Features

- Halogen Free. "Green" Device (Note 1)
- AEC-Q101 Qualified
- Low Current Leakage
- 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)

200mW 100Volt Plastic-Encapsulate Diode

Maximum Ratings

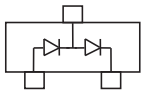
- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance:625°C/W Junction to Ambient

MCC Part Number	Device Marking
BAV99WTHE3	KJG

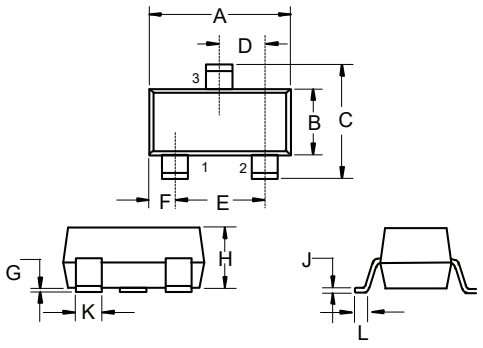
Average Rectified Output Current	I_o	150mA	
Non-Repetitive Peak Forward Surge Current	I_{FSM}	2.0A 1.0A	@1μs @1s
Power Dissipation	P_{TOT}	200mW	

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

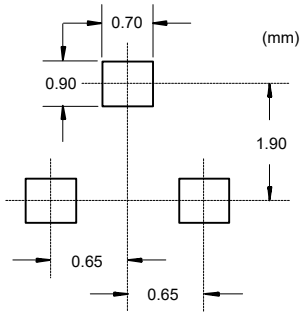


SOT-323



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		0.65		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



Electrical Characteristics @ 25°C Unless Otherwise Specified

Reverse Breakdown Voltage	V_R	100V	
Maximum Forward Voltage	V_F	0.715V 0.855V 1.000V 1.250V	I_{FM}=1.0mA I_{FM}=10.0mA I_{FM}=50.0mA I_{FM}=150.0mA
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	2.5μA	V_R=75V,T_j=25°C
Typical Junction Capacitance	C_J	2.0pF	V_R=0.0V,f=1.0MHz
Reverse Recovery Time	t_{rr}	4.0ns	I_F=10mA, V_R=0V,R_L=100Ω

*Pulse test: Pulse width 300 μsec, Duty cycle 2%

Curve Characteristics

Fig. 1 - Typical Instantaneous Forward Characteristics

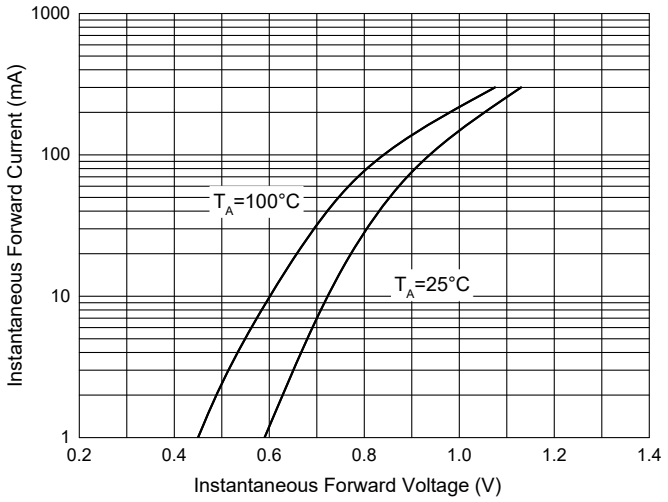


Fig. 2 - Typical Reverse Leakage Characteristics

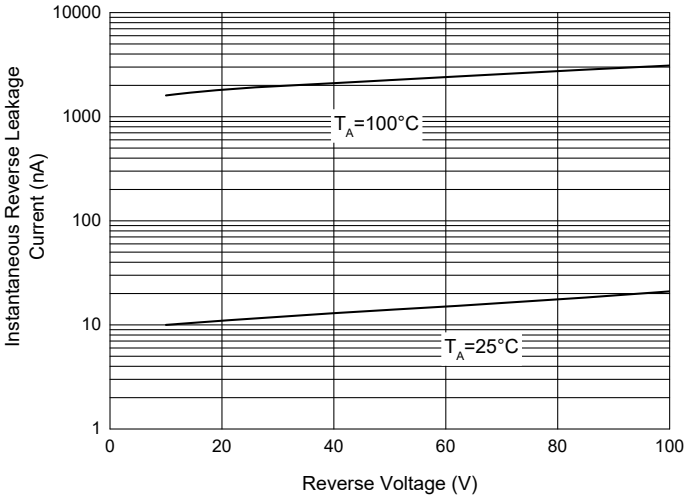
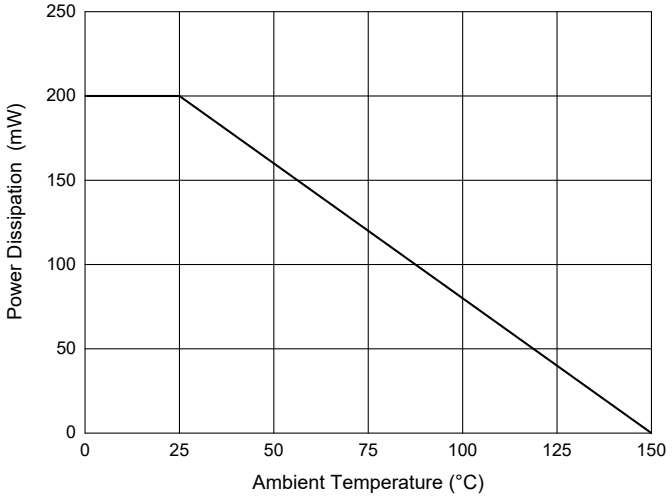


Fig. 3 - Power Derating Curve



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel
Part Number-13P	Tape&Reel: 10Kpcs/Reel

For packaging details,go to our website at https://www.mccsemi.com/pdf/ProductPackaging/SOT-323%20Package.pdf

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