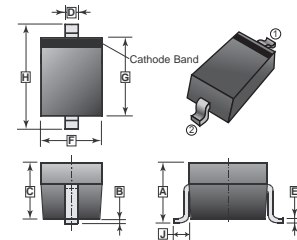


RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

SOD-123

## FEATURES

- High Current Capability
- Extremely Low Thermal Resistance
- For Surface Mount Application
- Higher Temp Soldering : 250°C for 10 Seconds at Terminals
- Low Forward Voltage



## MECHANICAL DATA

- Case: Molded Plastic
- Epoxy: UL 94V-0 Rate Flame Retardant
- Lead: Solderable per MIL-STD-202, method 208 guaranteed
- Polarity: Color Band Denotes Cathode End
- Mounting Position: Any

## MARKING CODE

XG

REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	0.95	1.35	F	1.40	1.80
B	0.10	REF.	G	2.55	2.85
C	1.05	1.15	H	3.55	3.85
D	0.30	0.78	J	-	-
E	0.08	0.25			

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise specified)

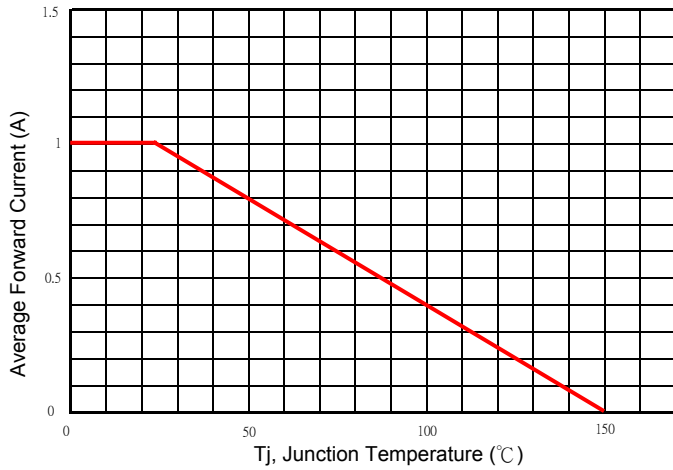
PARAMETER	SYMBOL	RATING	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	60	V
Working Peak Reverse Voltage	V <sub>RWM</sub>	60	V
Maximum DC Blocking Voltage	V <sub>R</sub>	60	V
Average Forward Current @ T <sub>J</sub> =25°C	I <sub>F(AV)</sub>	1	A
Peak Forward Current @ 8.3 ms Half Sine	I <sub>FSM</sub>	10	A
Maximum Instantaneous Forward Voltage I <sub>FM</sub> = 1 A, T <sub>A</sub> = 25°C	V <sub>F1</sub>	0.65	V
Maximum Instantaneous Forward Voltage I <sub>FM</sub> = 1 A, T <sub>A</sub> = 125°C	V <sub>F2</sub>	0.58	V
Maximum DC Reverse Current At Rated DC Blocking Voltage @ T <sub>J</sub> = 25°C	I <sub>R1</sub>	80	uA
Maximum DC Reverse Current At Rated DC Blocking Voltage @ T <sub>J</sub> = 125°C	I <sub>R2</sub>	3	mA
Typical Junction Capacitance (Note 1)	C <sub>J</sub>	120	pF
Typical Thermal Resistance (Note 2)	R <sub>θJA</sub>	310	°C/W
Operating Temperature Range	T <sub>J</sub>	150	°C
Storage temperature	T <sub>STG</sub>	150	°C

Notes:

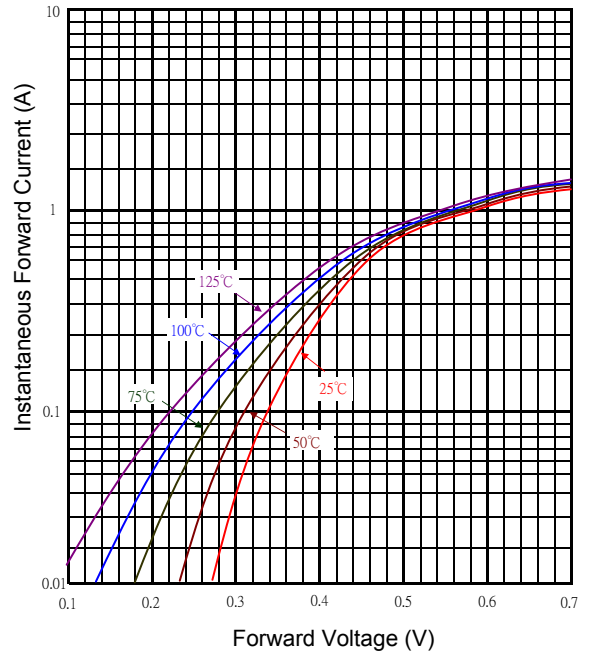
1. Measured at 1MHZ and applied reverse of 0V DC.
2. FR-4 PCB, 2 oz. 0.7mm × 1.2mm copper pad.

**RATINGS AND CHARACTERISTIC CURVES**

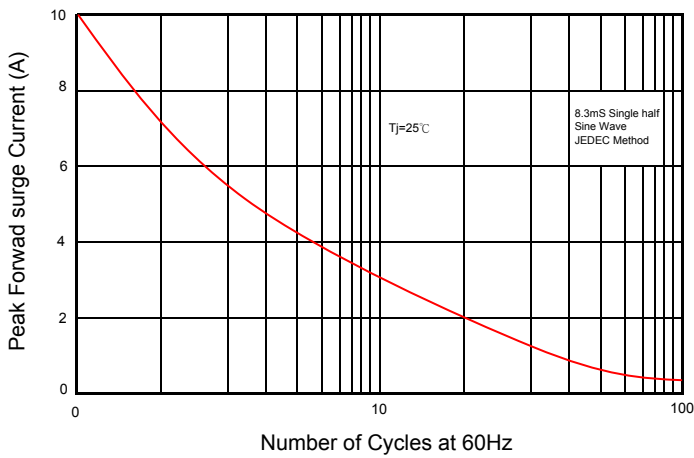
Typical Forward Current Derating Curve



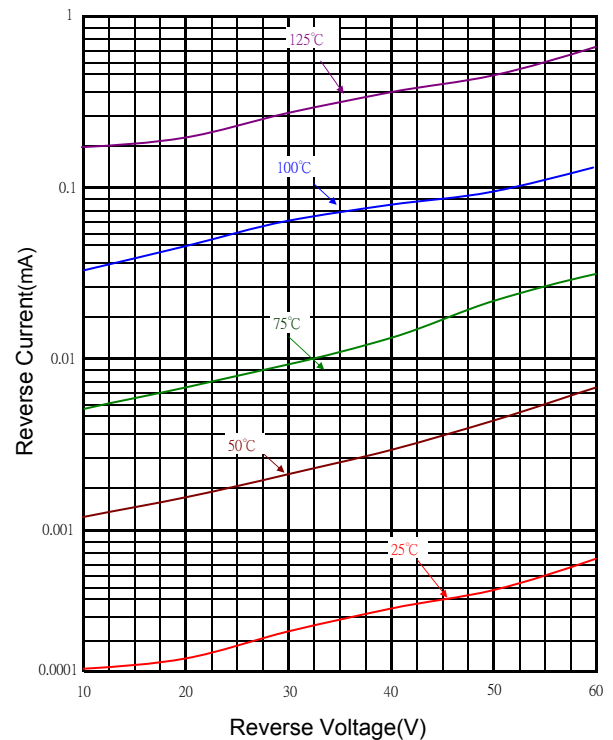
Typical Forward Characteristic



Maximum Non- Repetitive Forward Surge Current



Typical Reverse Characteristic



Typical Junction Capacitance

