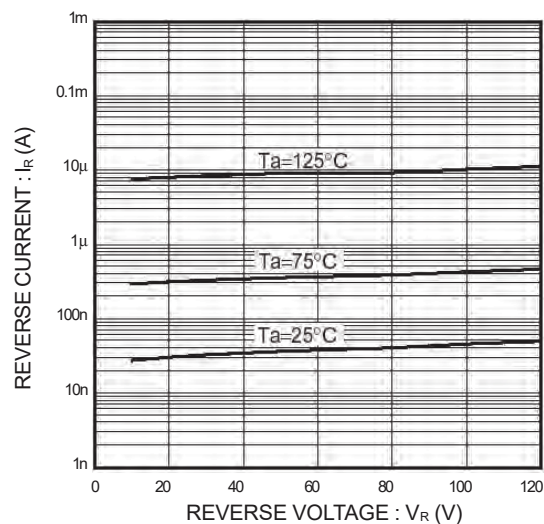


Fig.2 Reverse characteristics

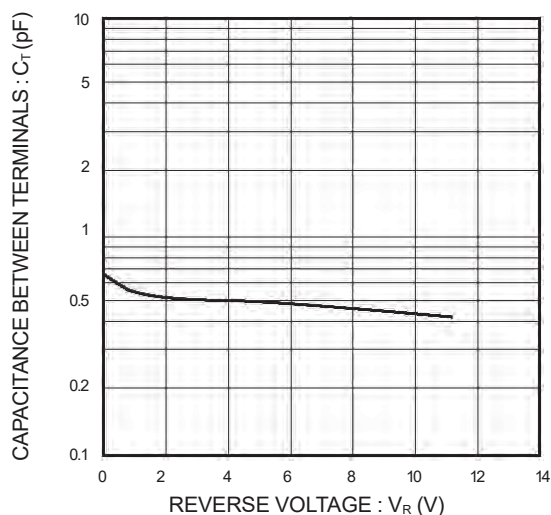


Fig.3 Capacitance between terminals

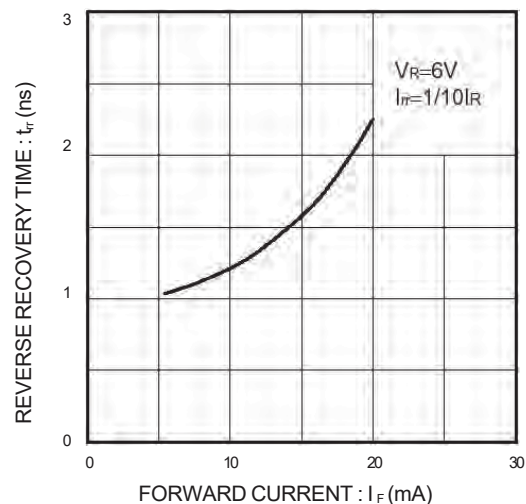


Fig.4 Reverse recovery time characteristics

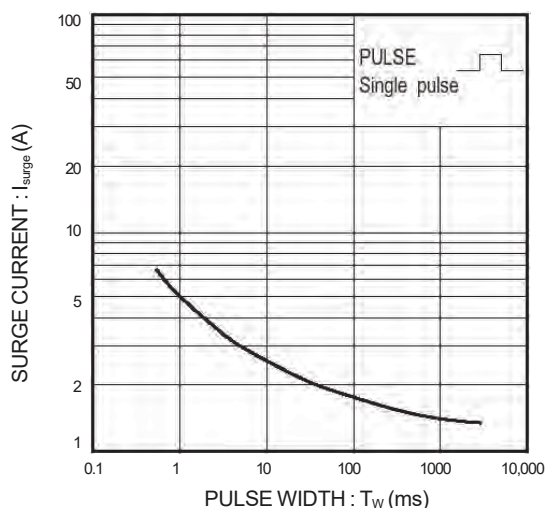


Fig.5 Surge current characteristics

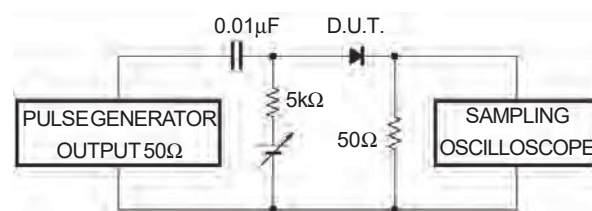
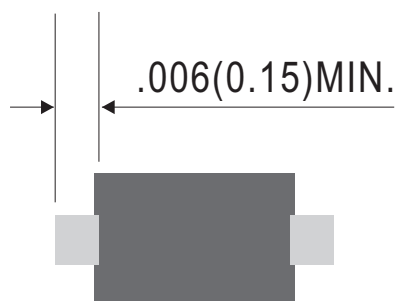
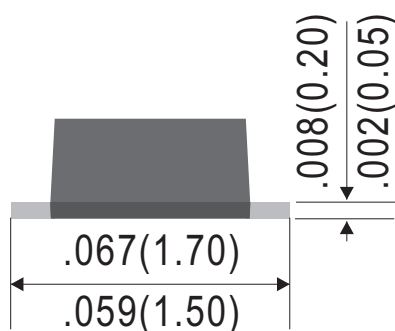
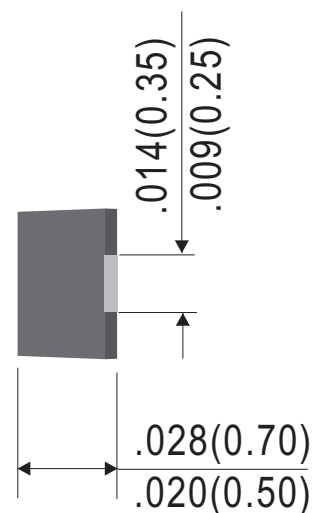
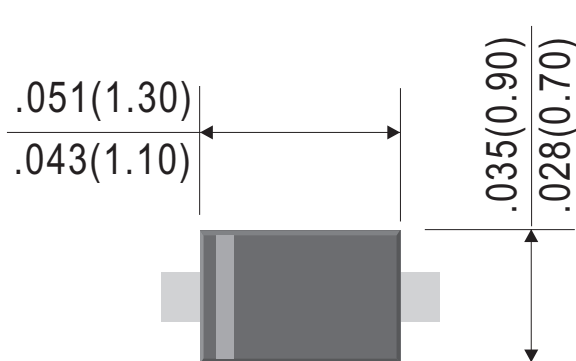


Fig.6 Reverse recovery time (t_{rr}) measurement circuit



Outline Drawing

SOD-523



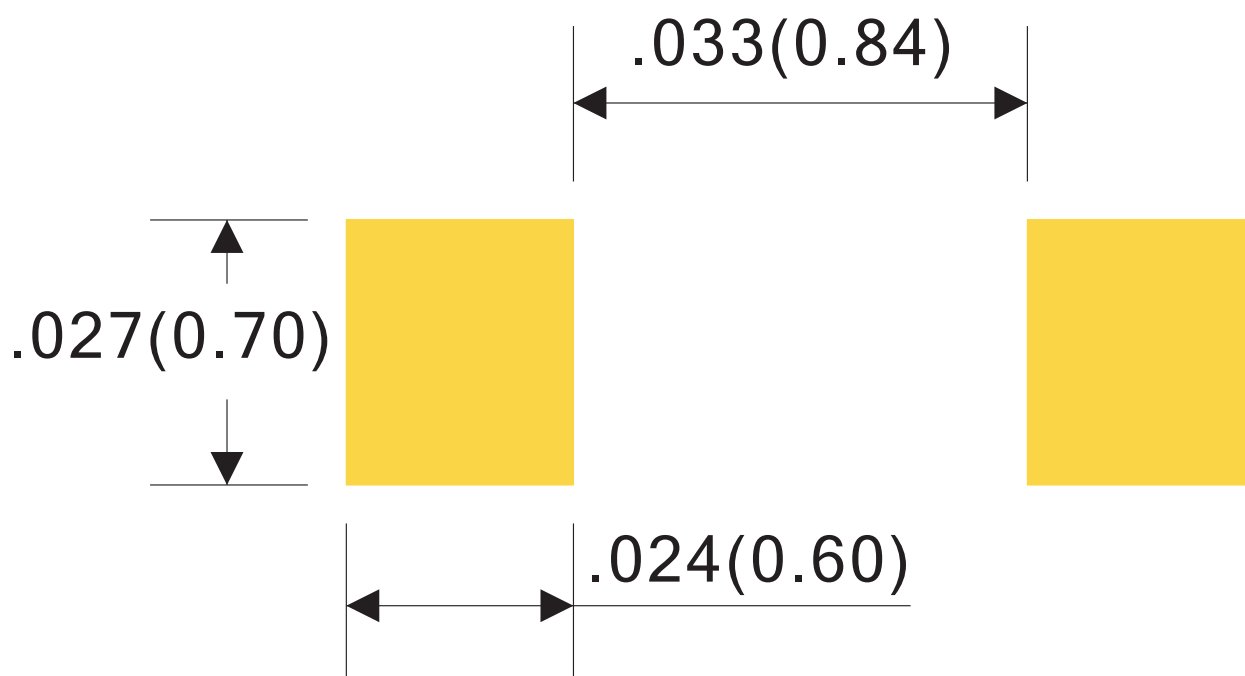
Dimensions in inches and (millimeters)

Rev.C



Suggested Soldering Pad Layout

SOD-523



Dimensions in inches and (millimeters)

RevA



Ordering Information:

Device PN	Marking ⁽⁴⁾	Packing
1SS400-T ⁽¹⁾ G ⁽²⁾ -WS ⁽³⁾	A	Tape&Reel: 5 Kpcs/Reel
1SS400-T2 ⁽¹⁾ G ⁽²⁾ -WS ⁽³⁾	A	Tape&Reel: 10 Kpcs/Reel

Note: (1) Packing code, Tape & Reel Packing

(2) Packing code suffix "G" for RoHS product ; Packing code Suffix "H" for halogen free product.
All materials and products supplied comply with the U.S. Toxic Substances Control Act statement, PBT Chemicals.

(3) Willas brand abbreviation, Label Type does not display

(4) There may be additional marking, which relates to the lot trace code information (data code and vendor code), the logo or the environmental category on the device

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