

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	

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RATINGS AND CHARACTERISTICS CURVES

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

Fig. 1 Typical Forward Characteristics

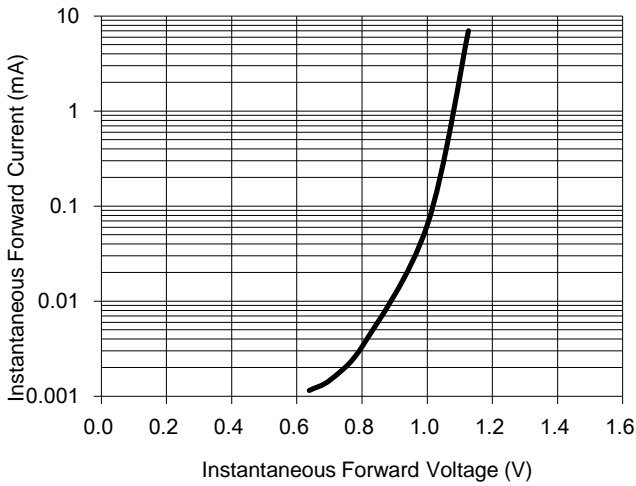


Fig. 2 Reverse Current VS. Reverse Voltage

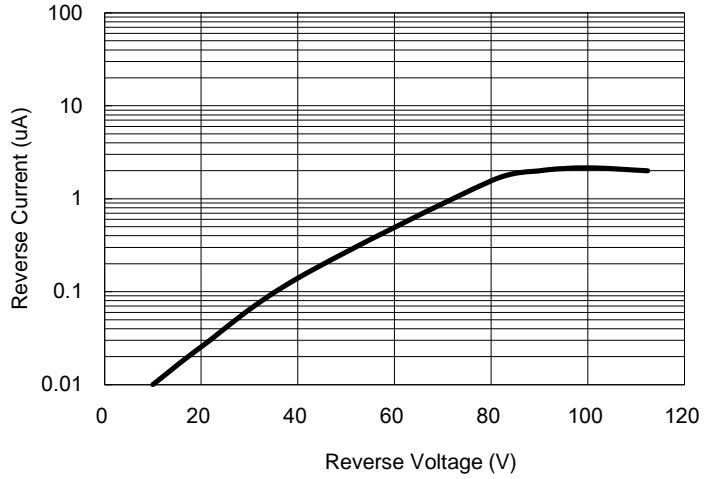


Fig. 3 Admissible Power Dissipation

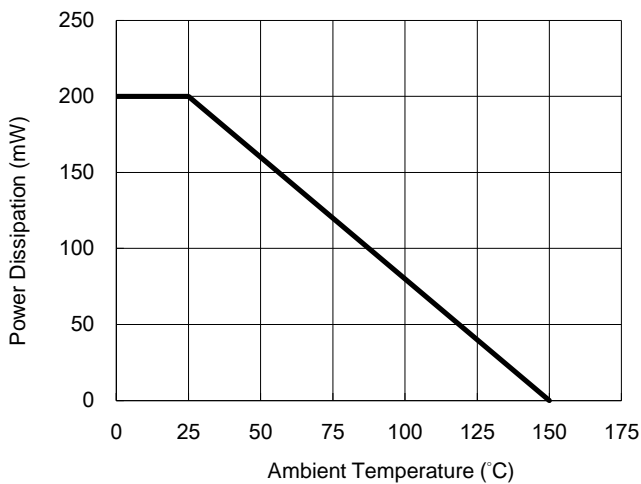
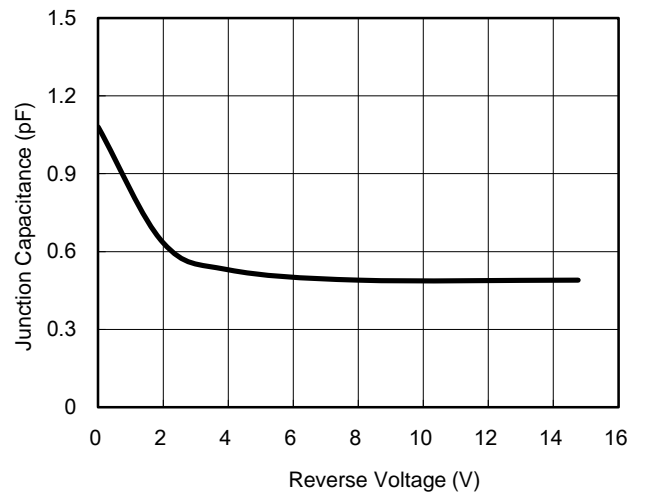


Fig. 4 Typical Junction Capacitance

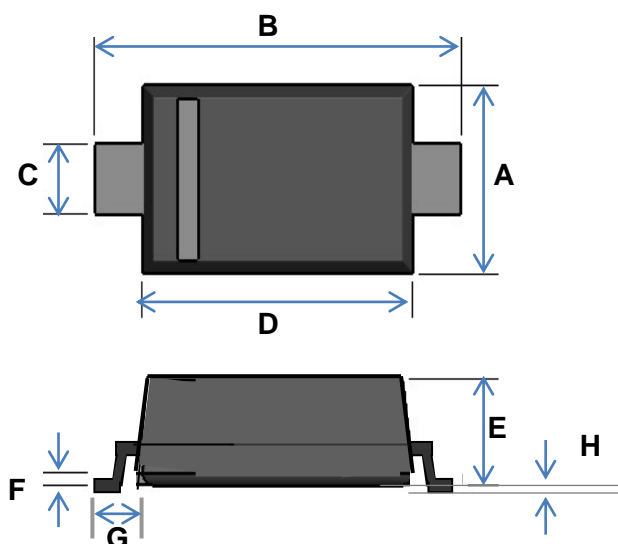


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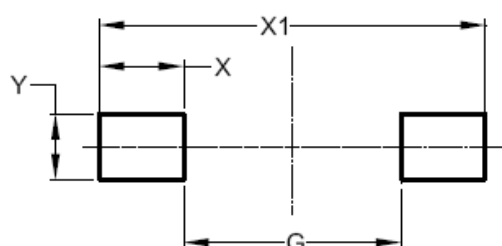
ORDERING INFORMATION				
PART NO.	PACKING CODE	PACKING CODE SUFFIX	PACKAGE	PACKING
BAS316 (Note 1)	RR	G	SOD-323	3K / 7" Reel

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	Min	Min
G	1.52		0.060	
X	0.59		0.023	
X1	2.70		0.106	
Y	0.45		0.018	

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