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

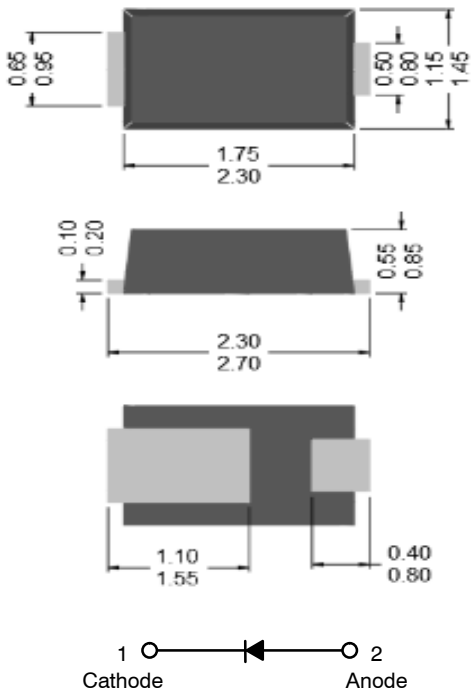
MECHANICAL DATA

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

APPLICATIONS

- DC/DC converters

SOD-323HE



ABSOLUTE MAXIMUM RATINGS (Ta=25℃)

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 Junciton Temperature Range	T_{JW}	-40 to +150	℃
Storage Temperature Range	T_{STG}	-40 to +150	℃

ELECTRICAL CHARACTERISTICS (Ta=25℃)

PARAMETER		SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNITS
Forward Voltage		V_F1	I_F=0.7A	-	0.48	-	V
		V_F2	I_F=1.0A	-	0.53	0.58	V
Reverse Current		I_R1	V_R=5V	-	0.5	-	μA
		I_R2	V_R=40V	-	-	100	μA
Typi cal Thermal Resi stance	Note1 Note2	$R_{\theta JA}$	Junction to Ambient	- -	- -	220 250	°C/W
Typi cal Thermal Resi stance	Note1	$R_{\theta JL}$	Junction to Lead	-	-	50	°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.

Characteristics (Typical)

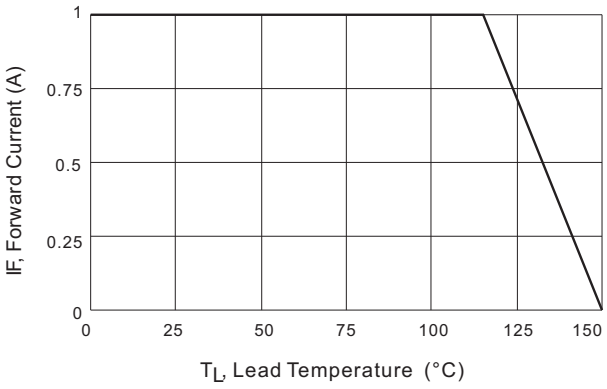


Fig.1 Forward Current Derating Curve

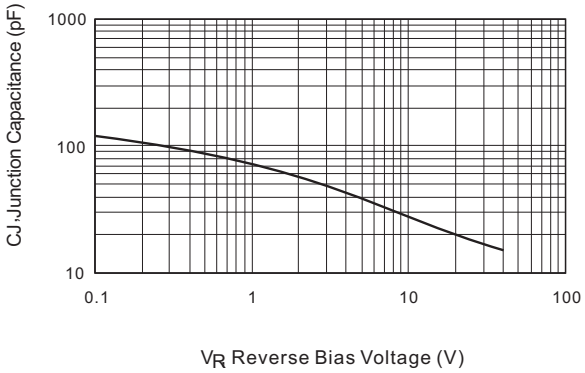


Fig.2 Typical Junction Capacitance

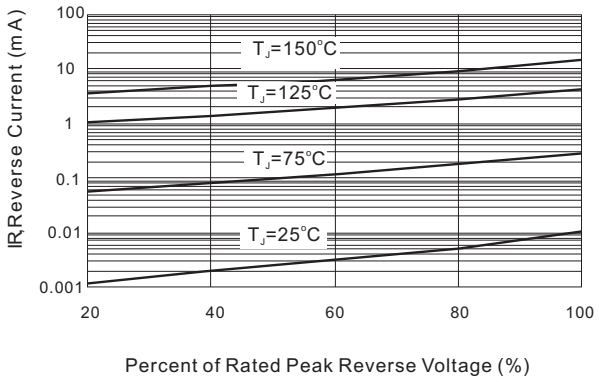


Fig.3 Typical Reverse Characteristics

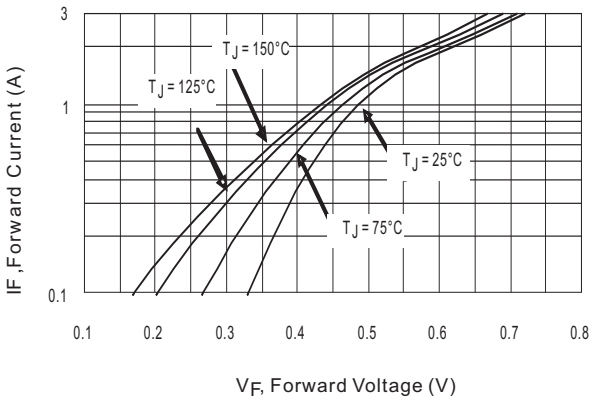


Fig.4 Typical Forward Characteristics

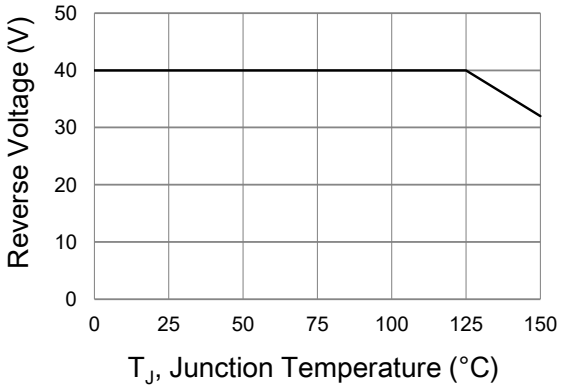


Fig.5 Operating Temperature Derating Curve