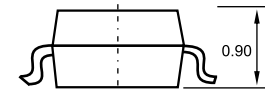
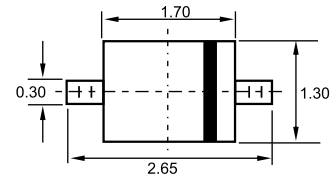




SOD-323



Dimensions in inches and (millimeters)

Features

- ◇ Low Forward Voltage Drop
- ◇ Guard Ring Die Construction for Transient Protection
- ◇ Ideal for low logic level applications
- ◇ Low Capacitance

Mechanical Data

- ◇ Case: SOD-323, Plastic
- ◇ Case Material - UL Flammability Rating Classification 94V-0
- ◇ Polarity: Cathode Band
- ◇ Weight: 0.004 grams (approx.)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Maximum Ratings

Type Number	Symbol	SD107WS	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	30	V
RMS Reverse Voltage	$V_{R(RMS)}$	21	V
Forward Continuous Current	I_{FM}	100	mA
Non-Repetitive Peak Forward Surge Current @ $t \leq 10ms$	I_{FSM}	750	mA
Power Dissipation	P_d	250	mW
Thermal Resistance, Junction to Ambient Air	$R_{\theta JA}$	500	°C/W
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to 150	°C

Electrical Characteristics

Type Number	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 1)	$V_{(BR)R}$	30	-	-	V	$I_R = 100\mu A$
Forward Voltage Drop (Note 1)	V_{FM}	-	300 360 470 580	- - 550 800	mV	@ $I_F = 2.0mA$ @ $I_F = 15mA$ @ $I_F = 50mA$ @ $I_F = 100mA$
Peak Reverse Current (Note 1)	I_{RM}	-	-	1.0	μA	$V_R = 25V$
Total Capacitance	C_T	-	7	-	pF	$V_R = 10V$ $f = 1.0$ MHz

Notes: 1. Short duration test pulse used in minimizing self-heating effect.

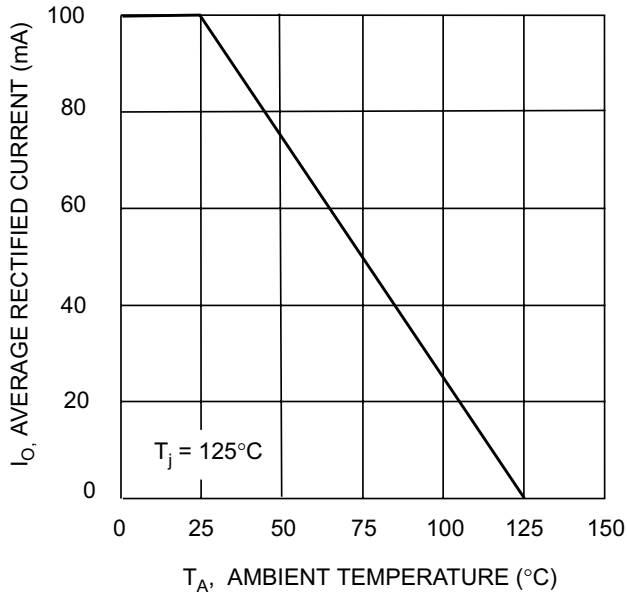


Fig. 1 Forward Current Derating Curve

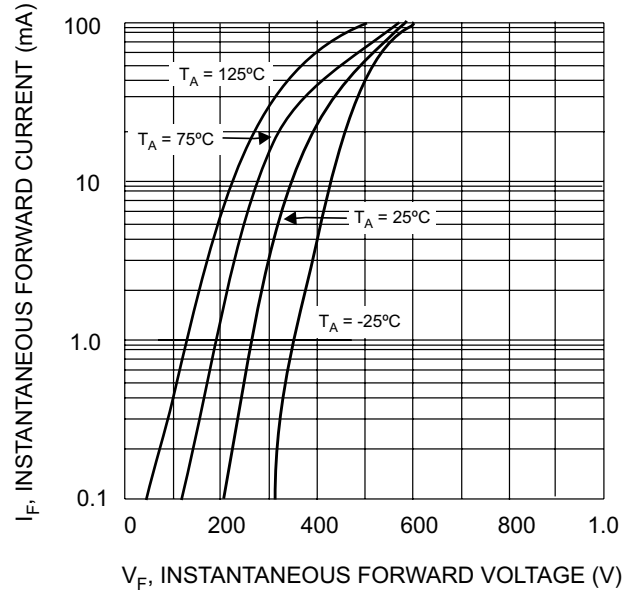


Fig. 2 Typical Forward Characteristics

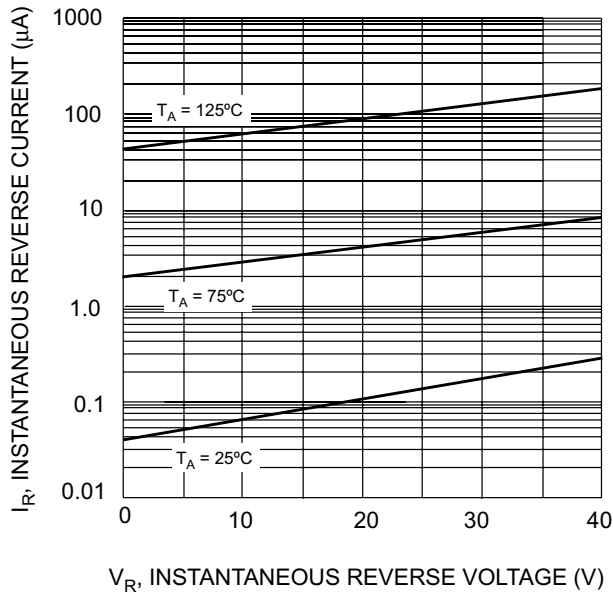


Fig. 3 Typical Reverse Characteristics

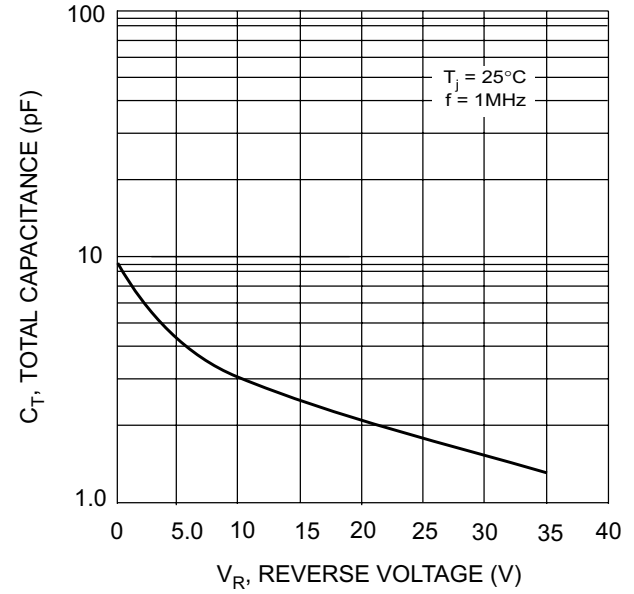


Fig. 4 Total Capacitance vs. Reverse Voltage

PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
SOD-323	3000/REEL	180000	44X44X22	9.00	8.00