

■ 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

■ APPLICATIONS

- DC/DC converters
- Freewheeling
- low voltage high frequency inverters
- polarity protection applications

■ ABSOLUTE MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$)

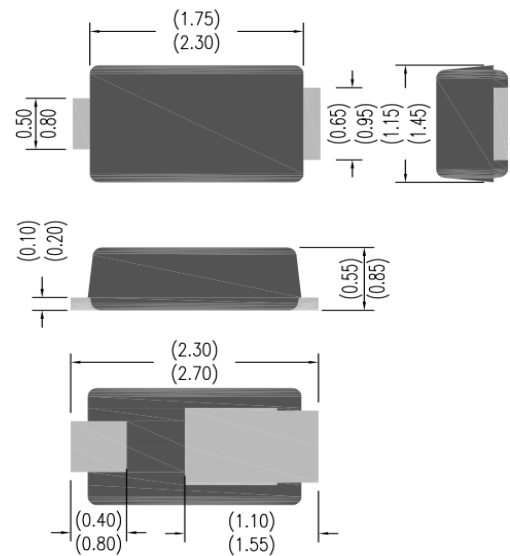
PARAMETER	SYMBOL	LIMITS	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	60	V
Maximum Average Rectified Forward Current	I_O	1.0	A
Peak Forward Surge Current (Half Sine Wave , 1 cycle , non-repetitive)	I_{FSM}	22	A
Operating Junction Temperature Range	T_{JW}	-40 to +150	°C
Storage Temperature Range	T_{STG}	-40 to +150	°C

■ ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$)

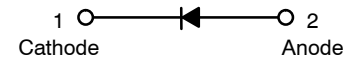
PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNITS
Forward Voltage	V_{F1}	$I_F=0.1\text{A}$	-	0.38	0.43	V
	V_{F2}	$I_F=0.7\text{A}$	-	0.55	0.58	V
	V_{F3}	$I_F=1.0\text{A}$	-	0.63	0.68	V
Reverse Current	I_{R1}	$V_R=5\text{V}$	-	0.3	-	μA
	I_{R2}	$V_R=60\text{V}$	-	3	100	μA
Thermal Resistance (Note)	$R_{\theta JA}$	Junction to Ambient	-	-	220	°C/W
	$R_{\theta JL}$	Junction to Lead	-	-	50	°C/W

Note : Mounted on P.C Board with (15mmx50mm) copper pad areas.

SOD-323HE



unit: inch (mm)



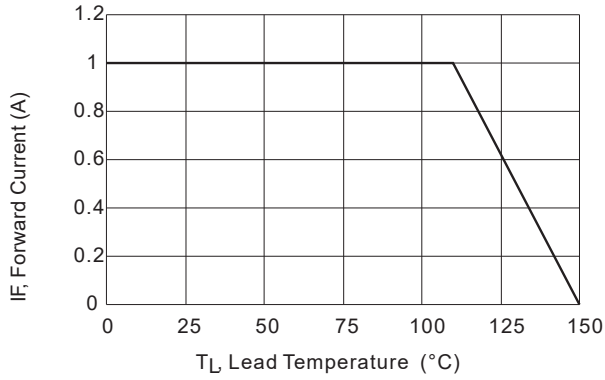


Fig.1 Forward Current Derating Curve

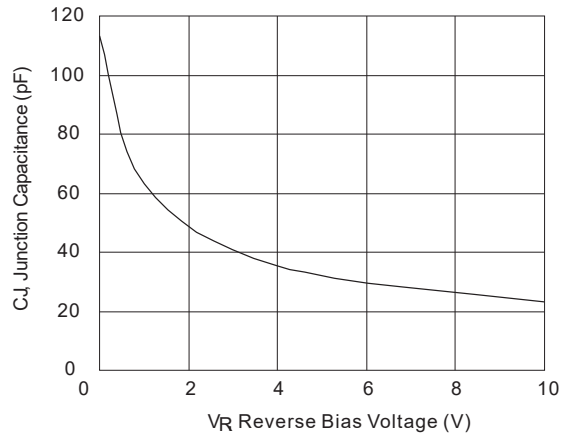


Fig.2 Typical Junction Capacitance

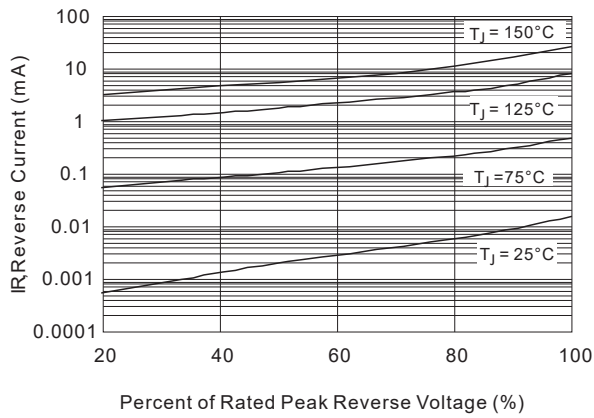


Fig.3 Typical Reverse Characteristics

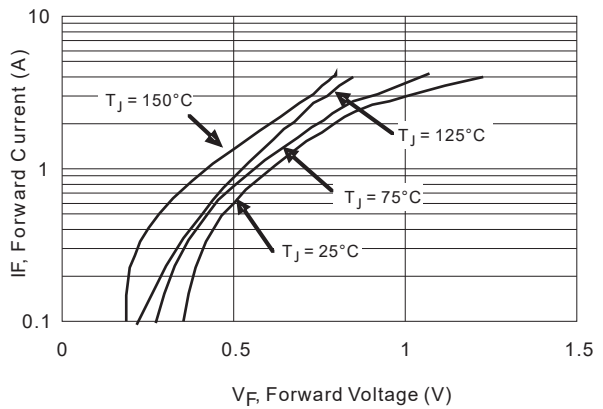


Fig.4 Typical Forward Characteristics