

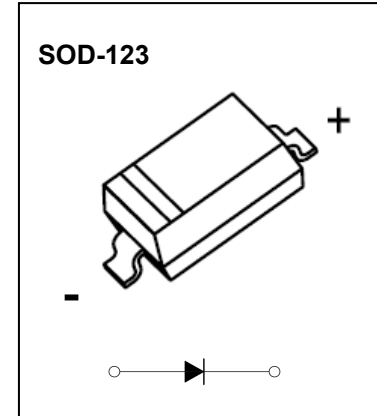
SOD-123 Plastic-Encapsulate Diodes

Schottky Barrier Diode

FEATURES

- Lead Free Finish/RoHS Compliant
- Extremely Low Thermal Resistance
- For Surface Mount Application and High Current Capability

MARKING:



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

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	60	V
Reverse Voltage	V_R	60	V
Average Rectified Forward Current	$I_{F(AV)}$	500	mA
Non-Repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	I_{FSM}	5.5	A
Power Dissipation	P_d	410	mW
Thermal Resistance Junction to Ambient ¹⁾	$R_{\theta JA}$	244	$^\circ\text{C/W}$
Operating Junction Temperature Range	T_j	- 55 to + 125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

1) 1 inch" pad size (1 X 0.5 inch for each lead) on FR4 board.

Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 0.5\text{ A}$	V_F	0.70	V
Reverse Current at $V_R = 60\text{ V}$	I_R	80	μA
Capacitance between terminals at $V_R = 4\text{ V}$, $f=1\text{MHz}$	C_T	30	pF

Typical Characteristics

Fig 1. Reverse Characteristics

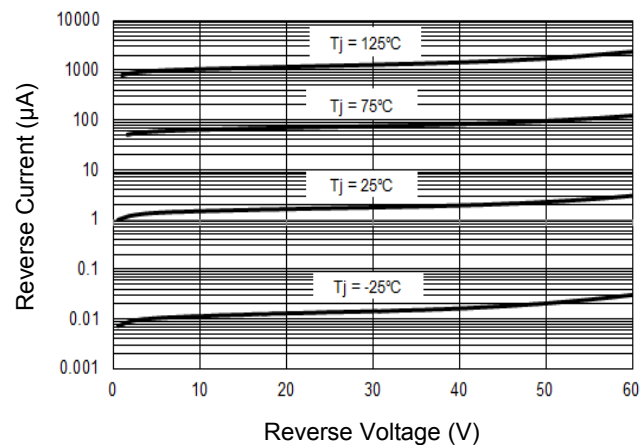


Fig 2. Forward Characteristics

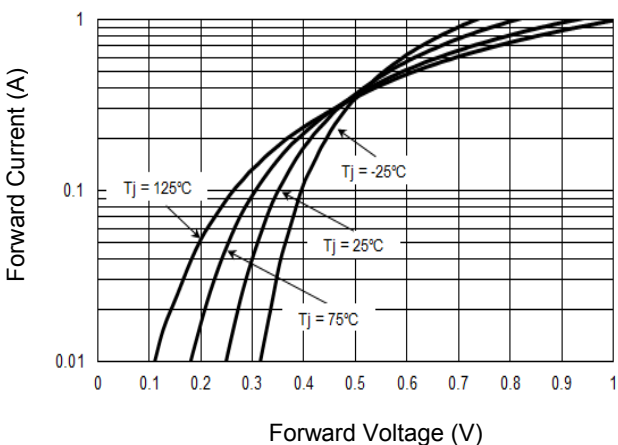


Fig 3. Junction Capacitance

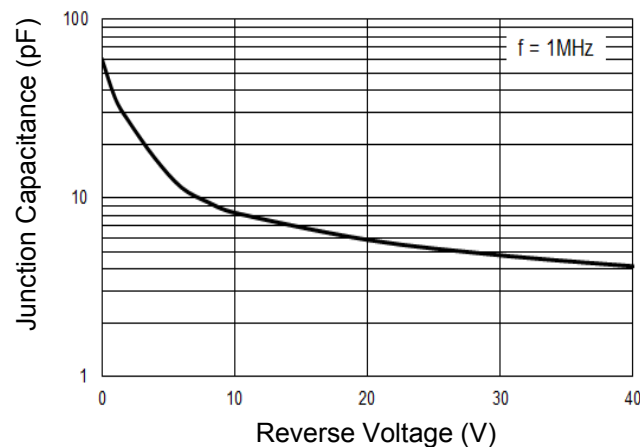


Fig 4. Average Rectified Current Derating Curve

