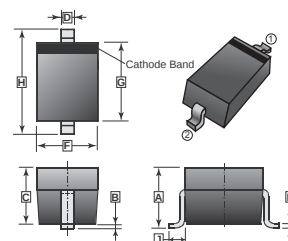


RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

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

MARKING CODE

SD

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

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise specified)

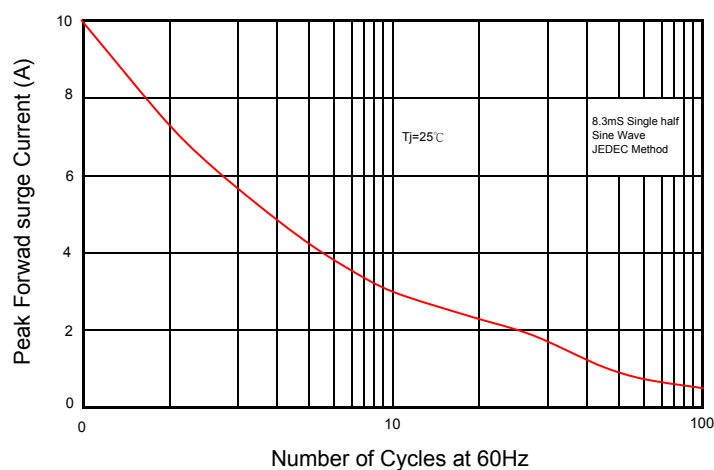
PARAMETER	SYMBOL	RATING	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	V
Working Peak Reverse Voltage	V_{RWM}	20	V
Maximum DC Blocking Voltage	V_R	20	V
Average Forward Current @ $T_J=25^\circ\text{C}$	$I_{F(AV)}$	0.5	A
Peak Forward Current @ 8.3 ms Half Sine	I_{FSM}	10	A
Maximum Instantaneous Forward Voltage $I_{FM} = 0.5 \text{ A}, T_A = 25^\circ\text{C}$	V_{F1}	0.45	V
Maximum Instantaneous Forward Voltage $I_{FM} = 0.5 \text{ A}, T_A = 125^\circ\text{C}$	V_{F2}	0.35	V
Maximum DC Reverse Current At Rated DC Blocking Voltage @ $T_J = 25^\circ\text{C}$	I_{R1}	0.1	mA
Maximum DC Reverse Current At Rated DC Blocking Voltage @ $T_J = 125^\circ\text{C}$	I_{R2}	5	mA
Typical Junction Capacitance (Note 1)	C_J	170	pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	488	$^\circ\text{C/W}$
Operating Temperature Range	T_J	150	$^\circ\text{C}$
Storage temperature	T_{STG}	150	$^\circ\text{C}$

Notes:

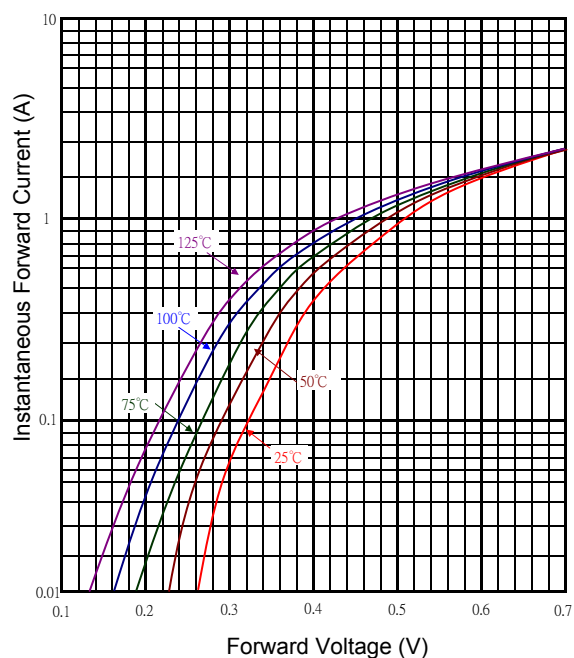
1. Measured at 1MHZ and applied reverse of 0V DC.
2. FR-4 PCB, 2 oz. 0.65mm × 1.35mm copper pad.

RATINGS AND CHARACTERISTIC CURVES

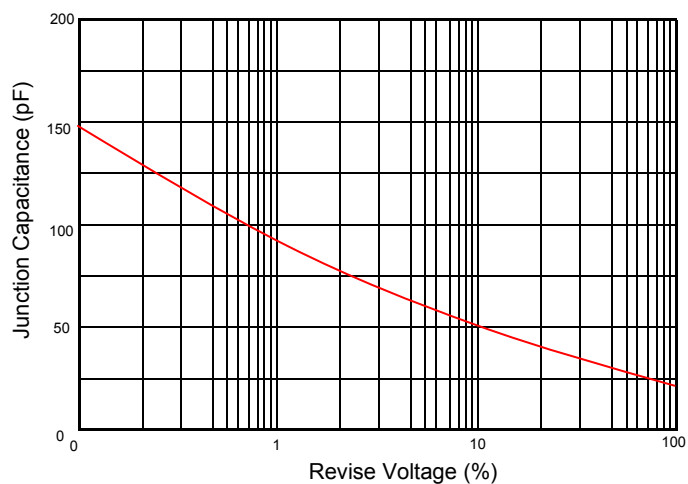
Maximum Non- Repetitive Forward Surge Current



Typical Forward Characteristic



Typical Junction Capacitance



Typical Reverse Characteristic

