

Small Signal Product

200mW High Voltage SMD Switching Diode

FEATURES

- Fast switching device ($t_{rr} < 4.0\text{ns}$)
- Surface mount device type
- Moisture sensitivity level 1
- Matte Tin (Sn) lead finish
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21


SOD-323

MECHANICAL DATA

- Case: Bend 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 : $260^{\circ}\text{C}/10\text{s}$
- Polarity: Indicated by cathode band
- Weight: $4.85 \pm 0.5 \text{ mg}$


MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS ($T_A = 25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNITS
Power dissipation	P_D	200	mW
Mean forward current	I_O	250	mA
Non-repetitive peak forward current Pulse Width = 1 μsec Pulse Width = 1 msec	I_{FRM}	4.0	A
		1.0	
Junction and storage temperature range	T_J, T_{STG}	-65 to + 150	$^{\circ}\text{C}$

PARAMETER	SYMBOL	MIN	MAX	UNITS	
Reverse Breakdown Voltage	$V_{(BR)}$	100	-	V	
Forward Voltage	V_F	$I_F = 1.0 \text{ mA}$	-	0.715	V
		$I_F = 10 \text{ mA}$	-	0.855	
		$I_F = 50 \text{ mA}$	-	1.000	
		$I_F = 150 \text{ mA}$	-	1.250	
Reverse Leakage Voltage	I_R	$V_R = 75 \text{ V}$	-	1.00	μA
		$V_R = 25 \text{ V}$	-	0.03	
Junction Capacitance	C_J	-	1.5	pF	
Reverse Recovery Time	t_{rr}	-	4	ns	

Small Signal Product

RATINGS AND CHARACTERISTICS CURVES

($T_A=25^\circ\text{C}$ unless otherwise noted)

Fig. 1 Typical Forward Characteristics

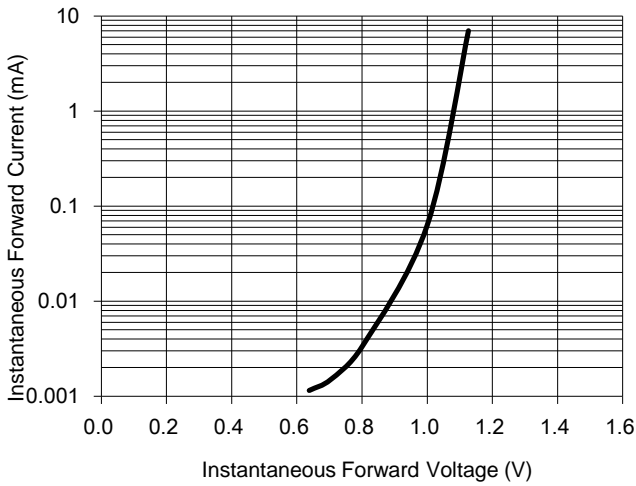


Fig. 2 Reverse Current VS. Reverse Voltage

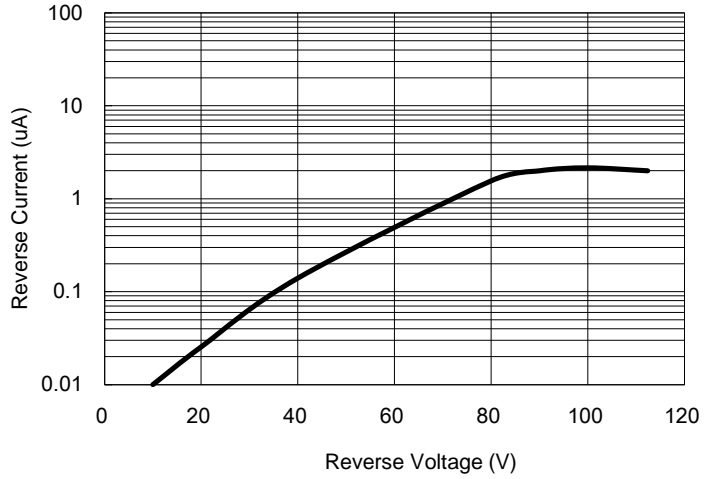


Fig. 3 Admissible Power Dissipation

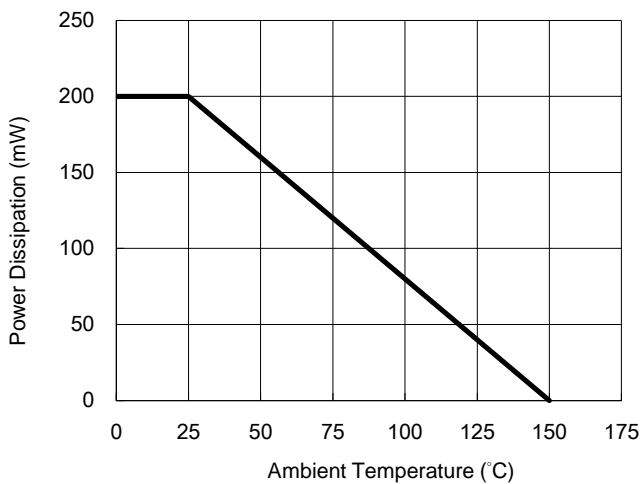
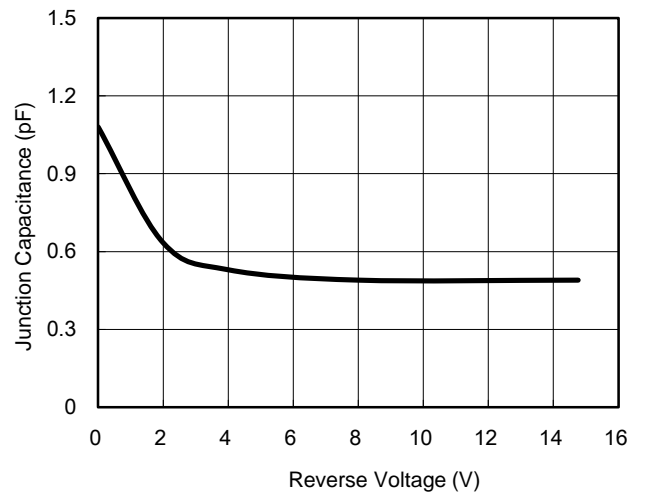


Fig. 4 Typical Junction Capacitance

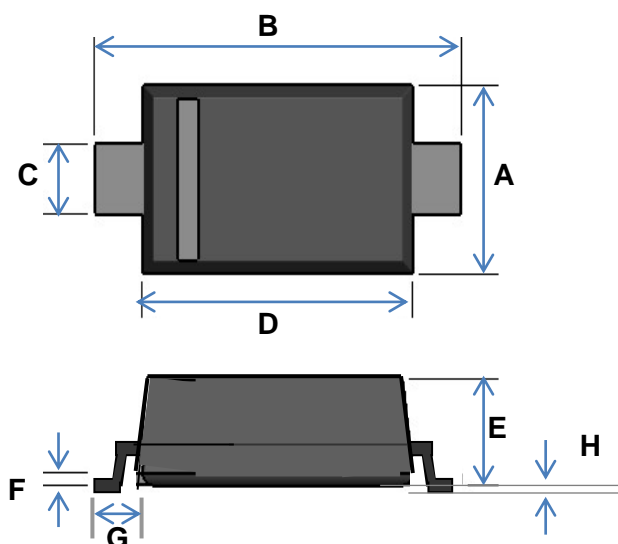


Small Signal Product

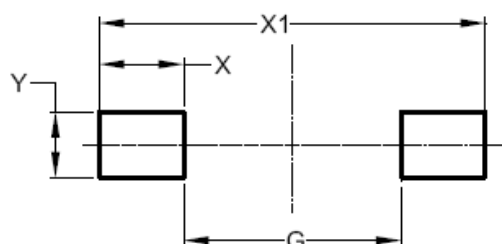
ORDERING INFORMATION				
PART NO.	PACKING CODE	PACKING CODE SUFFIX	PACKAGE	PACKING
BAS316 (Note 1)	RR	G	SOD-323	3K / 7" Reel

Note 1: Whole series with green compound

EXAMPLE				
EXAMPLE PART NO.	PART NO.	PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION
BAS316 RRG	BAS316	RR	G	Green compound

DIMENSIONS


DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	1.150	1.400	0.045	0.055
B	2.300	2.700	0.091	0.106
C	0.250	0.450	0.010	0.018
D	1.600	1.800	0.063	0.071
E	0.800	1.000	0.031	0.039
F	0.050	0.177	0.002	0.007
G	0.475 REF		0.019 REF	
H	-	0.100	-	0.004

SUGGESTED PAD LAYOUT


DIM.	Unit (mm)	Unit (inch)
	Min	Min
G	1.52	0.060
X	0.59	0.023
X1	2.70	0.106
Y	0.45	0.018

Small Signal Product

Notice

Specifications of the products displayed herein are subject to change without notice. TSC or anyone on its behalf assumes no responsibility or liability for any errors or inaccuracies.

Information contained herein is intended to provide a product description only. No license, express or implied, to any intellectual property rights is granted by this document. Except as provided in TSC's terms and conditions of sale for such products, TSC assumes no liability whatsoever, and disclaims any express or implied warranty, relating to sale and/or use of TSC products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright, or other intellectual property right.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify TSC for any damages resulting from such improper use or sale.