

## **Features**

- · High Conductance
- · Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- · Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- · Halogen Free Available Upon Request By Adding Suffix "-HF"
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

# **Maximum Ratings**

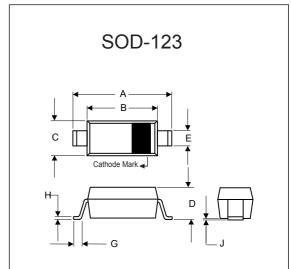
- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 357°C/W Junction to Ambient

MCC Part Number	Device Marking
BAS16W	A6 / T4

Parameter	Symbol	Value	
Non-Repetitive Peak Reverse Voltage	$V_{RM}$	85V	
DC Reverse Voltage	V <sub>R</sub>	75V	
Peak Repetitive Reverse Voltage	$V_{RRM}$	75V	
RMS Reverse Voltage	$V_{R(RMS)}$	53V	
Forward Continuous Current (Note 1)	I <sub>FM</sub>	200mA	
Average Rectified Current	I <sub>F(AV)</sub>	100mA	
Peak Forward Surge Current (t=1s)	-	2A	
(t=10µs)	I <sub>FSM</sub>	1A	
Power Dissipation (Note 1)	P <sub>D</sub>	350mW	

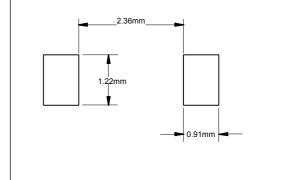
Notes: 1. Valid Provided that Terminals are Kept at Ambient Temperature.

# 350mW High Speed Switching Diode



DIMENSIONS					
DIM INCHES		MM		NOTE	
DIIVI	MIN	MAX	MIN	MAX	NOTE
Α	0.140	0.152	3.55	3.85	
В	0.100	0.112	2.55	2.85	
С	0.055	0.071	1.40	1.80	
D		0.053		1.35	
E	0.018	0.026	0.45	0.65	
G	0.006		0.15		
Н		0.010		0.25	
J		0.006		0.15	

### **Suggested Solder Pad Layout**





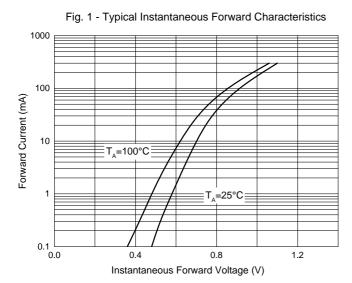
# Electrical Characteristics @ 25°C (Unless Otherwise Specified)

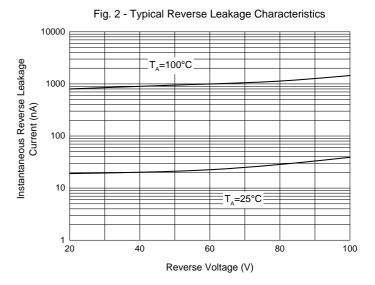
Parameter	Symbol	Conditions	Min.	Тур.	Max.	Units
- IV 6	Forward Voltage V <sub>F</sub>	I <sub>F</sub> =1mA			0.715	V
		I <sub>F</sub> =10mA			0.855	V
Forward Voltage		I <sub>F</sub> =50mA			1	V
		I <sub>F</sub> =150mA			1.25	V
Reverse Current I <sub>R</sub>	V <sub>R</sub> =75V			1	μA	
	V <sub>R</sub> =75V, T <sub>J</sub> =150°C			50	μA	
Junction Capacitance	CJ	$V_R = 0V$ , $f = 1MHz$			2	pF
Reverse Recovery Time	t <sub>rr</sub>	$I_F=I_R=10\text{mA},$ $I_{rr}=0.1\times I_R, R_L=100\Omega$			6	ns

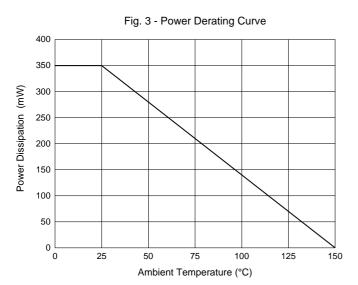
<sup>\*</sup> Pulse Test: Pulse Width 300 µsec, Duty Cycle 2%



## **Curve Characteristics**









# **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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