

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

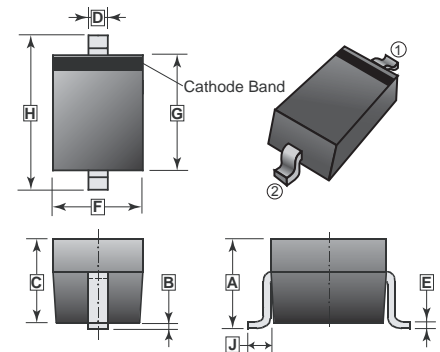
**SOD-323**

## 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

SL

REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	0.039	1.00	E	0.080	0.180
B	0.004	0.1	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

## PACKAGE INFORMATION

Package	MPQ	Leader Size
SOD-323	3K	7 inch

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating 25°C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load.  
For capacitive load, de-rate current by 20%.)

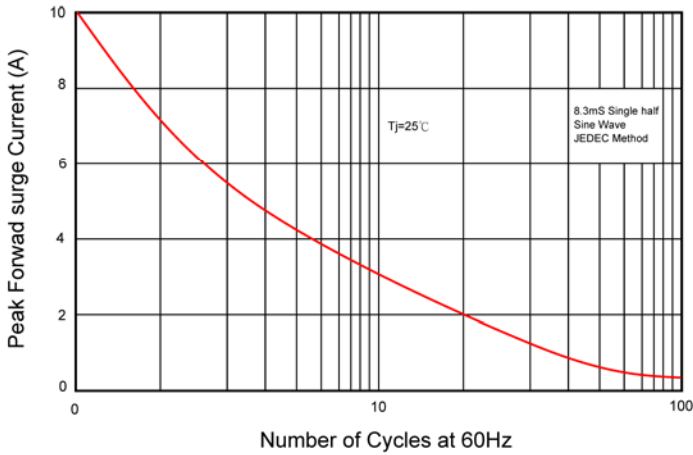
PARAMETER		SYMBOL	RATING	UNITS
Maximum Recurrent Peak Reverse Voltage		$V_{RRM}$	40	V
Working Peak Reverse Voltage		$V_{RWM}$	40	V
Maximum DC Blocking Voltage		$V_R$	40	V
Average Forward Current @ $T_J=25^\circ\text{C}$		$I_{F(AV)}$	1	A
Peak Forward Current @ 8.3 ms Half Sine		$I_{FSM}$	10	A
Maximum Instantaneous Forward Voltage @ $I_{FM} = 1\text{ A}$ ,	$T_J = 25^\circ\text{C}$	$V_F$	0.52	V
	$T_J = 125^\circ\text{C}$		0.45	V
Maximum DC Reverse Current At Rated DC Blocking Voltage	$T_J = 25^\circ\text{C}$	$I_R$	0.1	mA
	$T_J = 125^\circ\text{C}$		5	mA
Typical Junction Capacitance <sup>1</sup>		$C_J$	160	pF
Typical Thermal Resistance <sup>2</sup>		$R_{\theta JA}$	488	°C/W
Operating Temperature Range		$T_J$	-55~125	°C
Storage temperature		$T_{STG}$	-55~125	°C

Notes:

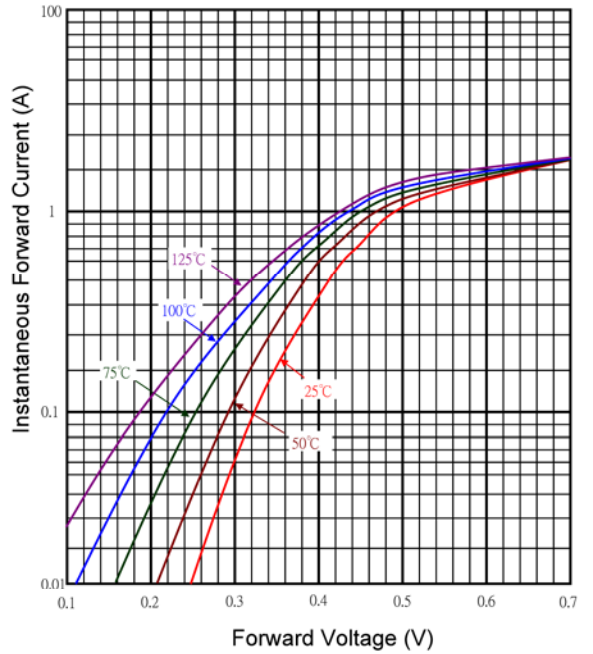
1. Measured at 1MHZ and applied reverse of 0V DC.
2. FR-4 PCB, 2 oz. 0.65mm × 1.35mm copper pad.

**RATINGS AND CHARACTERISTIC CURVES**

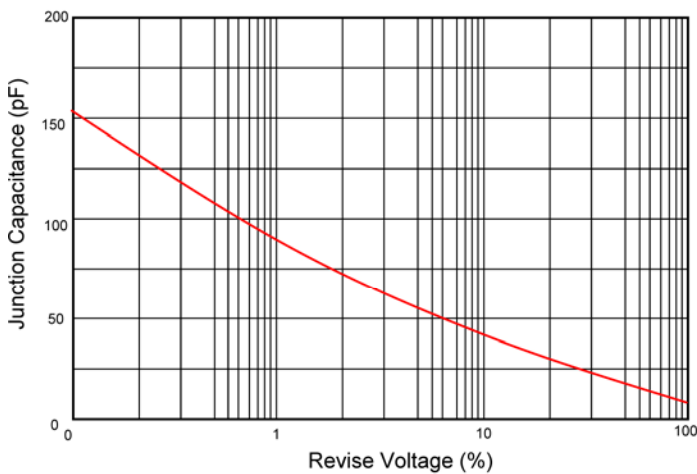
Maximum Non- Repetitive Forward Surge Current



Typical Forward Characteristic



Typical Junction Capacitance



Typical Reverse Characteristic

