

## **Features**

- · Fast Switching Speed
- · High Conductance
- · Lead Free Plating
- · For General Purpose Switching Applications
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- · 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)

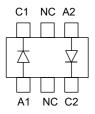
## **Maximum Ratings**

- 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 <sub>RRM</sub>	DC Blocking Voltage V <sub>R</sub>
BAS16V	KAM	75V	75V

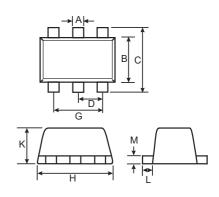
Non-Repetitive Peak Reverse Voltage	$V_{RM}$	100V	
Working Peak Reverse Voltage	$V_{RWM}$	75V	
Forward Continuous Current	I <sub>FM</sub>	300mA	
Average Rectified Output Current	I <sub>o</sub>	200mA	
Peak Forward Surge Current	I <sub>FSM</sub>	2.0A 1.0A	@1.0µs @1.0s
Power Dissipation	P <sub>D</sub>	150mW	

### **Internal Structure**



# 150mW Switching Diode

SOT-563



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	NOTE
Α	0.006	0.011	0.15	0.30	
В	0.043	0.051	1.10	1.30	
С	0.059	0.067	1.50	1.70	
D	0.020		0.50		
G	0.035	0.043	0.90	1.10	
Н	0.059	0.067	1.50	1.70	
K	0.020	0.023	0.52	0.60	
L	0.004	0.011	0.10	0.30	
М	0.004	0.007	0.10	0.18	

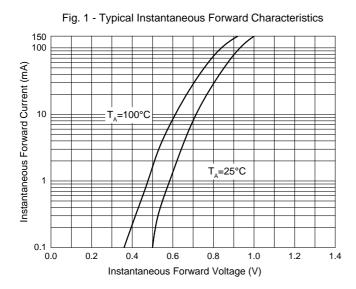


# Electrical Characteristics @ 25°C Unless Otherwise Specified

Minimum Breakdown Voltage	$V_{BR}$	75V	I <sub>R</sub> =100μA
Maximum Forward Voltage	V <sub>F</sub>	0.715V 0.855V 1.000V 1.250V	I <sub>F</sub> =1.0mA I <sub>F</sub> =10.0mA I <sub>F</sub> =50.0mA I <sub>F</sub> =150.0mA
Maximum Peak Reverse voltage	I <sub>R</sub>	1.0µA 25nA	V <sub>R</sub> =75V V <sub>R</sub> =20V
Maximum Total Capacitance	Ст	2.0pF	V <sub>R</sub> =0.0V,f=1.0MHz
Maximum Reverse Recovery Time	t <sub>rr</sub>	4.0ns	$I_F=10\text{mA}, I_R=10\text{mA}$ $I_{rr}=0.1*I_R, R_L=100\Omega$



### **Curve Characteristics**



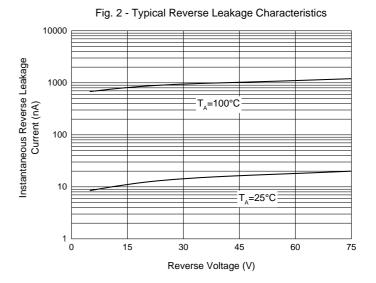


Fig. 3 - Power Derating Curve

200

150

150

0

0

25

50

Ambient Temperature (°C)



## **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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