

VOLTAGE 20 - 40 Volts

CURRENT 0.35 Amperes

PACKAGE SOD-323

FEATURES

- Low turn-on voltage
- Fast switching
- PN Junction Guard Ring for Transient and ESD Protection.

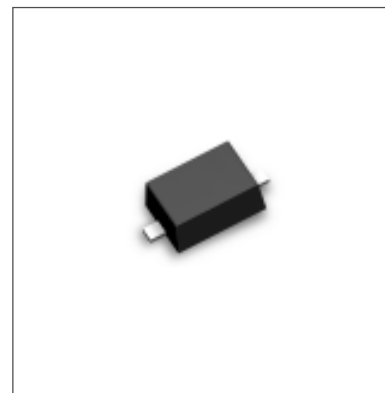
MECHANICAL DATA

Case: SOD-323, Plastic

Terminals: Solderable per MIL-STD-202, Method 208

Approx. Weight: 0.008 gram

Marking: S6, S7, S8



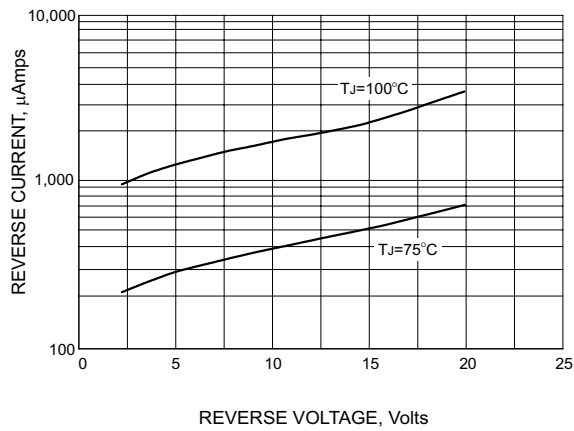
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

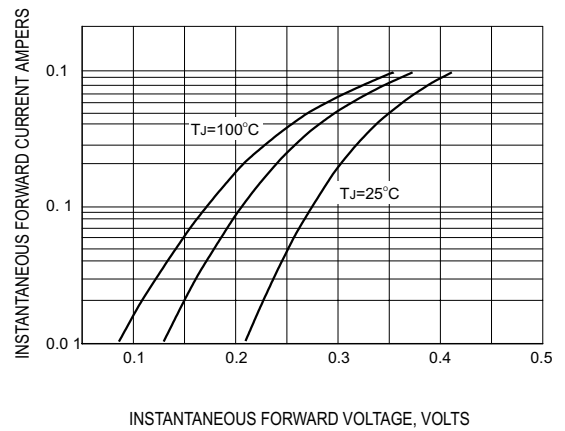
Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

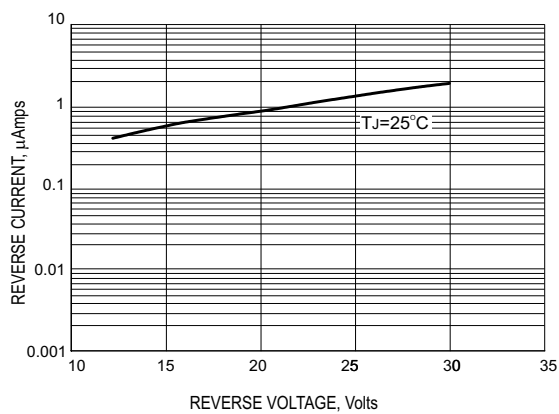
Parameter	Symbol	SD103AWS	SD103BWS	SD103CWS	Units
Peak Repetitive Reverse Voltage	V_{RRM}	40	30	20	V
Maximum Average Forward Current at $T_a=25^{\circ}\text{C}$	I_o	0.35	0.35	0.35	A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	2.0	2.0	2.0	A
Maximum Instantaneous Forward Voltage	V_F	0.37 @ $I_F=0.02\text{A}$ 0.6 @ $I_F=0.2\text{A}$	0.37 @ $I_F=0.02\text{A}$ 0.6 @ $I_F=0.2\text{A}$	0.37 @ $I_F=0.002\text{A}$ 0.6 @ $I_F=0.2\text{A}$	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	0.005 @ $V_R=30\text{V}$	0.005 @ $V_R=20\text{V}$	0.005 @ $V_R=10\text{V}$	mA
Thermal Resistance, Junction to Ambient Air	$R_{\theta JA}$	635			$^{\circ}\text{C} / \text{W}$
Operating Junction Temperature Range	T_J	-55 TO +125			$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-55 TO +125			$^{\circ}\text{C}$



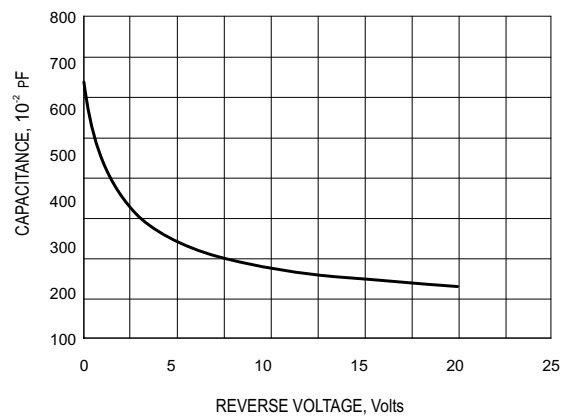
TYPICAL REVERSE CURRENT



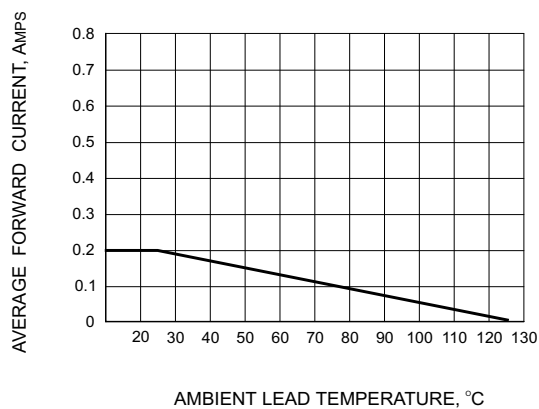
TYPICAL FORWARD VOLTAGE



TYPICAL REVERSE CURRENT



TYPICAL JUNCTION CAPACITANCE



CURRENT DERATING

SOD-323

