

■ 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

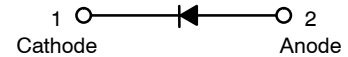
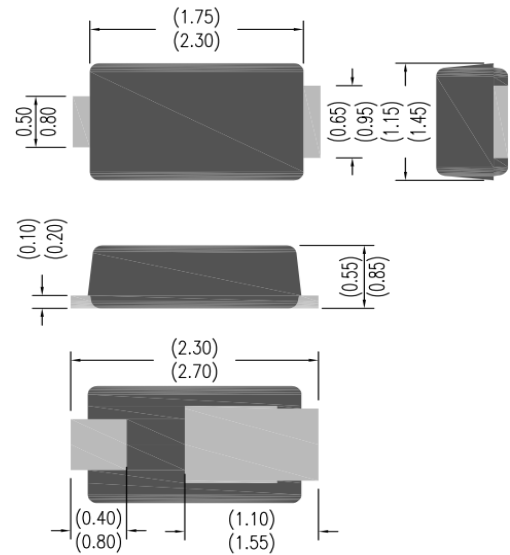
■ MECHANICAL DATA

- 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°C)

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	°C
Storage Temperature Range	T _{STG}	-40 to +150	°C

■ ELECTRICAL CHARACTERISTICS (Ta=25°C)

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
Typical Thermal Resistance	Note1 R _{θJA}	Junction to Ambient	-	-	220	°C/W
Typical Thermal Resistance	Note2 R _{θJL}	Junction to Lead	-	-	250	°C/W
Typical Thermal Resistance	Note1 R _{θJL}	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.

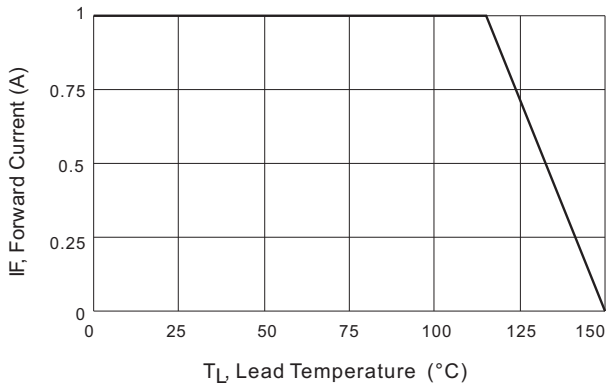


Fig.1 Forward Current Derating Curve

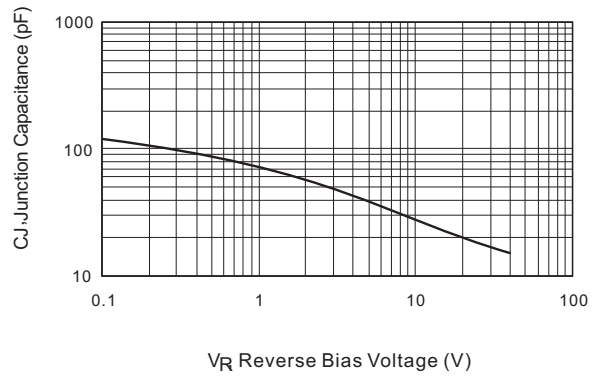


Fig.2 Typical Junction Capacitance

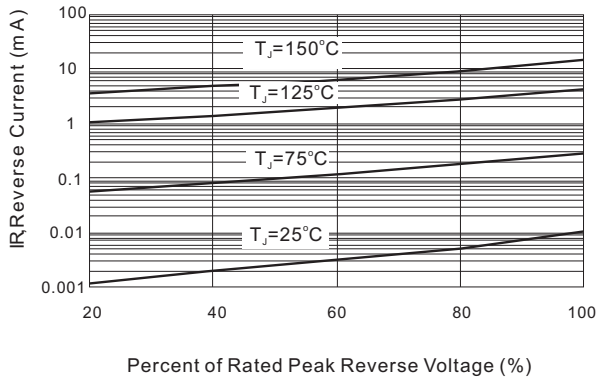


Fig.3 Typical Reverse Characteristics

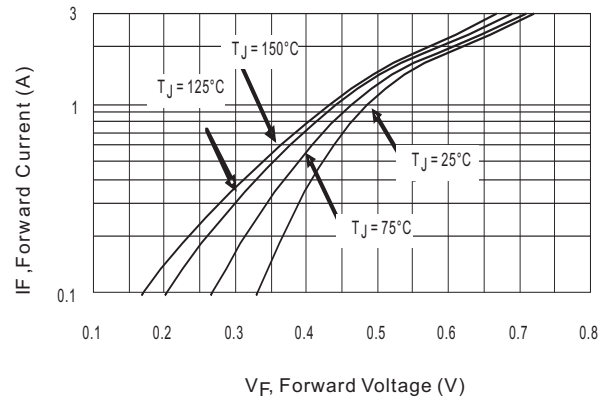


Fig.4 Typical Forward Characteristics

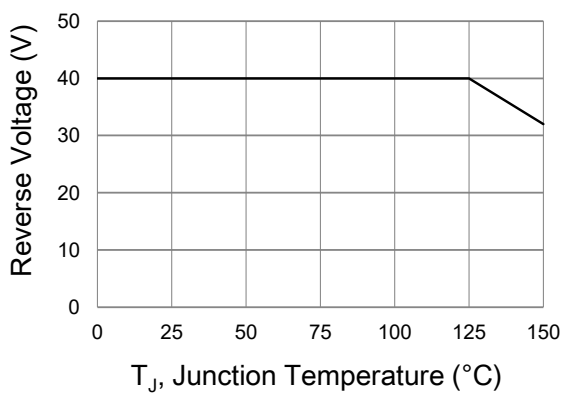


Fig.5 Operating Temperature Derating Curve