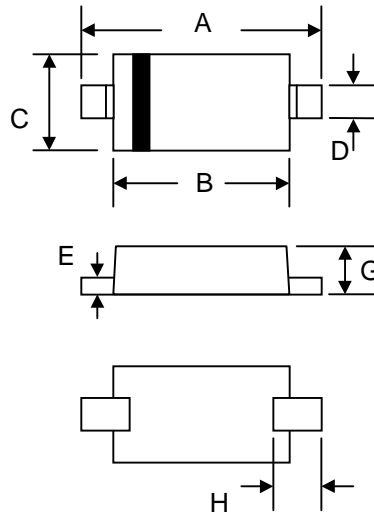


Features

- 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
- Marking Code: SG
- Weight: 0.004 grams (approx.)



SOD-323		
Dim	Min	Max
A	2.30	2.70
B	1.75	1.95
C	1.15	1.35
D	0.25	0.35
E	0.05	0.15
G	0.70	0.95
H	0.30	—
All Dimensions in mm		

Maximum Ratings @ T_A = 25°C unless otherwise specified

Characteristic	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 (Note 1)	I _{FM}	100	mA
Non-Repetitive Peak Forward Surge Current @ t ≤ 10ms	I _{FSM}	750	mA
Power Dissipation (Note 1)	P _d	250	mW
Thermal Resistance, Junction to Ambient Air (Note 1)	R _{θJA}	500	°C/W
Operating and Storage Temperature Range	T _j , T _{STG}	-65 to 150	°C

Electrical Characteristics @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 2)	V _{(BR)R}	30	-	-	V	I _R = 100μA
Forward Voltage Drop (Note 2)	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 2)	I _{RM}	-	-	1.0	μA	V _R = 25V
Total Capacitance	C _T	-	7	-	pF	V _R = 10V f = 1.0 MHz

- Notes: 1. Part mounted on FR-4 PC board with recommended pad layout,
2. Short duration test pulse used in minimizing self-heating effect.

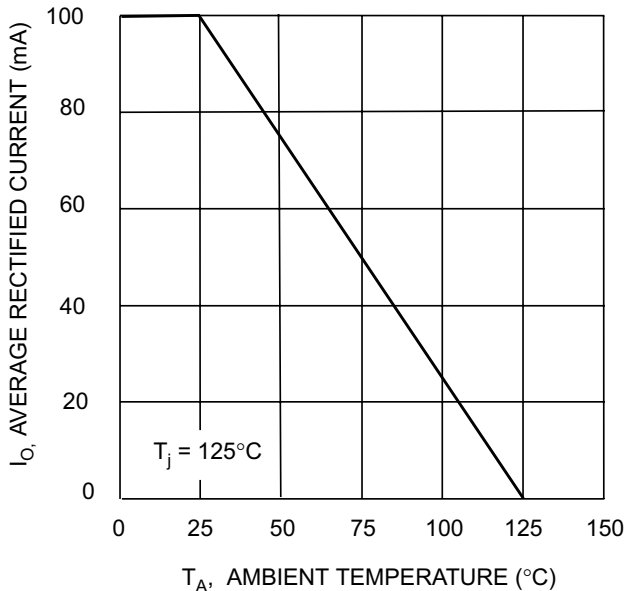


Fig. 1 Forward Current Derating Curve

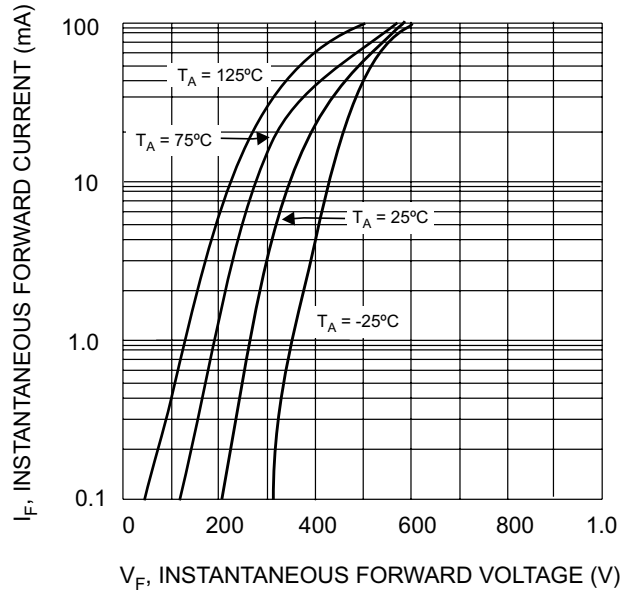


Fig. 2 Typical Forward Characteristics

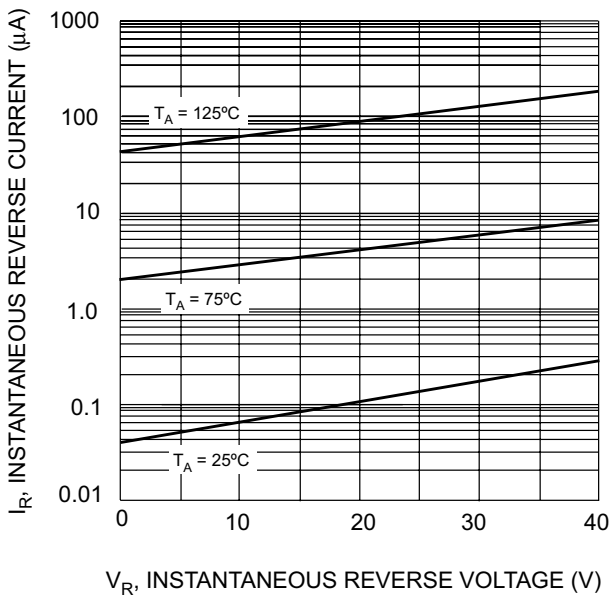


Fig. 3 Typical Reverse Characteristics

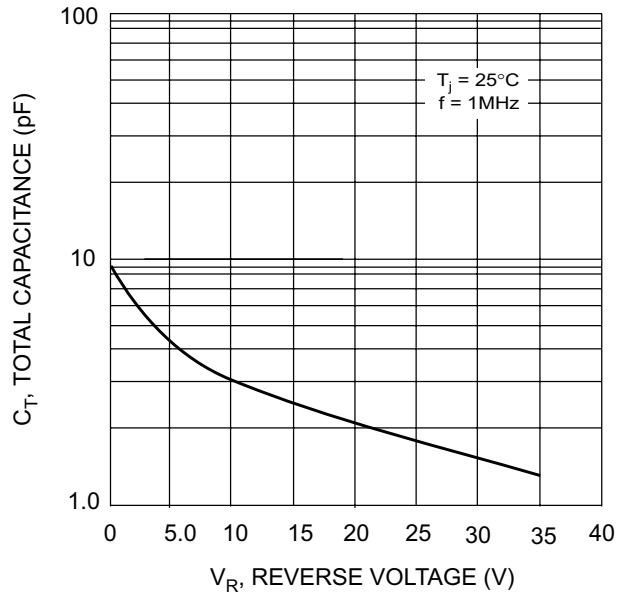


Fig. 4 Total Capacitance vs. Reverse Voltage