

Features

- Low Turn-on Voltage
- Fast Switching
- Ultra-Small Surface Mount Package
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Halogen Free. "Green" Device (Note 1)
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)
- AEC-Q101 Qualified

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +125°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance(Note2): 500°C/W Junction to Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
BAS70WTHE3	K73.	70V	49V	70V
BAS70WT-04HE3	K74.	70V	49V	70V
BAS70WT-05HE3	K75.	70V	49V	70V
BAS70WT-06HE3	K76.	70V	49V	70V

Electrical Characteristics @ 25°C Unless Otherwise Specified

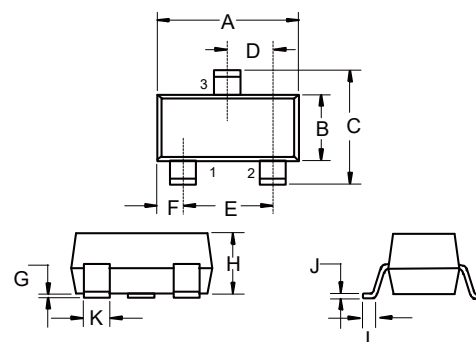
Average Forward Current	$I_{F(AV)}$	70mA	$T_A = 25^\circ\text{C}$
Non-repetitive Peak Forward surge current	I_{FSM}	100mA	$t = 8.3\text{ms}$
Power Dissipation	P_d	200mW	$T_A = 25^\circ\text{C}$
Maximum Forward Voltage	V_F	410mV 1000mV	$I_F = 1.0\text{mA}$ $I_F = 15\text{mA}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	0.2μA	$V_R = 50\text{V}$
Minimum Reverse Breakdown Voltage	$V_{(BR)}$	70V	$I_R = 10\mu\text{A}$
Junction Capacitance	C_J	4.0pF	Measured at 1.0MHz, $V_R = 0\text{V}$
Reverse Recovery Time	t_{rr}	5.0ns	$I_F = I_R = 10\text{mA}$, $I_{rr} = 0.1 \times I_R$, $R_L = 100\Omega$

Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

Note: 2. Part mounted on FR-4 board with recommended pad layout.

200mW, 70V Schottky Barrier Diode

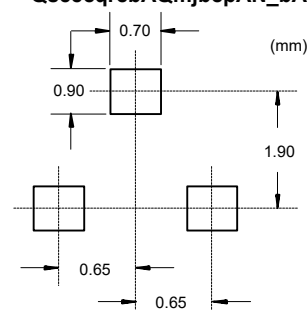
SOT-323



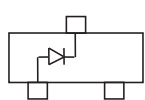
DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.071	0.087	1.80	2.20	
B	0.045	0.053	1.15	1.35	
C	0.083	0.096	2.10	2.45	
D	0.026	0.026	0.65	0.65	TYP.
E	0.047	0.055	1.20	1.40	
F	0.012	0.016	0.30	0.40	
G	0.000	0.004	0.00	0.10	
H	0.035	0.044	0.90	1.10	
J	0.002	0.010	0.05	0.25	
K	0.006	0.016	0.15	0.40	
L	0.010	0.018	0.26	0.46	

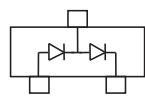
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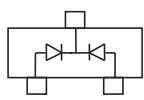
Internal Structure and Marking Code



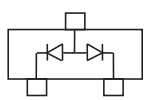
BAS70WTHE3



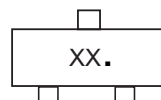
BAS70WT-04HE3



BAS70WT-05HE3



BAS70WT-06HE3



XX: Device Code

Curve Characteristics

Fig. 1 - Typical Instantaneous Forward Characteristics

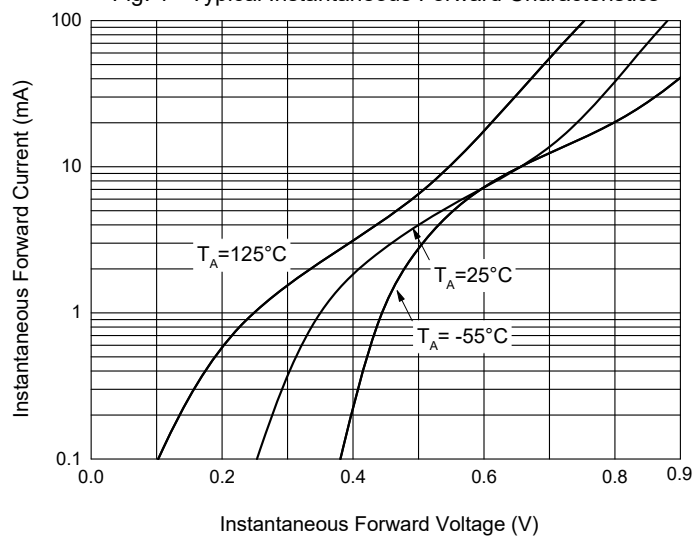


Fig. 2 - Typical Reverse Leakage Characteristics

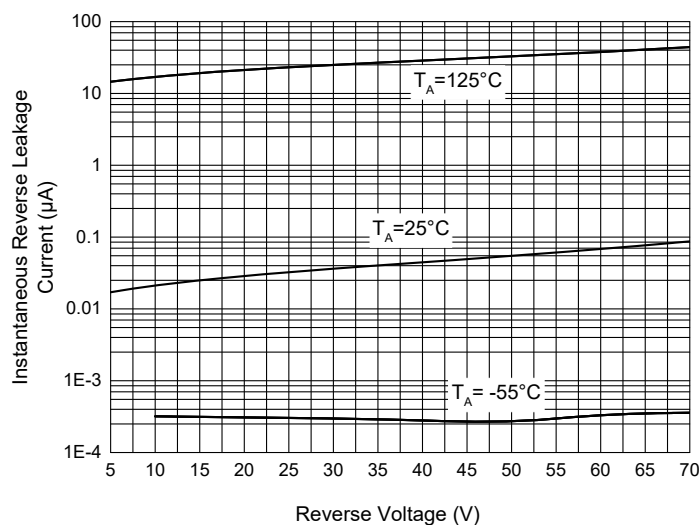


Fig. 3 - Capacitance Characteristics

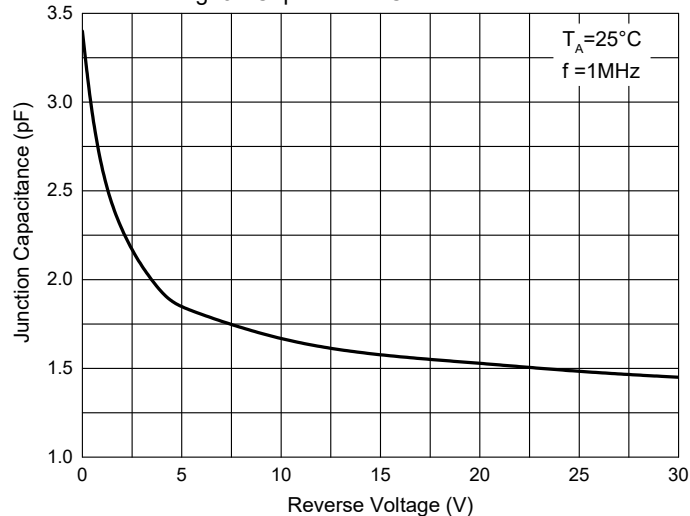
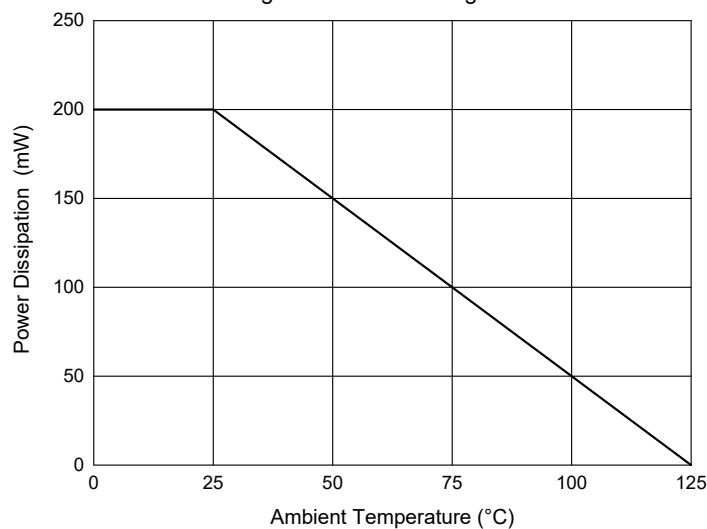


Fig. 4 - Power Derating Curve



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

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