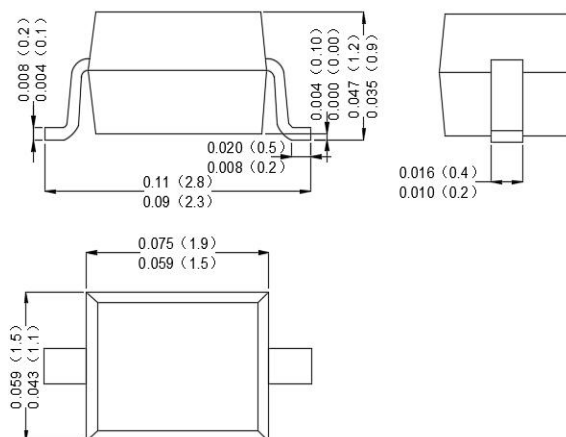




Features

- Guard Ring Protection
- Low Forward Voltage Drop
- For Use in Low Voltage, High Frequency Inverters
- High Surge Current Capability

SOD-323



Dimensions in inches and (millimeters)

Mechanical Data

- Case: Molded Plastic, SOD-323
- Epoxy: UL 94V-0 rate flame retardant
- Terminals: Plated Leads Solderable per MIL-STD-750, Method-2026
- Mounting Position : Any.
- Marking: SM

Maximum Ratings Maximum Ratings (Rating at 25°C ambient temperature unless otherwise specified.)

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	60	V
Maximum RMS Voltage	V_{RMS}	42	V
Maximum DC Blocking Voltage	V_{DC}	60	V
Average forward current	$I_{F(AV)}$	1	A
Peak Forward Surge Current	I_{FSM}	10	A
Junction Temperature	T_J	-65 ~ +125	°C
Storage Temperature Range	T_{stg}	-65 ~ +150	°C

Electrical Characteristics (Rating at 25°C ambient temperature unless otherwise specified.)

Parameter	Symbol	Max.	Unit
Average Forward Current $T_C = 90^\circ\text{C}$	$I_{F(AV)}$	1.0	A
Peak Forward Surge Current 8.3ms, half sine	I_{FSM}	10	A
Maximum Instantaneous Forward Voltage $I_{FM} = 1\text{A};$ $T_J = 25^\circ\text{C}$ (Note 1)	V_F	0.70	V
Maximum DC Reverse Current At Rated DC Blocking Voltage $T_A = 25^\circ\text{C}$	I_R	0.1	mA
Typical junction capacitance Measured at 1.0MHz, $V_R = 4.0\text{V}$	C_J	120	PF

Notes: 1. Pulse Test: Pulse Width 300usec, Duty Cycle 2%



Rating And Characteristic Curves

Fig.1 Typical Forward Voltage Characteristics

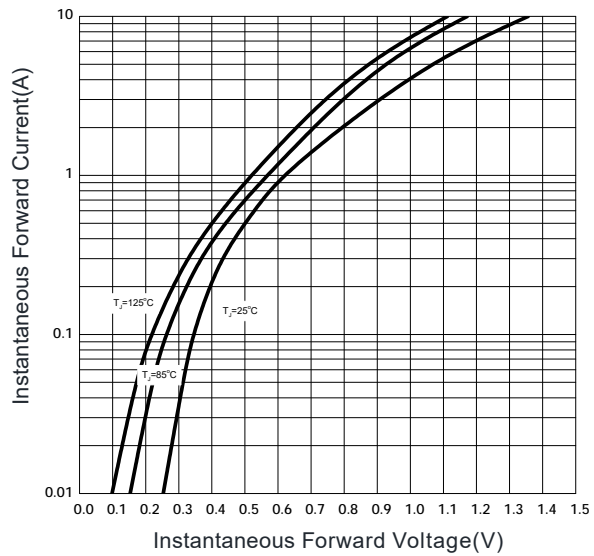


Fig.2 Typical Reverse Characteristics

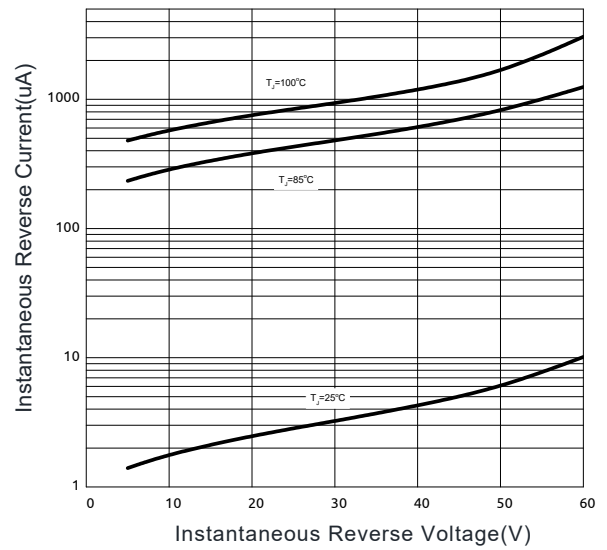
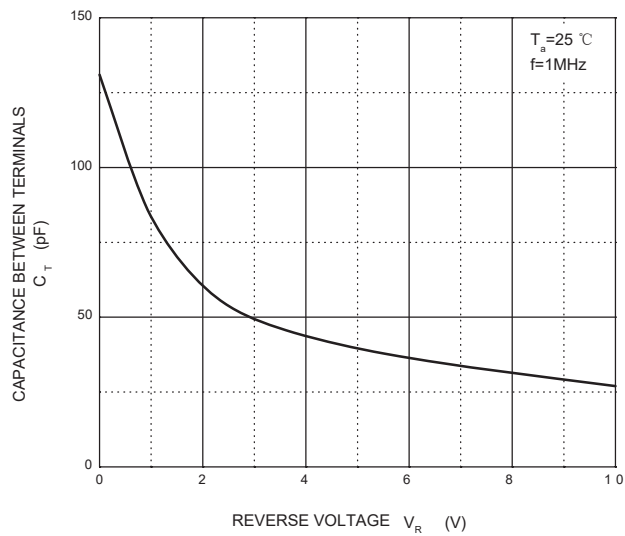


Fig.3 Capacitance Characteristics





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