



# THE DATASHEET OF BAS16V-TP



### Features

- Fast Switching Speed
- High Conductance
- Lead Free Plating
- For General Purpose Switching Applications
- Halogen Free. "Green" Device (Note 1)
- 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)

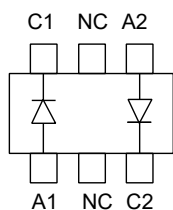
### Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -65°C to +150°C
- Thermal Resistance: 833°C/W Junction to Ambient

MCC Part Number	Device Marking	Repetitive Peak Reverse Voltage $V_{RRM}$	DC Blocking Voltage $V_R$
BAS16V	KAM	75V	75V
Non-Repetitive Peak Reverse Voltage	$V_{RM}$	100V	
Working Peak Reverse Voltage	$V_{RWM}$	75V	
Forward Continuous Current	$I_{FM}$	300mA	
Average Rectified Output Current	$I_o$	200mA	
Peak Forward Surge Current	$I_{FSM}$	2.0A 1.0A	@1.0µs @1.0s
Power Dissipation	$P_D$	150mW	

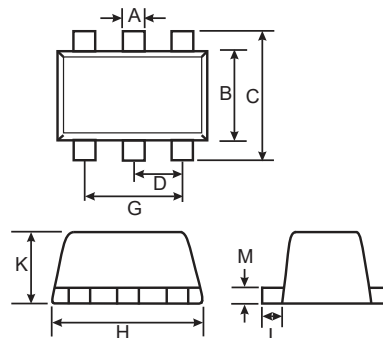
Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

### Internal Structure



## 150mW Switching Diode

### SOT-563



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.006	0.011	0.15	0.30	
B	0.043	0.051	1.10	1.30	
C	0.059	0.067	1.50	1.70	
D	0.020		0.50		TYP.
G	0.035	0.043	0.90	1.10	
H	0.059	0.067	1.50	1.70	
K	0.022	0.026	0.55	0.65	
L	0.004	0.011	0.10	0.30	
M	0.004	0.007	0.10	0.18	

**Electrical Characteristics @ 25°C Unless Otherwise Specified**

Minimum Breakdown Voltage	$V_{BR}$	75V	$I_R=100\mu A$
Maximum Forward Voltage	$V_F$	0.715V 0.855V 1.000V 1.250V	$I_F=1.0mA$ $I_F=10.0mA$ $I_F=50.0mA$ $I_F=150.0mA$
Maximum Peak Reverse voltage	$I_R$	1.0 $\mu A$ 25nA	$V_R=75V$ $V_R=20V$
Maximum Total Capacitance	$C_T$	2.0pF	$V_R=0.0V, f=1.0MHz$
Maximum Reverse Recovery Time	$t_{rr}$	4.0ns	$I_F=10mA, I_R=10mA$ $I_{rr}=0.1 \cdot I_R, R_L=100\Omega$

## Curve Characteristics

Fig. 1 - Typical Instantaneous Forward Characteristics

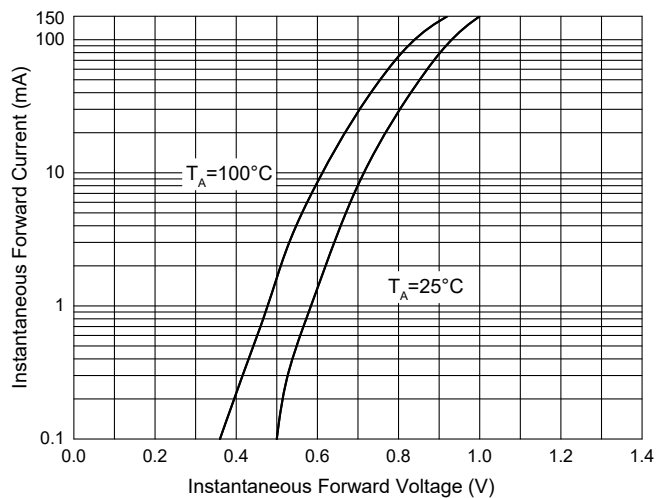


Fig. 2 - Typical Reverse Leakage Characteristics

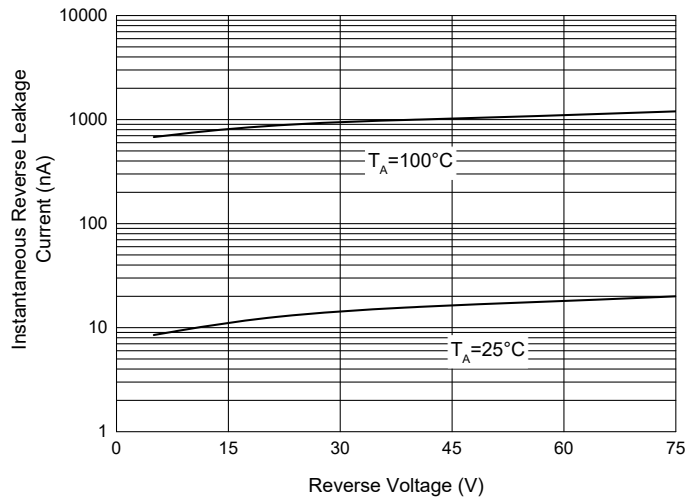
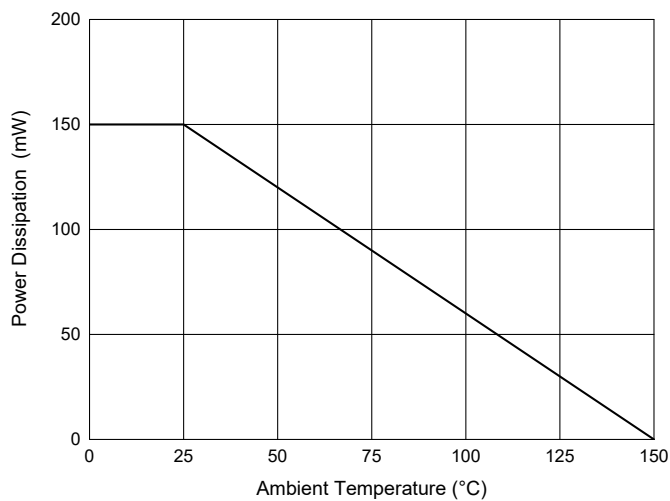


Fig. 3 - Power Derating Curve



## Ordering Information

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

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