

Features

- Surface Mount Package Ideally Suited for Automatic Insertion
- PN Junction Guard Ring for Transient and ESD Protection
- Low Turn-on Voltage
- Fast Switching
- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free. "Green" Device (Note 1)
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

Maximum Ratings

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

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
BAS70X	K73	70V	49V	70V

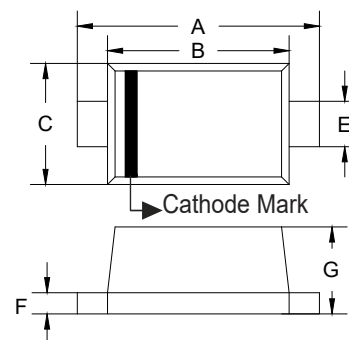
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I_F	70mA	
Repetitive Peak Forward Current	I_{FRM}	70mA	$t_p \leq 1s$; Duty Cycle $\leq 50\%$
Peak Forward Surge Current	I_{FSM}	100mA	$t=8.3ms$
Power Dissipation	P_d	200mW	
Maximum Forward Voltage	V_F	410mV 1000mV	$t_p < 300\mu s, I_F = 1.0mA$ $t_p < 300\mu s, I_F = 15mA$
DC Reverse Current At Rated DC Blocking Voltage	I_R	100nA(Max)	$t_p < 300\mu s, V_R = 50V$
Maximum Junction Capacitance	C_j	2.0pF	Measured at 1.0MHz, $V_R = 0.0V$
Maximum Reverse Recovery Time	T_{rr}	5.0ns	$I_F = I_R = 10mA$ $I_R = 1.0mA, R_L = 100\Omega$

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

200mW, 70Volt Schottky Barrier Diode

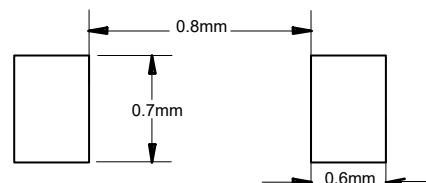
SOD-523



DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.059	0.067	1.50	1.70	
B	0.043	0.051	1.10	1.30	
C	0.030	0.033	0.75	0.85	
E	0.010	0.014	0.25	0.35	
F	0.003	0.008	0.08	0.20	
G	0.020	0.026	0.50	0.65	

Suggested Solder Pad Layout



Curve Characteristics

Fig. 1 - Typical Instantaneous Forward Characteristics

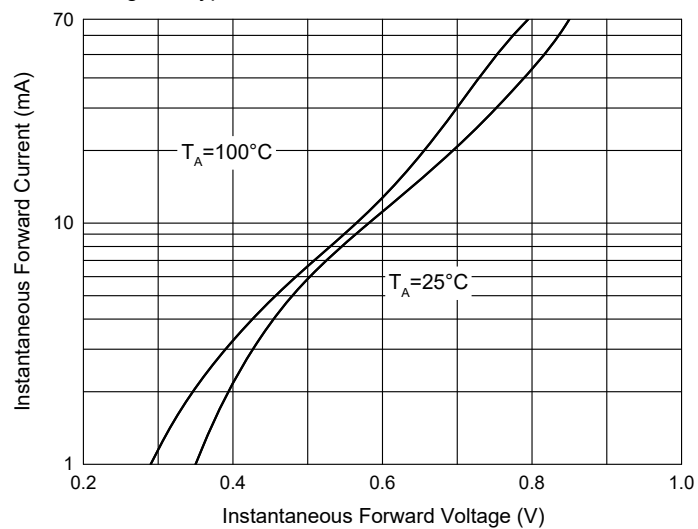


Fig. 2 - Typical Reverse Leakage Characteristics

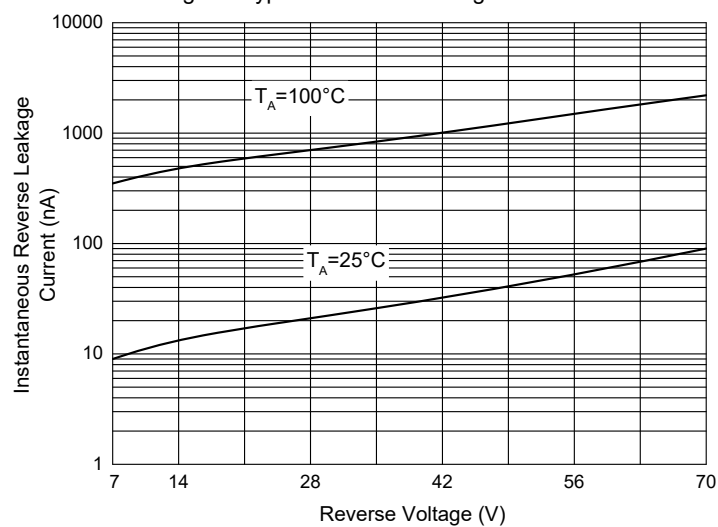
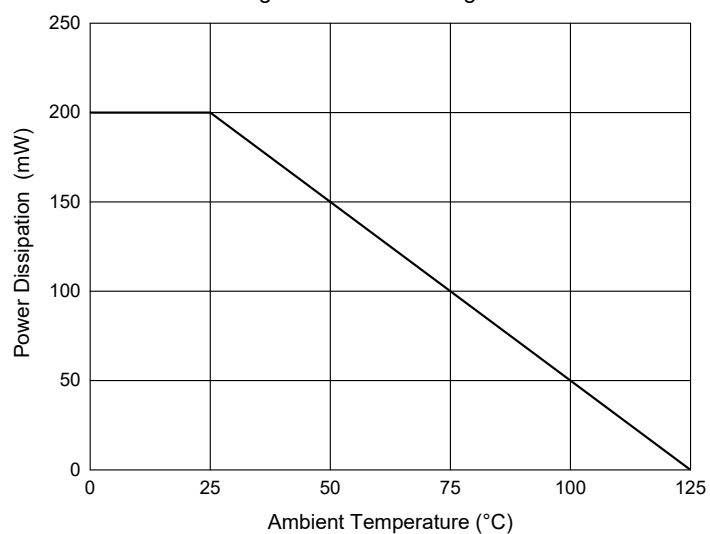


Fig. 3 - Power Derating Curve



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 8Kpcs/Reel
Part Number-T3P	Tape&Reel: 3Kpcs/Reel

For packaging details, go to our website at: https://www.mccsemi.com/pdf/productpackaging/SOD-523_Package_Rev_1.pdf

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