



# DATA SHEET

## BAS19W~BAS21W

### SURFACE MOUNT SWITCHING DIODES

**VOLTAGE** 120-250 Volts      **POWER** 200mWatts

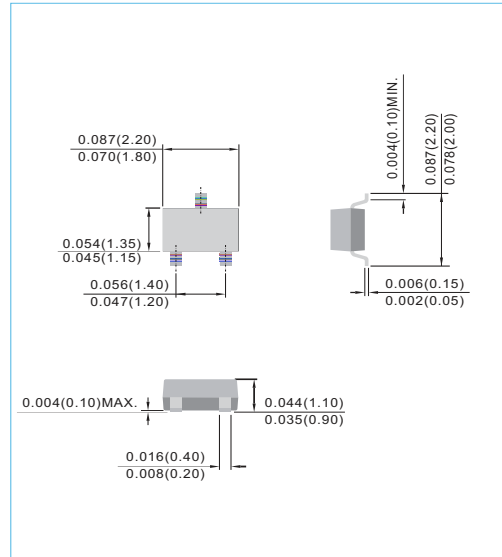
**SOT-323**      Unit : inch(mm)

#### FEATURES

- Fast switching speed.
- Surface mount package Ideally Suited for Automatic insertion
- Electrically Identical to Standard JEDEC
- High Conductance
- Lead free in comply with EU RoHS 2002/95/EC directives.
- Green molding compound as per IEC 61249 Std. . (Halogen Free)

#### MECHANICAL DATA

Case: SOT-323, Plastic  
Terminals: Solderable per MIL-STD-750, Method 2026  
Approx. Weight: 0.0002 ounces, 0.005 grams



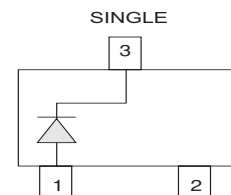
### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

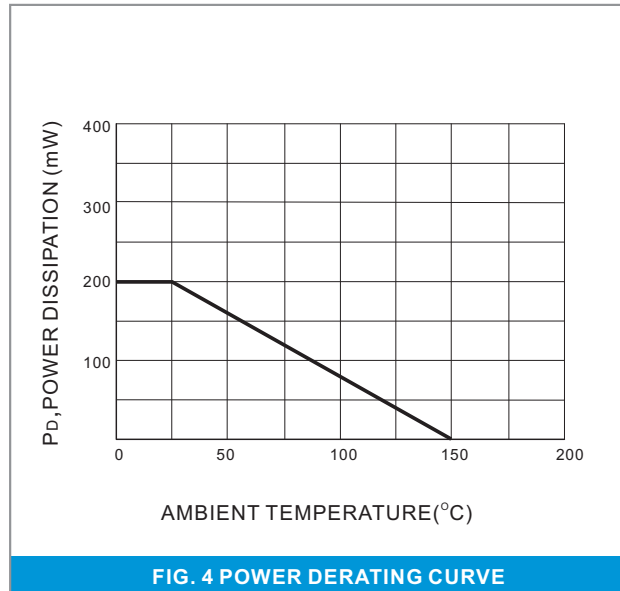
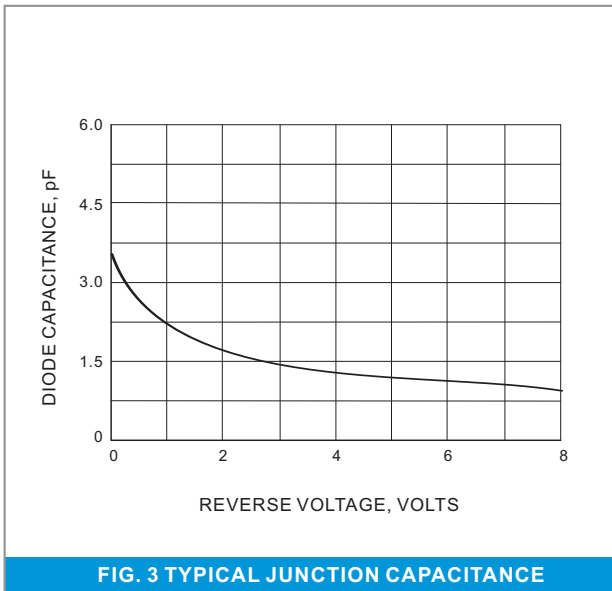
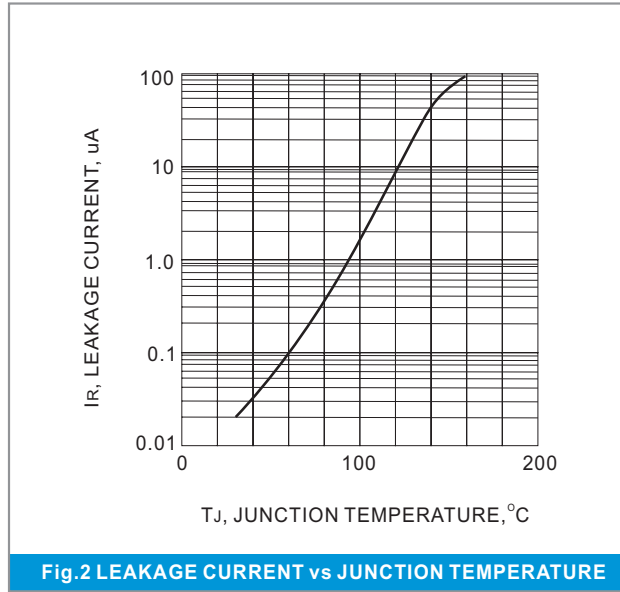
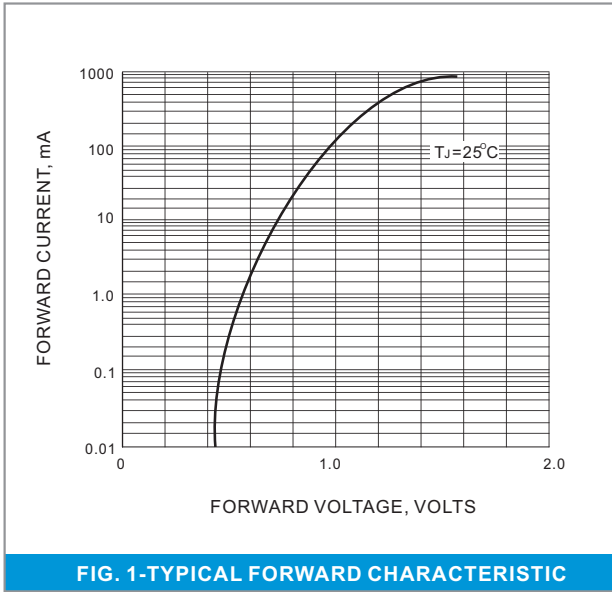
Ratings at 25°C ambient temperature unless otherwise specified. For capacitive load, derate current by 20%.

PARAMETER	SYMBOL	BAS19W	BAS20W	BAS21W	UNITS
Marking Code		A 8	A 80	A 82	
Reverse Voltage	$V_R$	100	150	200	V
Peak Reverse Voltage	$V_{RM}$	120	200	250	V
Rectified Current (Average), Half Wave Rectification with Resistive Load and $f >= 50$ Hz	$I_D$	200			mA
Peak Forward Surge Current, 1.0us	$I_{FSM}$	4.0			A
Power Dissipation Derate Above 25°C	$P_{TOT}$	200			mW
Maximum Forward Voltage at 0.1A	$V_F$	1.0			V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_J = 25^\circ C$	$I_R$	0.1			uA
Typical Junction Capacitance (Notes1)	$C_J$	5.0			pF
Maximum Reverse Recovery (Notes2)	$T_{RR}$	50			ns
Typical Thermal Resistance	$R_{\theta JA}$	625			°C / W
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150			°C

**NOTE:**

1.  $C_J$  at  $V_R=0, f=1MHz$
2. From  $I_F=10mA$  to  $I_R=1mA, V_R=6Volts, R_L=100\Omega$



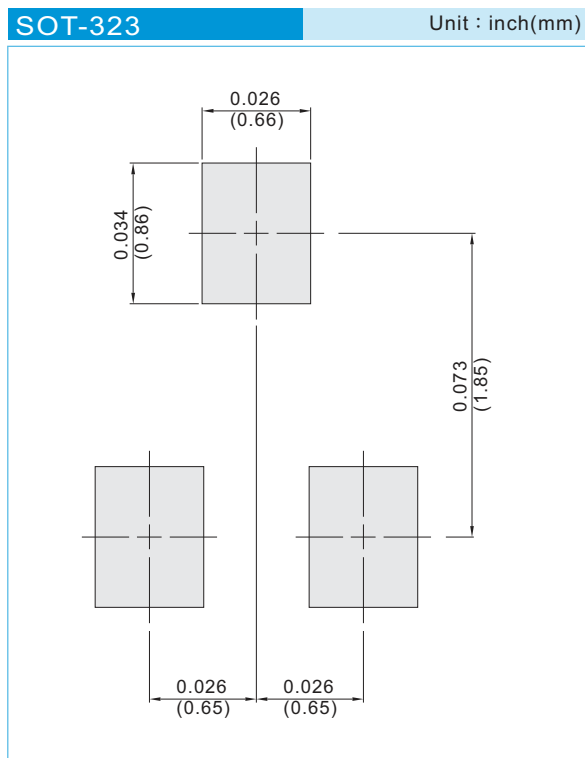





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## MOUNTING PAD LAYOUT

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## ORDER INFORMATION

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- Packing information
  - T/R - 12K per 13" plastic Reel
  - T/R - 3K per 7" plastic Reel

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## LEGAL STATEMENT

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