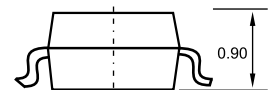
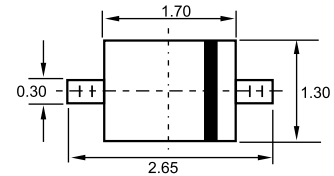




### SOD-323



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.

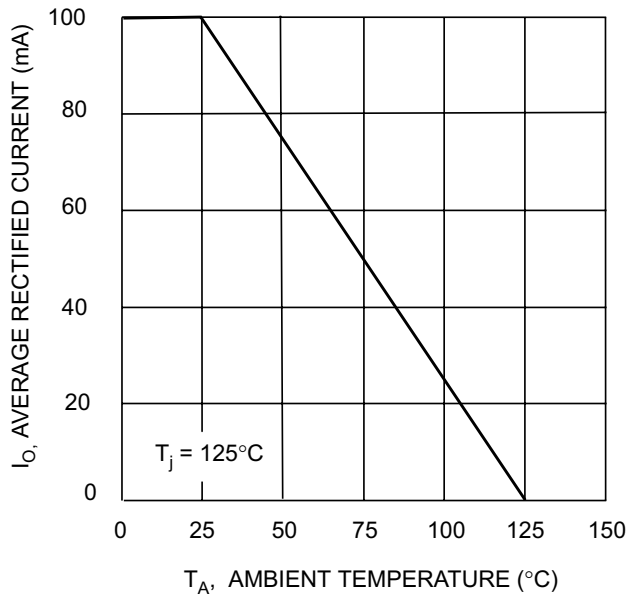
#### Maximum Ratings

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 @ $t \leq 10\text{ms}$	$I_{FSM}$	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

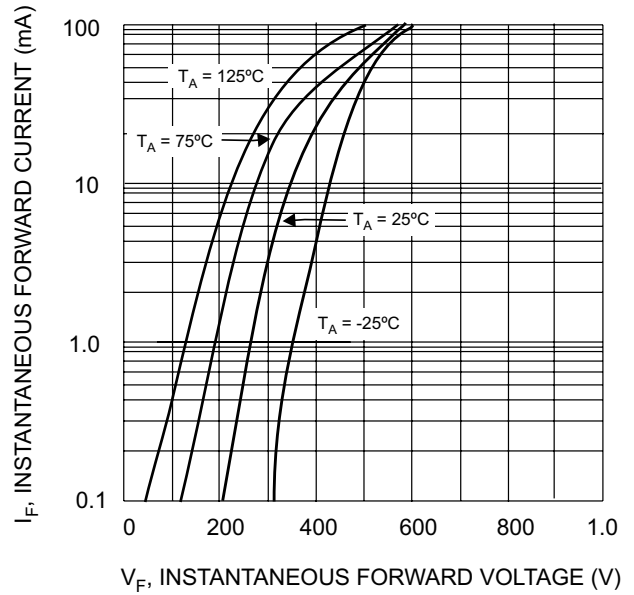
#### Electrical Characteristics

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

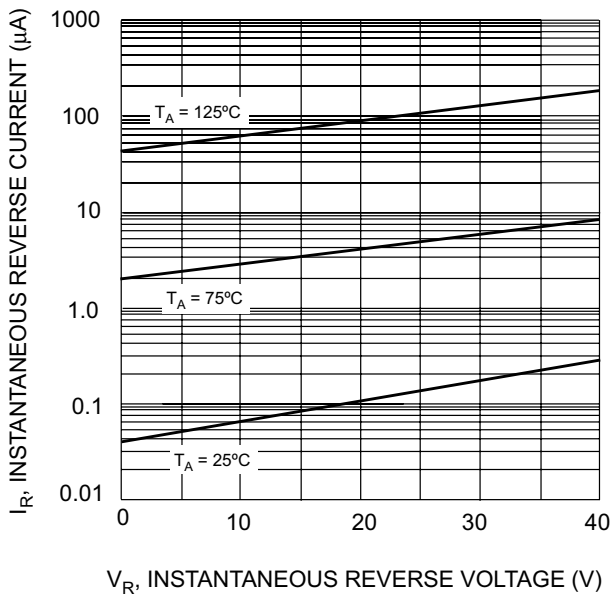
Notes: 1. Short duration test pulse used in minimizing self-heating effect.



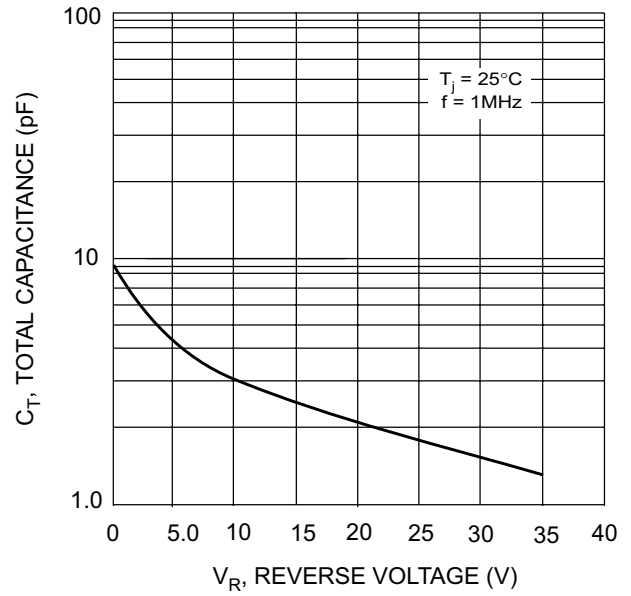
$T_A$ , AMBIENT TEMPERATURE (°C)  
Fig. 1 Forward Current Derating Curve



$V_F$ , INSTANTANEOUS FORWARD VOLTAGE (V)  
Fig. 2 Typical Forward Characteristics



$V_R$ , INSTANTANEOUS REVERSE VOLTAGE (V)  
Fig. 3 Typical Reverse Characteristics



$V_R$ , REVERSE VOLTAGE (V)  
Fig. 4 Total Capacitance vs. Reverse Voltage