SD107WS

Surface Mount Schottky Barrier Diode

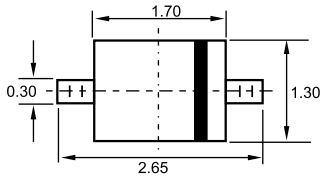
Features

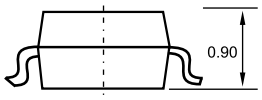
- ✧ Low Forward Voltage Drop
- ✧ Guard Ring Die Construction for Transient Protection
- ✧ Ideal for low logic level applications
- ✧ Low Capacitance

Mechanical Data

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

SOD-323





Dimensions in inches and (millimeters)

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 ≤ 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 = 100μA
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.

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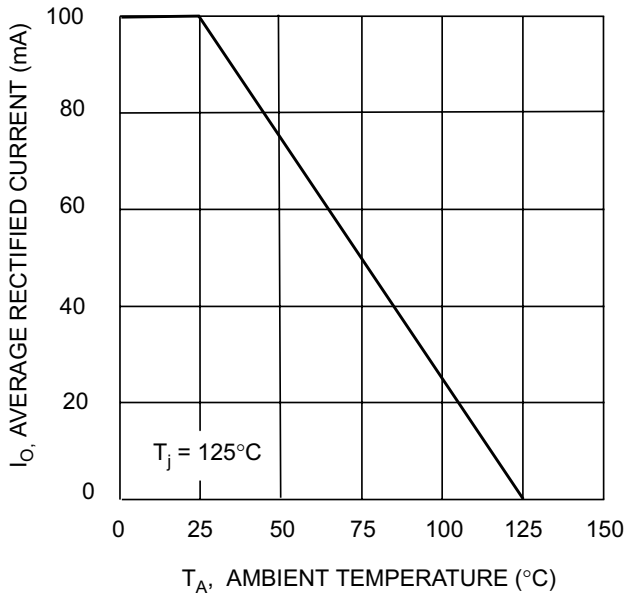

Fig. 1 Forward Current Derating Curve

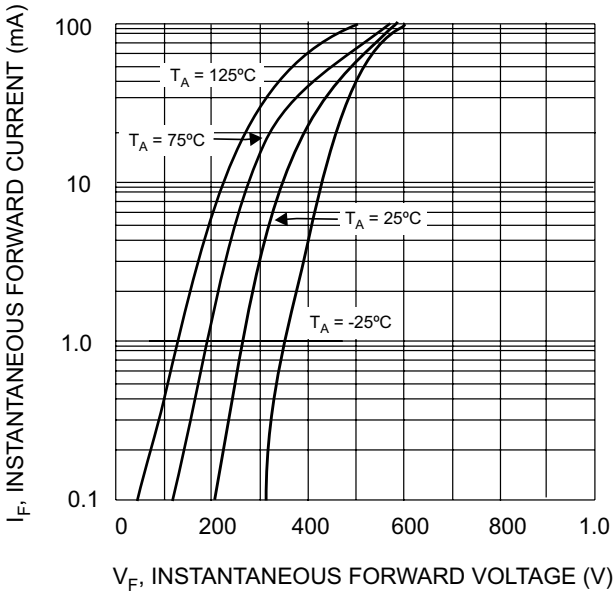

Fig. 2 Typical Forward Characteristics

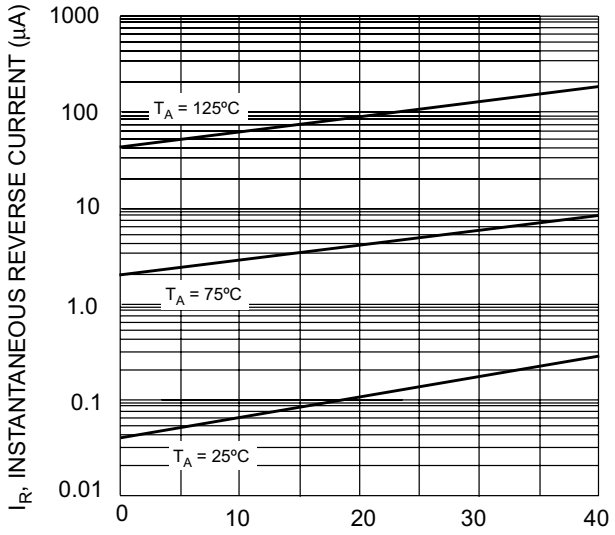

Fig. 3 Typical Reverse Characteristics

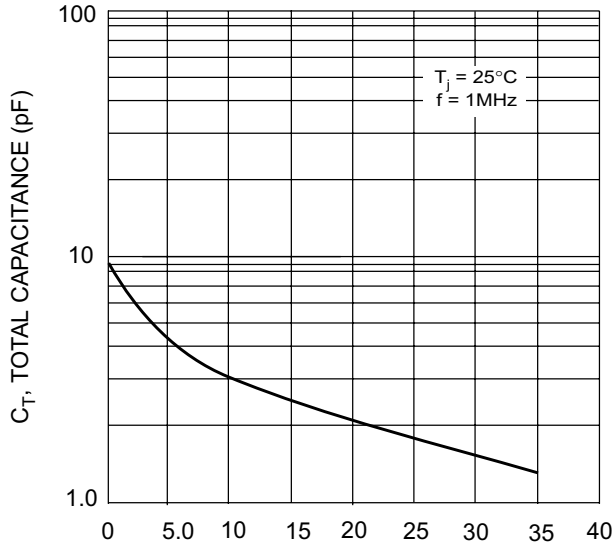

Fig. 4 Total Capacitance vs. Reverse Voltage