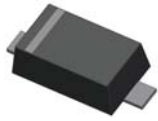


Small Signal Diode

Features

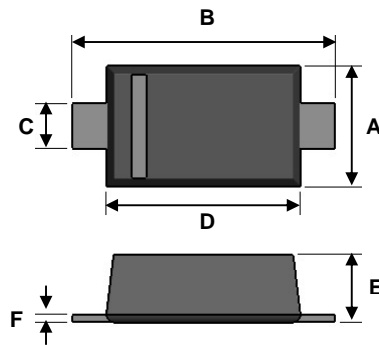
- ✧ Low power loss, high current capability, low V_F
- ✧ Surface device type mounting
- ✧ Moisture sensitivity level 1
- ✧ Matte Tin(Sn) lead finish
- ✧ Pb free version and RoHS compliant
- ✧ Green compound (Halogen free) with suffix "G" on packing code and prefix "G" on date code

Mechanical Data

- ✧ Case : Flat lead SOD-323 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 : 4.85±0.5 mg

Ordering Information

Part No.	Package	Packing
B0530WS RR	SOD-323F	3Kpcs/ 7" Reel

SOD-323F


Dimensions	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	1.15	1.35	0.045	0.053
B	2.30	2.70	0.091	0.106
C	0.25	0.40	0.010	0.016
D	1.60	1.80	0.063	0.071
E	0.80	1.00	0.031	0.039
F	0.05	0.20	0.002	0.008

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	200	mW
Repetitive Peak Reverse Voltage	V_{RRM}	30	V
Mean Forward Current	I_o	500	mA
Non-Repetitive Peak Forward Surge Current Pulse Width= 8.3 mS (Singal Half -wave)	I_{FSM}	5.0	A
Thermal Resistance (Junction to Ambient) (Note 1)	$R\theta_{JA}$	426	°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	$I_R= 500\mu A$ $V_{(BR)}$	30	-	V
Forward Voltage	$I_F= 100mA$ V_F	-	0.36	V
	$I_F= 500mA$ V_F	-	0.47	
Reverse Leakage Current	$V_R= 15V$ I_R	-	80	uA
	$V_R= 20V$ I_R	-	100	
	$V_R= 30V$ I_R	-	500	
Junction Capacitance	$V_R=0, f=1.0MHz$ C_J	-	58.0	pF

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

Small Signal Diode

Rating and Sharacteristic Curves

FIG 1 Typical Forward Characteristics

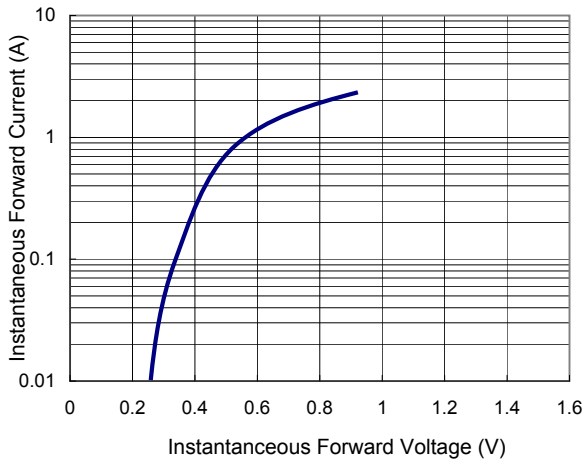


FIG 2 Forward Current Derating Curve

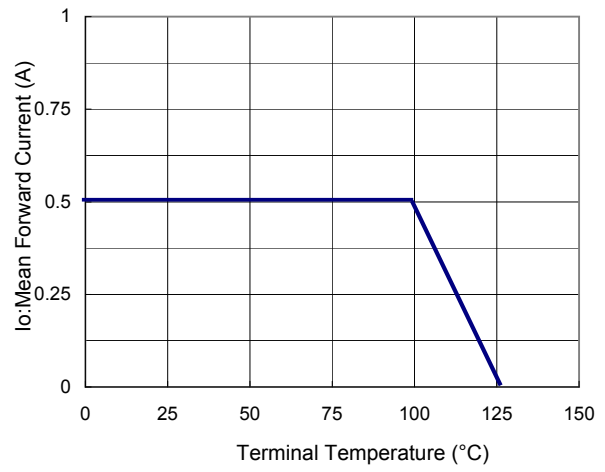


FIG 3 Admissible Power Dissipation Curve

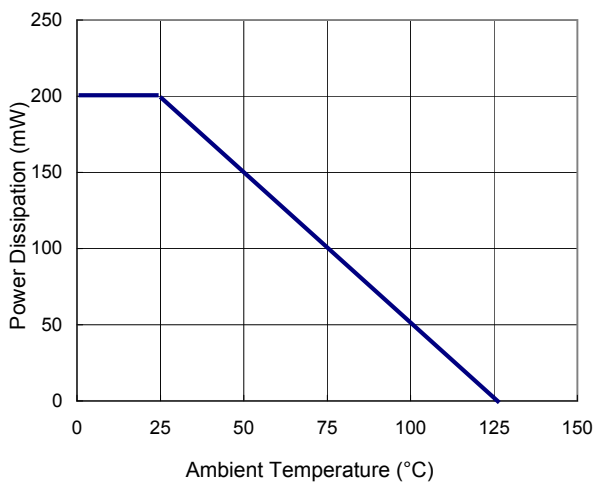


FIG 4 Typical Junction Capacitance

