

## Features

- Ultra-Small Surface Mount Package
- Low turn on Voltage
- Fast Switching
- PN Junction Guard Ring for Transient and ESD Protection
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Halogen Free. "Green" Device (Note 1)

## Maximum Ratings

- Operating Junction Temperature Range: -55°C to +125°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 667°C/W Junction to Ambient

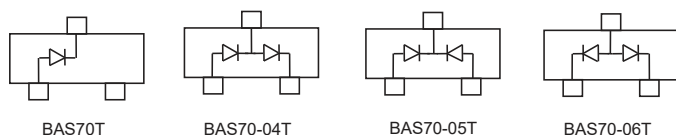
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum DC Blocking Voltage
BAS70T	7C	70V	70V
BAS70-04T	7D	70V	70V
BAS70-05T	7E	70V	70V
BAS70-06T	7F	70V	70V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	70mA	
Power Dissipation	$P_d$	150mW	$T_A = 25^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	100mA	$t < 1\text{s}$
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	$I_R$	0.1µA	$V_R = 50\text{V}$
Maximum Reverse Breakdown Voltage	$V_{(BR)}$	>70V	$I_R = 10\mu\text{A}$
Maximum Total Capacitance	$C_T$	2.0pF	Measured at 1.0MHz, $V_R = 0\text{V}$
Maximum Reverse Recovery Time	$t_{rr}$	5.0ns	$I_F = I_R = 10\text{mA}$ , $I_{rr} = 1\text{mA}, R_L = 100\Omega$

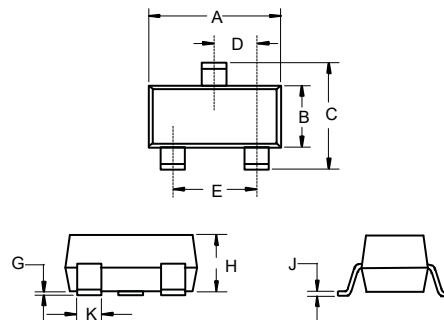
Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

## Internal Structure:



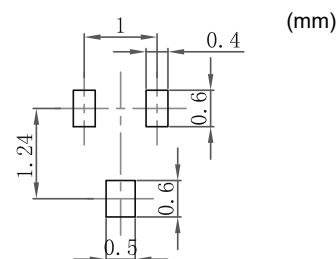
# 150mW, 70V Schottky Barrier Diode

## SOT-523



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.059	0.067	1.50	1.70	
B	0.030	0.033	0.75	0.85	
C	0.057	0.069	1.45	1.75	
D	0.020 Nominal		0.50 Nominal		
E	0.035	0.043	0.90	1.10	
G	0.000	0.004	0.00	0.10	
H	0.024	0.031	0.60	0.80	
J	0.004	0.008	0.10	0.20	
K	0.006	0.014	0.15	0.35	

## Suggested Solder Pad Layout



## Curve Characteristics

Fig. 1 - Typical Instantaneous Forward Characteristics

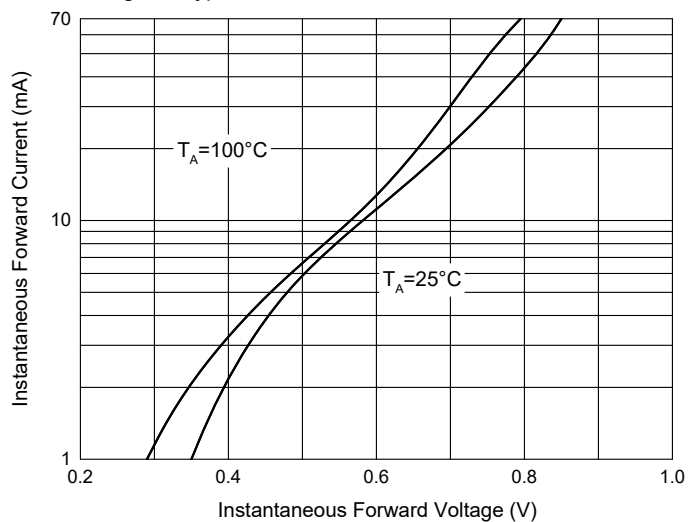


Fig. 2 - Typical Reverse Leakage Characteristics

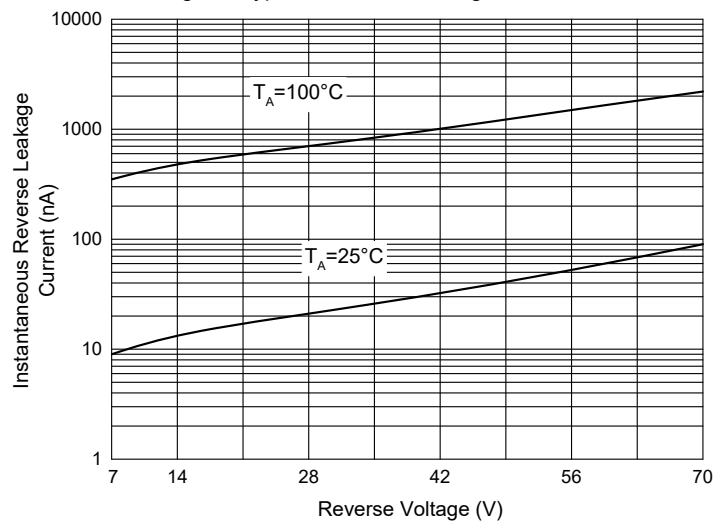
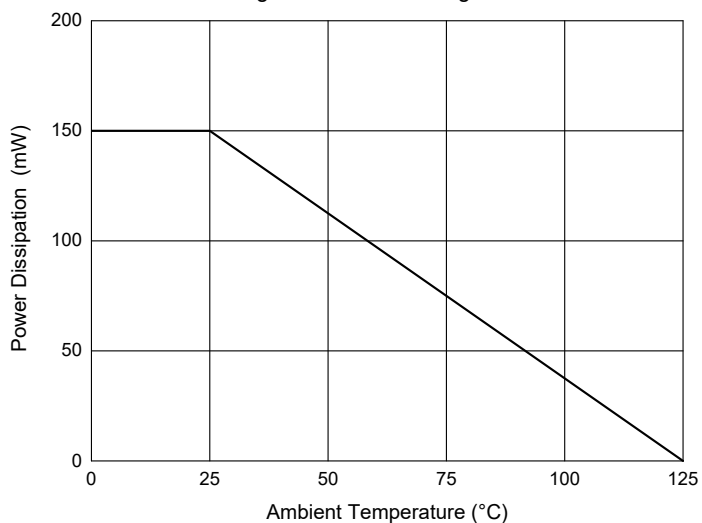


Fig. 3 - Power Derating Curve



## Ordering Information

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

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