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## BAS16V

### **Features**

- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance
- Lead Free Plating
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Halogen free available upon request by adding suffix "-HF" Lead Free Finish/Rohs Compliant ("P"Suffix designates RoHS Compliant. See ordering information)

## **Maxim um Ratings**

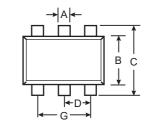
Symbol	Rating	Rating	Unit
$V_{RM}$	Non-Repetitive Peak Reverse Voltage	100	V
$egin{array}{c} V_{RRM} \ V_{RWM} \ V_{R} \end{array}$	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	75	V
Io	Average Rectified Output Current	200	mA
I <sub>FM</sub>	Forward Continuous Current	300	mA
P <sub>D</sub>	Power dissipation	150	mW
R <sub>0 JA</sub>	Thermal Resistance Junction to Ambient	833	°C/W
I <sub>FSM</sub>	Peak forward surge current @=1.0us @=1.0s	2.0 1.0	А
T <sub>STG</sub>	Storage Temperature	-65 to +150	$^{\circ}$

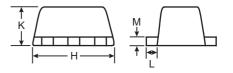
## Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Test Conditions
$V_{(BR)}$	Reverse Breakdown Voltage	75V		I <sub>R</sub> =100 μ A
I <sub>R</sub>	Reverse Voltage Leakage Current		25nA 1 µ A	V <sub>R</sub> =20V V <sub>R</sub> =75V
V <sub>F</sub>	Forward Voltage		715mV 855mV 1000mV 1250mV	I <sub>F</sub> =1mA I <sub>F</sub> =10mA I <sub>F</sub> =50mA I <sub>F</sub> =150mA
Ст	Total Capacitance		2pF	V <sub>R</sub> =0, f=1MHZ
t <sub>rr</sub>	Reverse Recovery Time		4ns	$I_{rr}=1$ mA, $I_{R}=I_{F}=10$ mA, $R_{L}=100$ $\Omega$

## 150mW **Switching Diodes**

## **SOT-563**





	DIMENSIONS						
	INCHES		MM				
DIM	MIN	MAX	MIN	MAX	NOTE		
Α	.006	.011	0.15	0.30			
В	.043	.049	1.10	1.25			
С	.061	.067	1.55	1.70			
D	.020		0.50				
G	.035	.043	0.90	1.10			
Н	.059	.067	1.50	1.70			
K	.022	.023	0.56	0.60			
Ĺ	.004	.011	0.10	0.30			
M	.004	.007	0.10	0.18			

## BAS16V

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### **Micro Commercial Components**

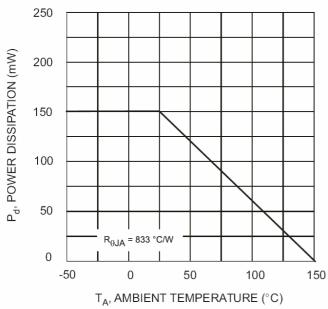


Fig. 1, Derating Curve - Total

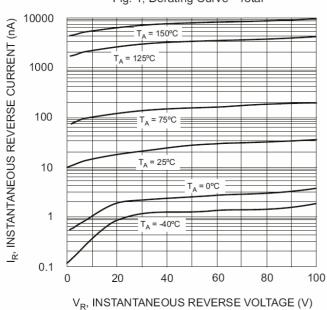
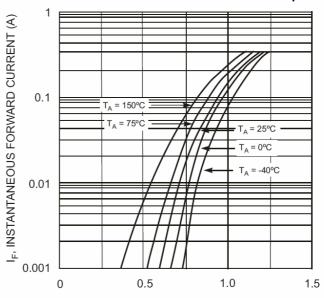
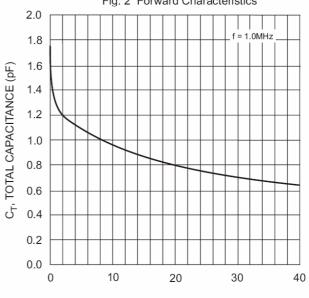


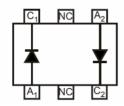
Fig. 3 Typical Reverse Characteristics



V<sub>F</sub>, INSTANTANEOUS FORWARD VOLTAGE (V) Fig. 2 Forward Characteristics



V<sub>R</sub>, REVERSE VOLTAGE (V) Fig. 4 Typical Capacitance vs. Reverse Voltage



Marking: KAM



### **Micro Commercial Components**

### Ordering Information:

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

Note: Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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