

Features

- 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)

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 625°C/W Junction to Ambient

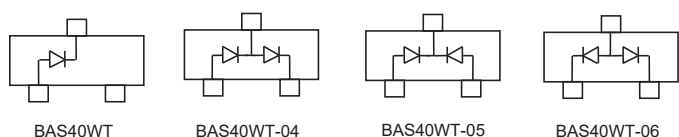
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum DC Blocking Voltage
BAS40WT	43	40V	40V
BAS40WT-04	44	40V	40V
BAS40WT-05	45	40V	40V
BAS40WT-06	46	40V	40V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	200mA	25°C
Peak Forward Surge Current	I_{FSM}	600mA	t<1s
Power Dissipation	P_d	200mW	$T_A = 25^\circ C$
Maximum Forward Voltage	V_F	380mV 1000mV	$I_F = 1.0mA$ $I_F = 40mA$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	1μA	$V_R = 30V$
Reverse Breakdown Voltage	$V_{(BR)}$	40V	$I_R = 10\mu A$
Typical Junction Capacitance	C_d	5.0pF	Measured at 1.0MHz, $V_R = 0V$
Reverse Recovery Time	t_{rr}	5.0ns	$I_{rr} = 1mA$, $I_R = I_F = 10mA$ $R_L = 100\Omega$

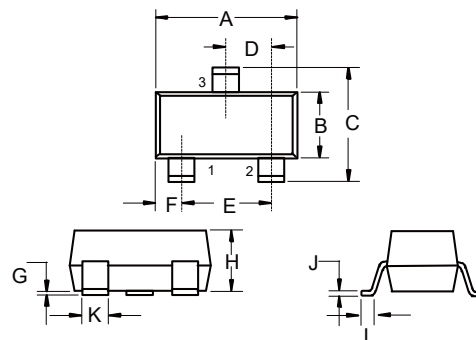
Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

Internal Structure:



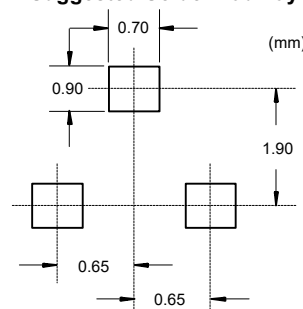
200mW, 40V Schottky Barrier Diode

SOT-323



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	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		0.65		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	

Suggested Solder Pad Layout



Curve Characteristics

Fig. 1 - Typical Instantaneous Forward Characteristics

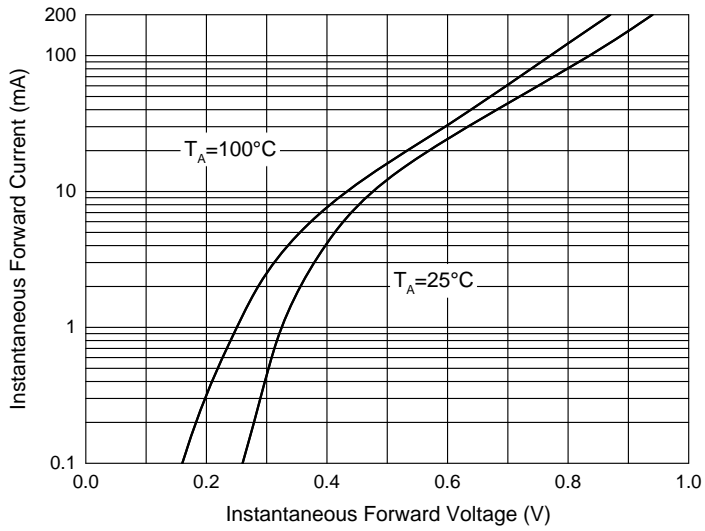


Fig. 2 - Typical Reverse Leakage Characteristics

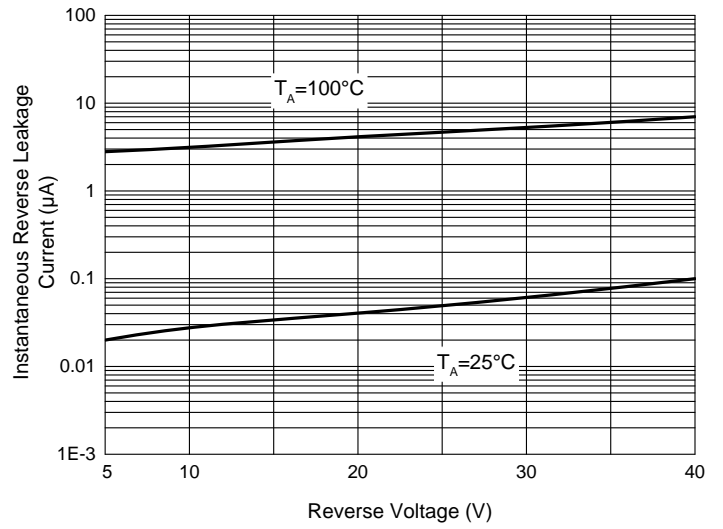
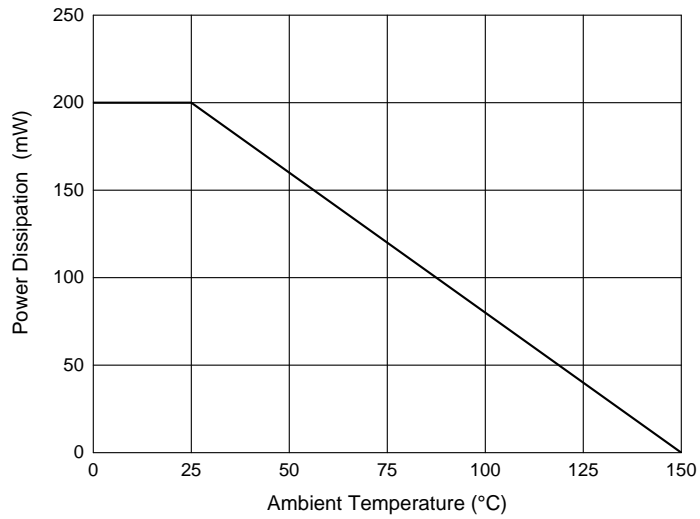


Fig. 3 - Power Derating Curve



Ordering Information

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

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