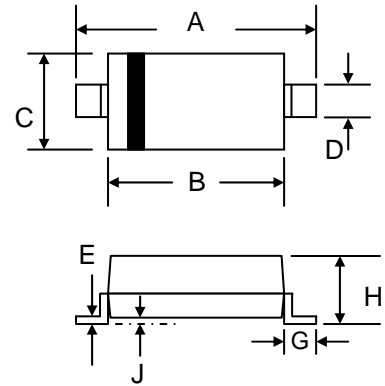


225mW Surface Mount low Capacitance Small Schottky Barrier Diode
SOD-123
Features

- Very Low Capacitance
- Low Reverse Leakage
- PN Junction Guard Ring for Transient and ESD Protection
- For General Purpose Switching Applications
- Plastic Material – UL Recognition Flammability Classification 94V-0


Mechanical Data

- Case: SOD-123, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.01 grams (approx.)
- Marking: XT

SOD-123		
Dim	Min	Max
A	3.60	3.90
B	2.50	2.80
C	1.40	1.80
D	0.30	0.78
E	—	0.25
G	0.15	—
H	0.95	1.35
J	—	0.15
All Dimensions in mm		

Maximum Ratings @ $T_A=25^{\circ}\text{C}$ unless otherwise specified

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	30	V
Forward Continuous Current	I_F	200	mA
Operating Temperature Range	T_J	-55 to +125	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150	$^{\circ}\text{C}$

Thermal Characteristics

Characteristic	Symbol	Value	Unit
Power Dissipation (Note 1)	P_D	225	mW

Note: 1. Mounted on FR-4 PC board with minimum recommended pad layout.

Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

Characteristic		Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	@ $I_R = 10\mu\text{A}$	$V_{(BR)}$	30			V
Forward Voltage Drop	@ $I_F = 1.0\text{mA}$ @ $I_F = 10\text{mA}$	V_F		0.38 0.52	0.45 0.60	V
Reverse Leakage Current	@ $V_R = 25\text{V}$	I_R		13	200	nA
Diode Capacitance ($V_R = 0\text{V}$, $f = 1.0\text{MHz}$)		C_D		0.9	1.5	pF
Total Capacitance ($V_R = 15\text{V}$, $f = 1.0\text{MHz}$)		C_T		0.9	1.5	pF

Typical characteristics

Fig. 1 Power Derating Curve

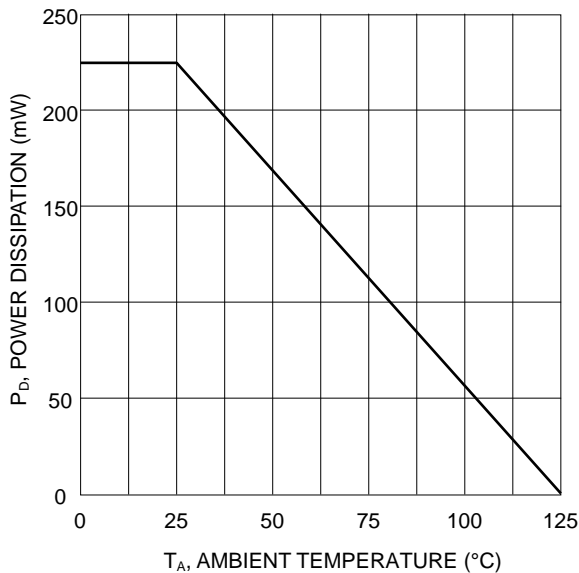


Fig. 2 Typical Forward Characteristics

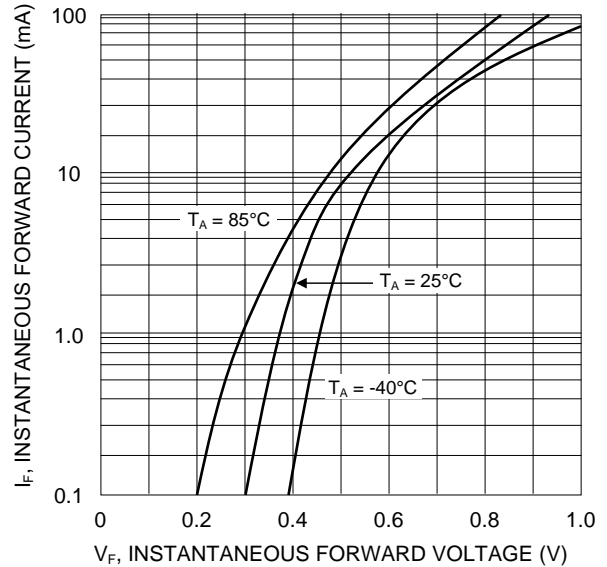


Fig. 3 Total Capacitance vs. Reverse Voltage

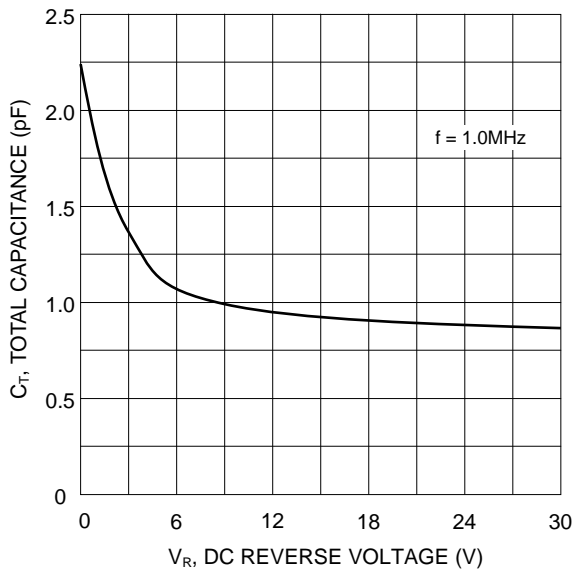
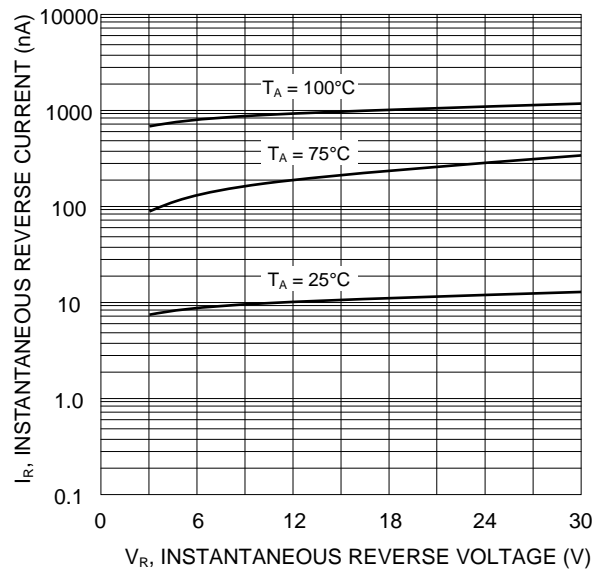


Fig. 4 Typical Reverse Characteristics



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