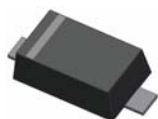


Small Signal Diode

Features

- ✧ Fast switching device ($T_{rr} < 4.0\text{ns}$)
- ✧ Surface device type mounting
- ✧ Moisture sensitivity level 1
- ✧ Matte Tin (Sn) lead finish with Nickel (Ni) underplate
- ✧ Pb free version and RoHS compliant
- ✧ Green compound (Halogen free) with suffix "G" on packing code and prefix "G" on date code

Mechanical Data

- ✧ Case : Flat lead SOD-123 small outline plastic package
- ✧ Terminal: Matte tin plated, lead free., solderable per MIL-STD-202, Method 208 guaranteed
- ✧ High temperature soldering guaranteed: 260 °C/10s
- ✧ Polarity : Indicated by cathode band
- ✧ Weight : 8.85±0.5 mg

Ordering Information

Part No.	Package	Packing
1NxxxxW RH	SOD-123F	3Kpcs / 7" Reel

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Maximum Ratings

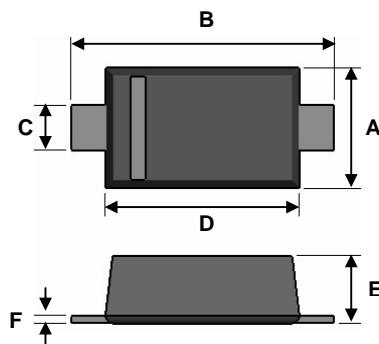
Type Number	Symbol	Value	Units
Power Dissipation	P_D	400	mW
Non-Repetitive Peak Reverse Voltage	V_{RSM}	100	V
Repetitive Peak Reverse Voltage	V_{RRM}	75	V
Repetitive Peak Forward Current	I_{FRM}	300	mA
Mean Forward Current	I_o	150	mA
Thermal Resistance (Junction to Ambient) (Note 1)	$R_{\theta JA}$	450	°C/W
Junction and Storage Temperature Range	T_J, T_{STG}	-65 to +150	°C

Electrical Characteristics

Type Number	Symbol	Min	Max	Units
Reverse Breakdown Voltage $I_R=100\mu\text{A}$ $I_R=5\mu\text{A}$	$V_{(BR)}$	100 75		V
Forward Voltage 1N4448W, 1N914BW 1N4148W 1N4448W, 1N914BW	V_F	0.62	0.72 1.0 1.0	V
Reverse Leakage Current $V_R=20\text{V}$ $V_R=75\text{V}$	I_R		25 5.0	nA μA
Junction Capacitance $V_R=0, f=1.0\text{MHz}$	C_J		4.0	pF
Reverse Recovery Time (Note 2)	T_{rr}		4.0	ns

Notes:1. Valid provided that electrodes are kept at ambient temperature

Notes:2. Reverse Recovery Test Conditions: $I_F=10\text{mA}$, $I_R=60\text{mA}$, $R_L=100\Omega$, $I_{RR}=1\text{mA}$

SOD-123F


Dimensions	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	1.5	1.7	0.059	0.067
B	3.3	3.7	0.130	0.146
C	0.5	0.7	0.020	0.028
D	2.5	2.7	0.098	0.106
E	0.8	1.0	0.031	0.039
F	0.05	0.2	0.002	0.008

Small Signal Diode

Rating and Sharacteristic Curves

FIG 1 Typical Forward Characteristics

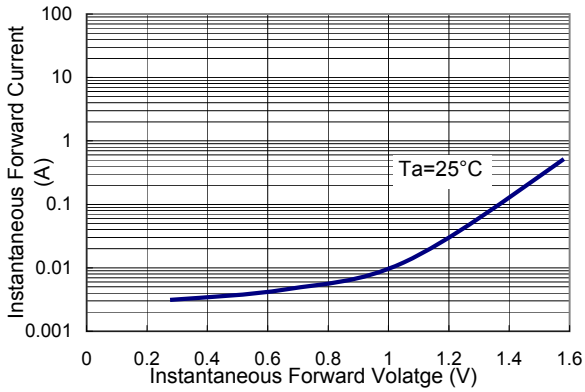


FIG 2 Reverse Current vs Reverse Voltage

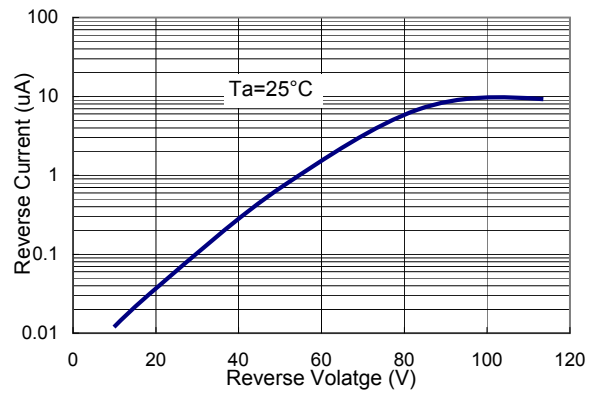


FIG 3 Admissible Power Dissipation Curve

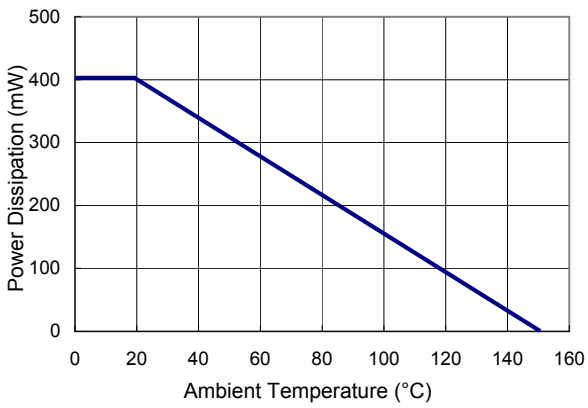


FIG 4 Typical Junction Capacitance

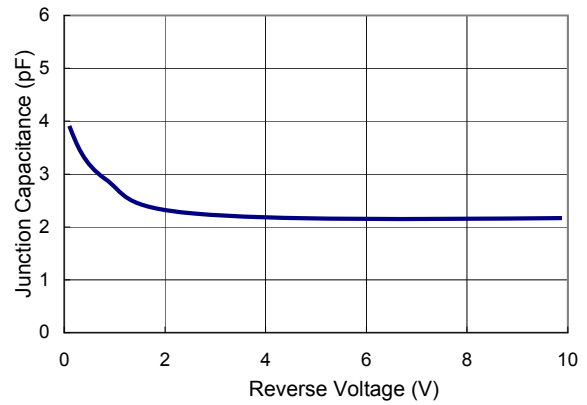


FIG 5 Forward Resistance vs. Forward Current

