

Features

- Low power losses, high efficiency
- Low forward voltage drop, low reverse current
- Compliant with RoHS requirements, lead-free, halogen-free
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C

Mechanical Data

- Package: SOD-323HE
- Terminals: Tin plated leads, solderable per
- Polarity: Cathode line denotes the cathode end

Absolute Maximum Ratings ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Limits	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	40	V
Maximum Average Rectified Forward Current	I_O	1.0	A
Peak Forward Surge Current (Half Sine Wave , 1 cycle , non-repetitive)	I_{FSM}	22	A
Operating Junction Temperature Range	T_{JW}	-40 to +150	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-40 to +150	$^{\circ}\text{C}$

Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Test Conditions	MIN.	TYP.	MAX.	Units
Forward Voltage	V_F1	$I_F=0.7\text{A}$	-	0.48	-	V
	V_F2	$I_F=1.0\text{A}$	-	0.53	0.58	V
Reverse Current	I_R1	$V_R=5\text{V}$	-	0.5	-	μA
	I_R2	$V_R=40\text{V}$	-	-	100	μA
Typical Thermal Resistance	$R_{\theta JA}$	Junction to Ambient	-	-	220	$^{\circ}\text{C/W}$
			-	-	250	$^{\circ}\text{C/W}$
Typical Thermal Resistance	$R_{\theta JL}$	Junction to Lead	-	-	50	$^{\circ}\text{C/W}$

Note : 1. Mounted on P.C Board with (15mm x 50mm) copper pad areas.

2. Mounted on a FR4 PCB, single-sided copper, mini pad.

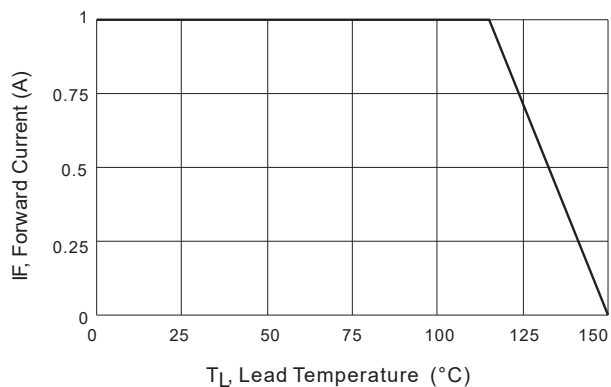


Fig.1 Forward Current Derating Curve

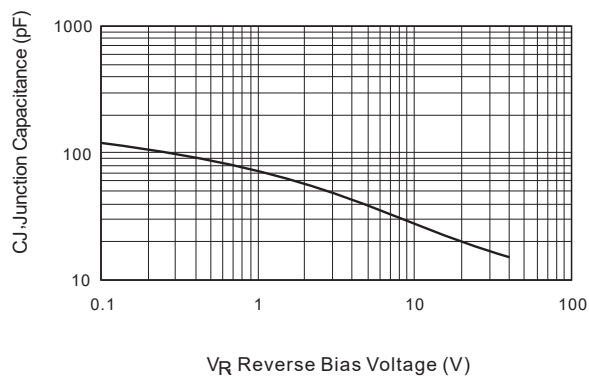


Fig.2 Typical Junction Capacitance

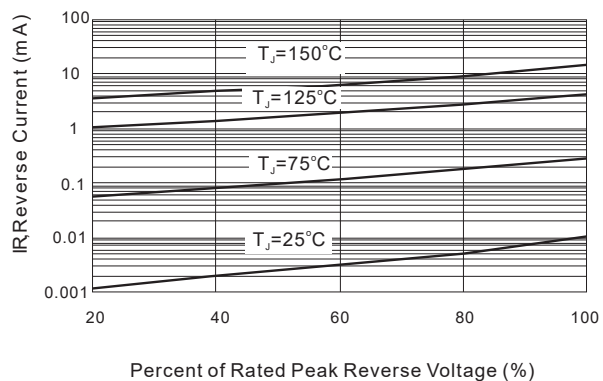


Fig.3 Typical Reverse Characteristics

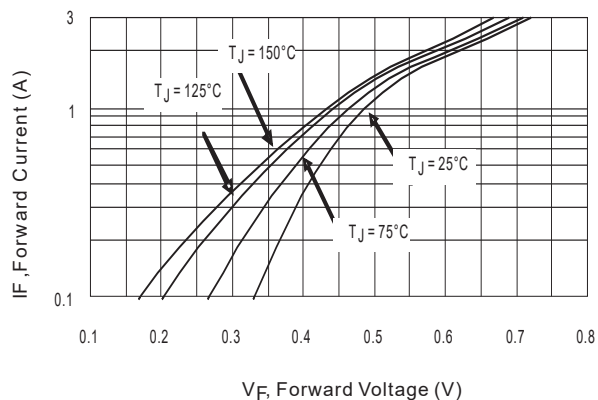


Fig.4 Typical Forward Characteristics

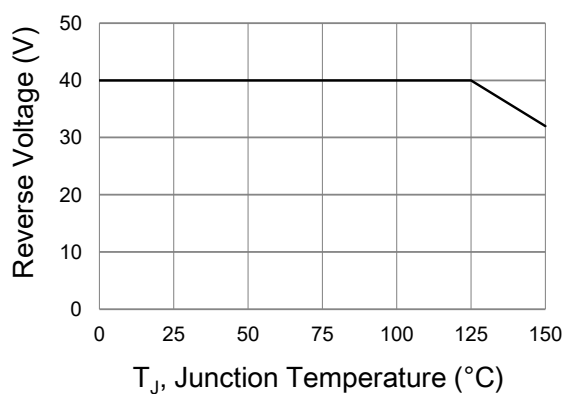


Fig.5 Operating Temperature Derating Curve



Dimensions (SOD-323HE)

Dim	Inches		Millimeters	
	Min	Max	Min	Max
A	0.083	0.091	2.10	2.30
B	0.094	0.110	2.40	2.80
C	0.050	0.058	1.28	1.48
D	0.020	0.028	0.50	0.70
E	0.025	0.033	0.64	0.84
F1	0.016	0.030	0.41	0.76
F2	0.046	0.062	1.18	1.58
G	0.002	0.010	0.05	0.25
H	0.031	0.041	0.80	1.05

Cathode Band
(for uni-directional
products only)

Soldering footprint

Dimensions in inches
and (millimeters)