



# THE DATASHEET OF BAV316-TP



**Features**

- High Switching Speed
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- 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: 500°C/W Junction to Ambient

**250mW  
Switching Diodes  
130 Volts**

**SOD-323**

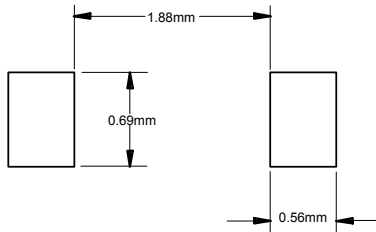
MCC Part Number	Device Marking
BAV316	XX

Parameter	Symbol	Value
Peak Repetitive Reverse Voltage	$V_{RRM}$	130V
Maximum DC Blocking Voltage	$V_R$	130V
Average Forward Current	$I_{F(AV)}$	215mA
Peak Forward Surge Current(t=8.3ms)	$I_{FSM}$	2A
Power Dissipation	$P_D$	250mW

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

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.090	0.107	2.30	2.70	
B	0.063	0.071	1.60	1.80	
C	0.045	0.053	1.15	1.35	
D	0.031	0.045	0.80	1.15	
E	0.010	0.016	0.25	0.40	
G	0.004	0.018	0.10	0.45	
H	0.004	0.010	0.10	0.25	
J	----	0.006	----	0.15	

**Suggested Solder Pad Layout**



Electrical Characteristics @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Breakdown Voltage	$V_{BR}$	$I_R=100\mu A$	130			V
Forward Voltage	$V_F$	$I_F=1mA$			0.85	V
		$I_F=10mA$			0.95	V
		$I_F=50mA$			1	V
		$I_F=150mA$			1.1	V
Reverse Current	$I_R$	$V_R=75V$			5	nA
Junction Capacitance	$C_J$	$V_R = 0V, f = 1MHz$		2		pF
Reverse Recovery Time	$t_{rr}$	$I_F=I_R=10mA,$ $I_{rr}=0.1 \times I_R, R_L=100\Omega$			3	$\mu s$

## Curve Characteristics

Fig. 1 - Typical Instantaneous Forward Characteristics

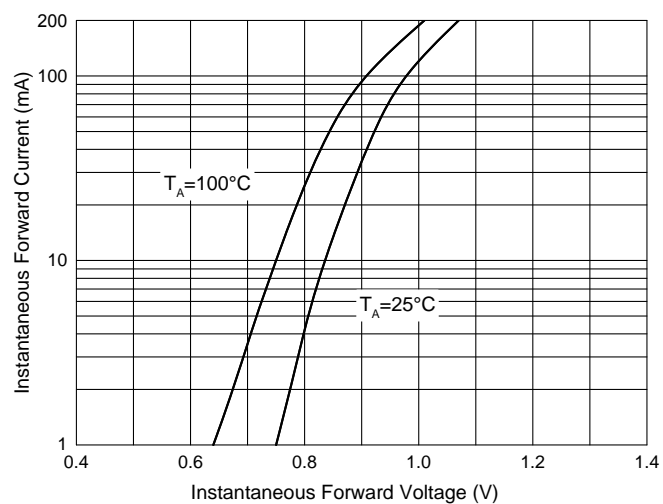


Fig. 2 - Typical Reverse Leakage Characteristics

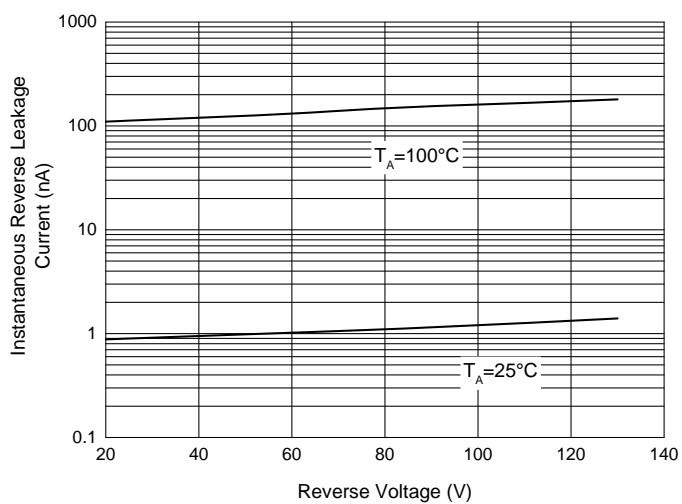
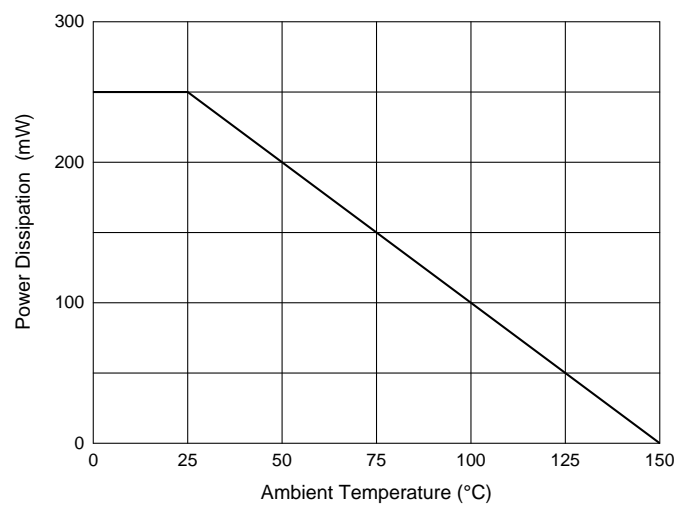


Fig. 3 - Power Derating Curve



## Ordering Information

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

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