

DATA SHEET

BAS19W~BAS21W

SURFACE MOUNT SWITCHING DIODES

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

SOT-323 Unit : inch(mm)

FEATURES

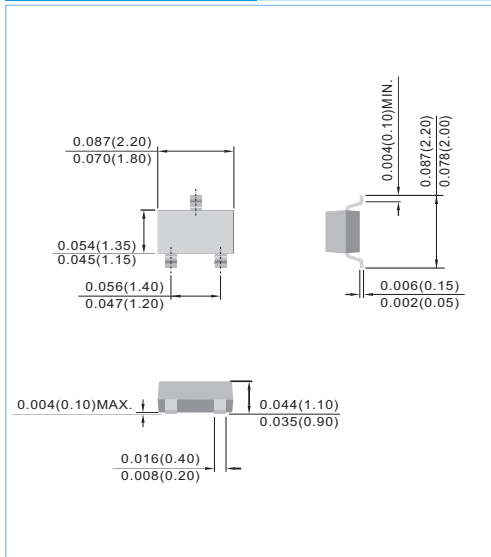
- Fast switching speed.
 - Surface mount package Ideally Suited for Automatic insertion
 - Electrically Identical to Standard JEDEC
 - High Conductance
 - Lead free in comply with EU RoHS 2002/95/EC directives.
- Green molding compound as per IEC61249 Std. . (Halogen Free)

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

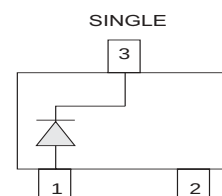
Ratings at 25°C ambient temperature unless otherwise specified. For capacitive load, derate current by 20%.

PARAMETER	SYMBOL	BAS19W	BAS20W	BAS21W	UNITS
Marking Code		A8	A80	A82	
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 $f \geq 50$ 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 $T_J = 25^\circ\text{C}$	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 $V_R=0$, $f=1\text{MHz}$

2. From $I_F=10\text{mA}$ to $I_R=1\text{mA}$, $V_R=6\text{Volts}$, $R_L=100\Omega$



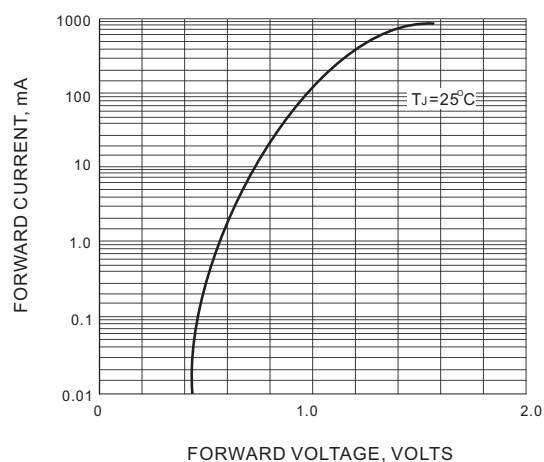


FIG. 1-TYPICAL FORWARD CHARACTERISTIC

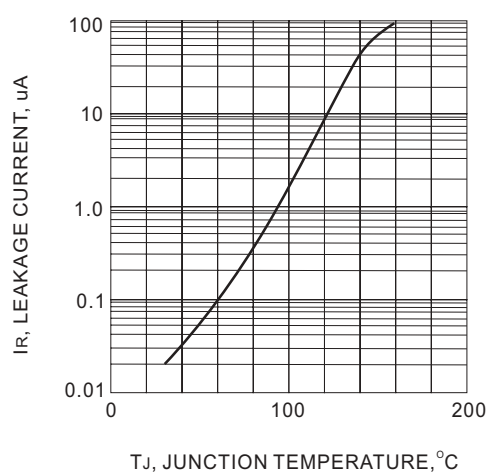


Fig.2 LEAKAGE CURRENT vs JUNCTION TEMPERATURE

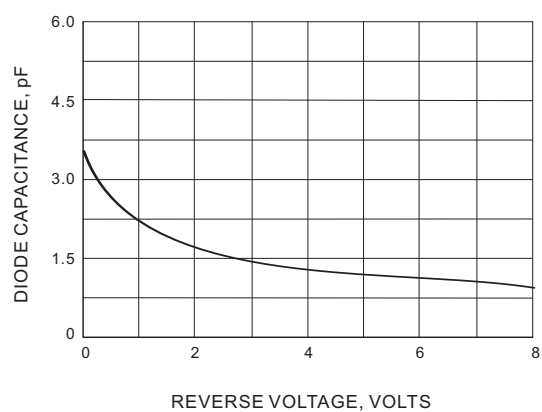


FIG. 3 TYPICAL JUNCTION CAPACITANCE

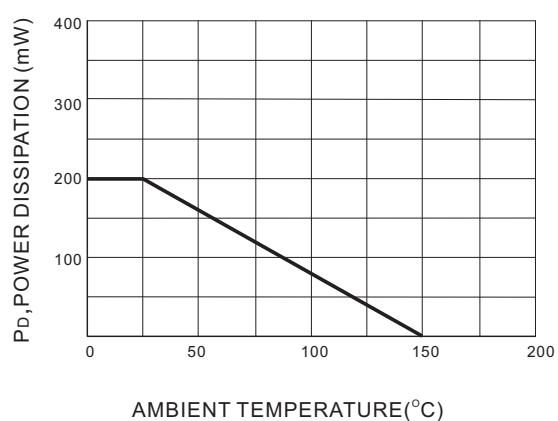
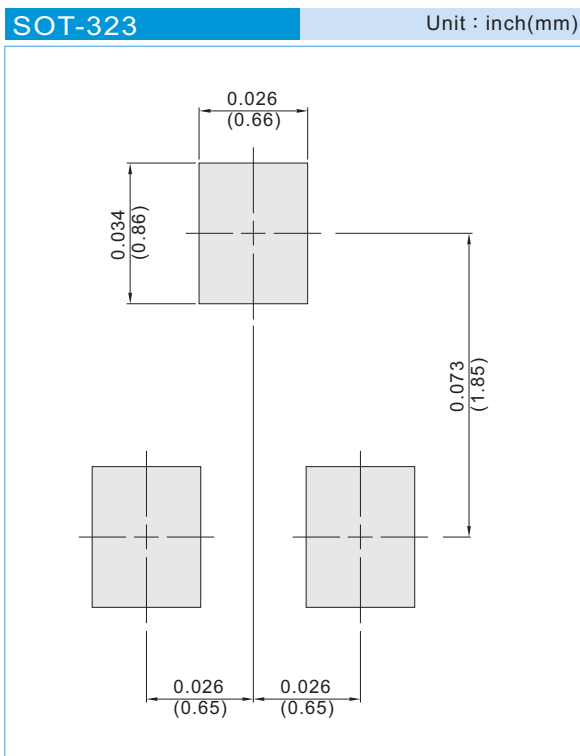


FIG. 4 POWER DERATING CURVE

MOUNTING PAD LAYOUT



ORDER INFORMATION

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

LEGAL STATEMENT

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