Features

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

350mW 100Volt Switching Diode

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 357°C/W Junction to Ambient（Note 2）

MCC Part Number	Repetitive Peak Reverse Voltage V_{RRM}	RMS Reverse Voltage $V_{R(RMS)}$	DC Blocking Voltage V_R
BAS16HE3	100V	71V	. 100V

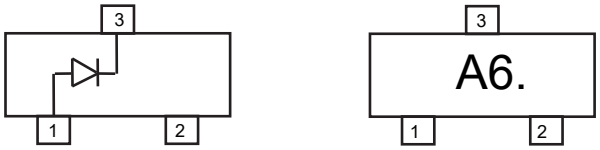
Electrical Characteristics @ 25°C Unless Otherwise Specifie

Parameter	Symbol	Value
Peak Forward Current	I_F	215mA
Peak Forward Surge Current（t=1s） （t=0.1ms）	I_{FSM}	1A 4A
Power Dissipation	P_D	350mW

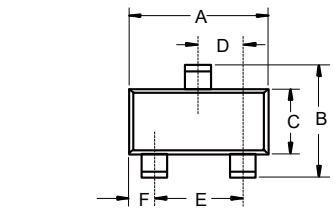
Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

2. Valid Provided that Terminals are Kept at Ambient Temperature.

Internal Structure and Marking Code

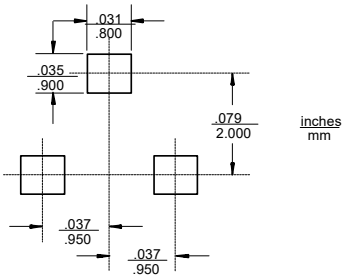


SOT-23



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.110	0.120	2.80	3.04	
B	0.083	0.104	2.10	2.64	
C	0.047	0.055	1.20	1.40	
D	0.035	0.041	0.89	1.03	
E	0.070	0.081	1.78	2.05	
F	0.018	0.024	0.45	0.60	
G	0.0005	0.0039	0.01	0.10	
H	0.035	0.044	0.89	1.12	
J	0.003	0.007	0.085	0.180	
K	0.015	0.020	0.37	0.51	

Suggested Solder Pad Layout



Electrical Characteristics @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Breakdown Voltage	V_{BR}	I_R=100μA	100			V
Maximum Instantaneous Forward Voltage	V_F	I_F=1mA			0.715	V
		I_F=10mA			0.855	V
		I_F=50mA			1	V
		I_F=100mA			1.25	V
Maximum DC Reverse Current	I_R	V_R=75V, T_J=25°C			1	μA
		V_R=75V, T_J=150°C			50	μA
Junction Capacitance	C_J	V_R = 0V, f = 1MHz			2	pF
Reverse Recovery Time	t_{rr}	I_F=10mA, V_R= 6.0V,R_L=100Ω			4	ns

* Pulse Test: Pulse Width 300 μsec, Duty Cycle 2%

Curve Characteristics

Fig. 1 - Typical Instantaneous Forward Characteristics

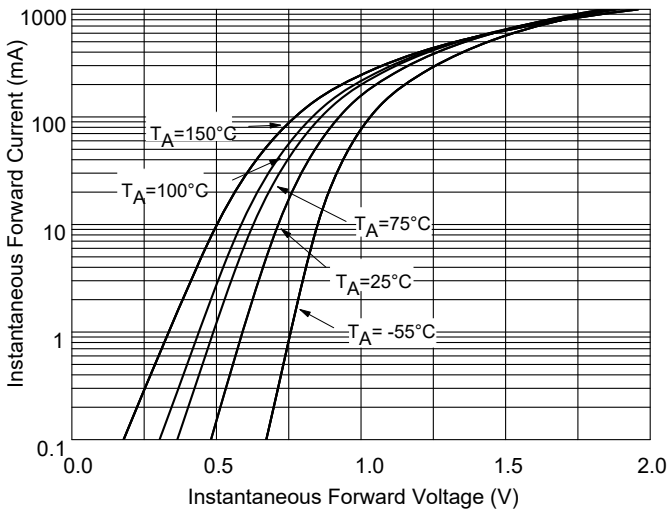


Fig. 2 - Typical Reverse Leakage Characteristics

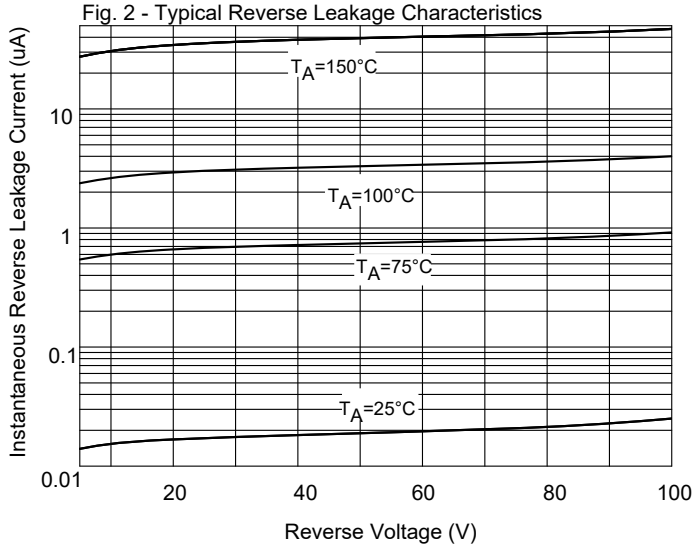


Fig. 3 - Capacitance Characteristics

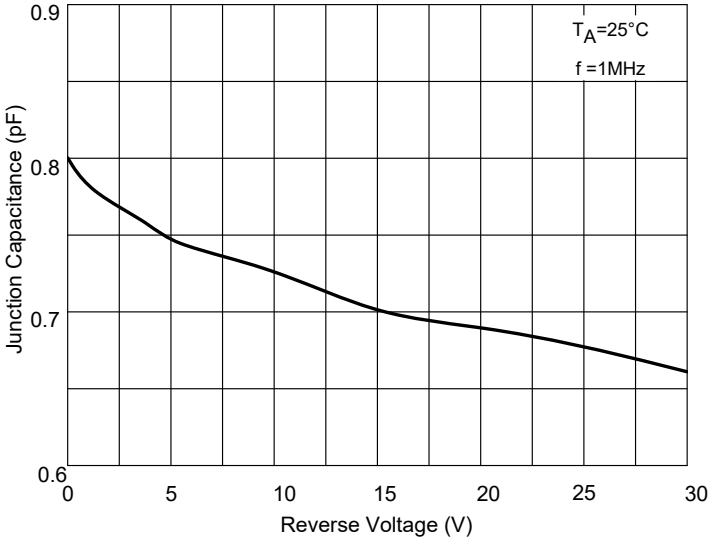
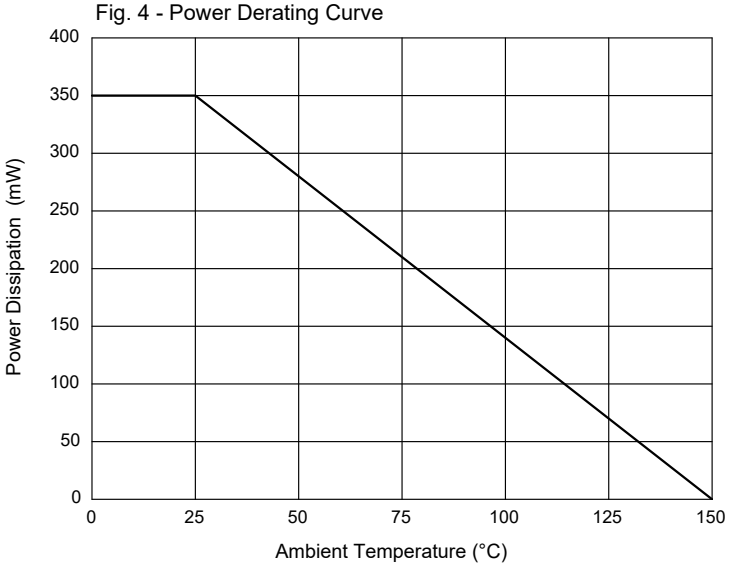


Fig. 4 - Power Derating Curve



Ordering Information

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

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