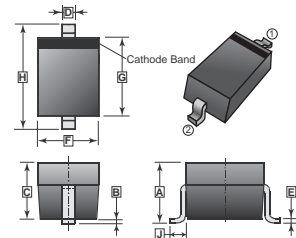


RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

**SOD-323**

## 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

REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.05	REF.	E	0.080	0.180
B	0.20	REF.	F	1.15	1.45
C	0.80	1.00	G	1.60	1.80
D	0.25	0.40	H	2.30	2.70

## MARKING CODE

SD

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

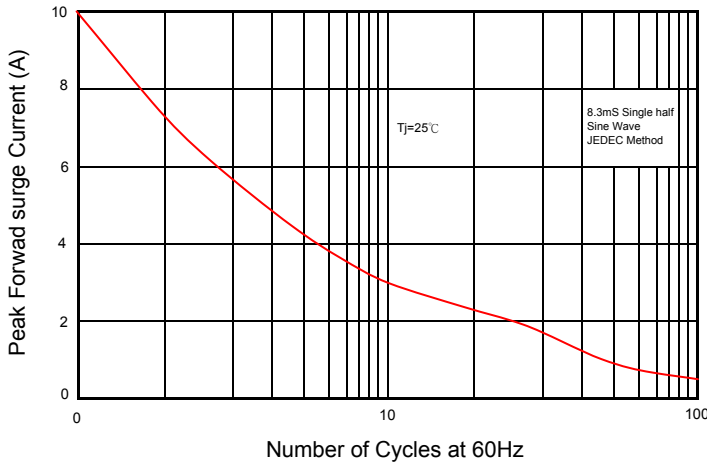
PARAMETER	SYMBOL	RATING	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	20	V
Working Peak Reverse Voltage	V <sub>RWM</sub>	20	V
Maximum DC Blocking Voltage	V <sub>R</sub>	20	V
Average Forward Current @ T <sub>J</sub> =25°C	I <sub>F(AV)</sub>	0.5	A
Peak Forward Current @ 8.3 ms Half Sine	I <sub>FSM</sub>	10	A
Maximum Instantaneous Forward Voltage I <sub>FM</sub> = 0.5 A, T <sub>A</sub> = 25°C	V <sub>F1</sub>	0.45	V
Maximum Instantaneous Forward Voltage I <sub>FM</sub> = 0.5 A, T <sub>A</sub> = 125°C	V <sub>F2</sub>	0.35	V
Maximum DC Reverse Current At Rated DC Blocking Voltage @ T <sub>J</sub> = 25°C	I <sub>R1</sub>	0.1	mA
Maximum DC Reverse Current At Rated DC Blocking Voltage @ T <sub>J</sub> = 125°C	I <sub>R2</sub>	5	mA
Typical Junction Capacitance (Note 1)	C <sub>J</sub>	170	pF
Typical Thermal Resistance (Note 2)	R <sub>θJA</sub>	488	°C/W
Operating Temperature Range	T <sub>J</sub>	150	°C
Storage temperature	T <sub>STG</sub>	150	°C

Notes:

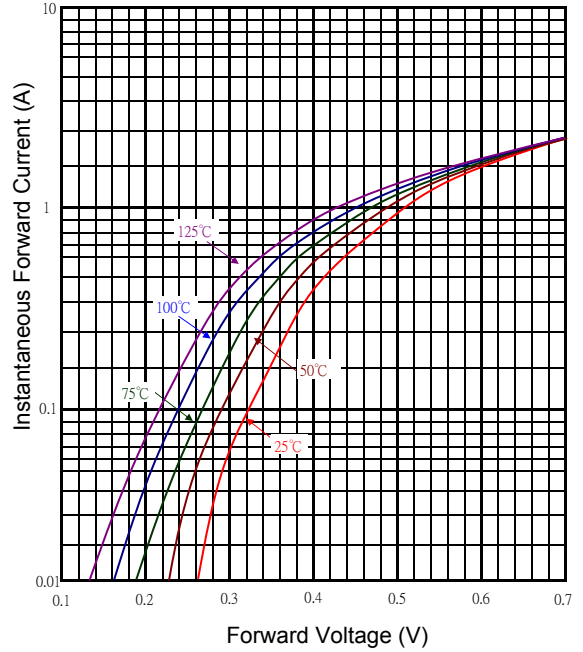
1. Measured at 1MHZ and applied reverse of 0V DC.
2. FR-4 PCB, 2 oz. 0.65mm × 1.35mm copper pad.

**RATINGS AND CHARACTERISTIC CURVES**

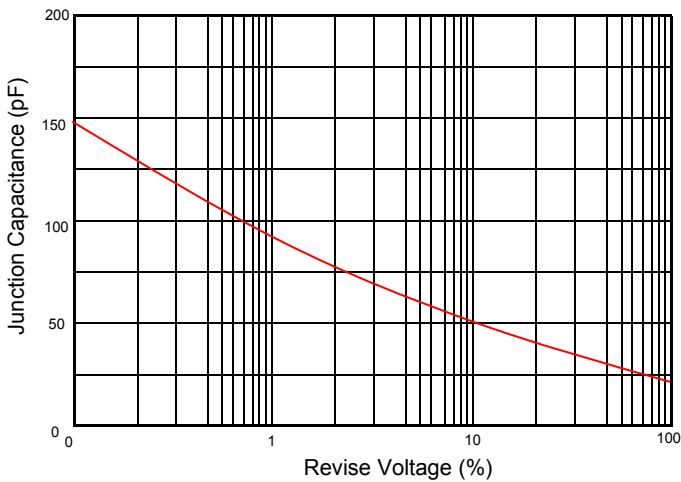
Maximum Non- Repetitive Forward Surge Current



Typical Forward Characteristic



Typical Junction Capacitance



Typical Reverse Characteristic

