



Micro Commercial Components

Micro Commercial Components  
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# BAS16W

## Features

- High Conductance
- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications

## Mechanical Data

- Marking: A6 , T6
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Polarity: Indicated by Cathode Band

### Maximum Ratings @ 25°C Unless Otherwise Specified

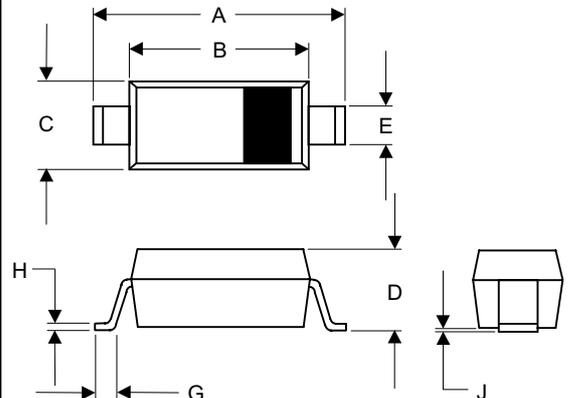
Characteristic	Symbol	Value	Unit
Non-Repetitive Peak Reverse Volt.	$V_{RM}$	85	V
Peak Repetitive Reverse Voltage	$V_{RRM}$	75	V
Working Peak Reverse Voltage	$V_{RWM}$		
DC Blocking Voltage	$V_R$		
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Forward Continuous Current(Note1)	$I_{FM}$	200	mA
Average Rectified Output Current	$I_o$	100	mA
Non-Repetitive Peak @ $t \leq 1.0s$	$I_{FSM}$	2	A
Forward Surge Current @ $t = 10\mu s$		1	A
Power Dissipation(Note 1)	$P_d$	350	mW
Thermal Resistance(Note 1)	$R$	315	K/W
Operation/Storage Temp. Range	$T_j, T_{STG}$	-55 to +150	°C

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

Maximum Forward Voltage Drop	$V_{FM}$	0.715 0.855 1 1.25	V	$I_F = 1.0mA$ $I_F = 10mA$ $I_F = 50mA$ $I_F = 150mA$
Maximum Peak Reverse Current	$I_{RM}$	1.0 50	$\mu A$	$V_R = 75V T_j = 25^\circ C$ $V_R = 75V T_j = 150^\circ C$
Junction Capacitance	$C_j$	2	pF	$V_R = 0V, f = 1.0MHz$
Reverse Recovery Time	$t_{rr}$	6	ns	$I_F = I_R = 10mA, I_{rr} = 0.1I_R,$ $R_L = 100 OHM$

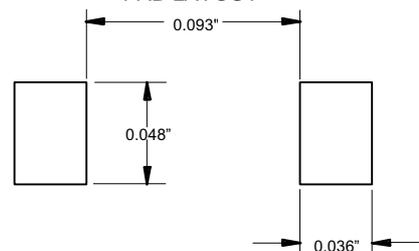
## High Speed Switching Diode 350mW

### SOD123



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.140	.152	3.55	3.85	
B	.100	.112	2.55	2.85	
C	.055	.071	1.40	1.80	
D	-----	.053	-----	1.35	
E	.012	.031	0.30	.78	
G	.006	-----	0.15	-----	
H	-----	.01	-----	.25	
J	-----	.006	-----	.15	

#### SUGGESTED SOLDER PAD LAYOUT



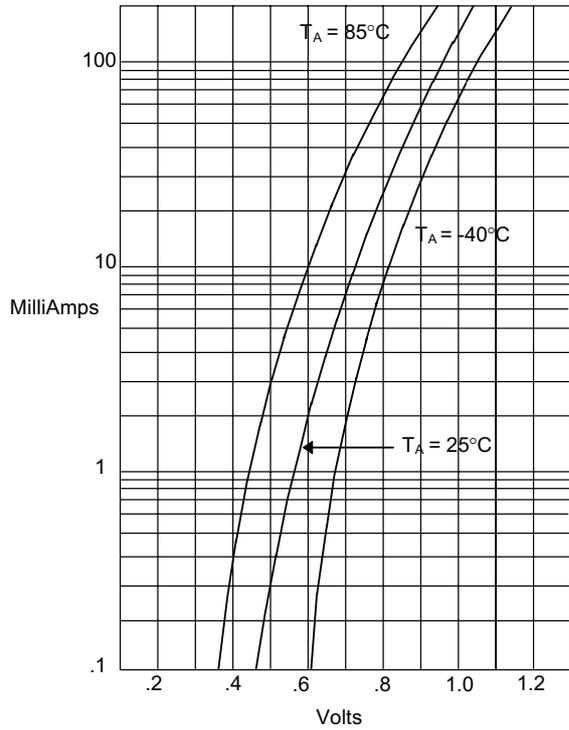
**Note:** 1. Valid provided that terminals are kept at ambient temperature

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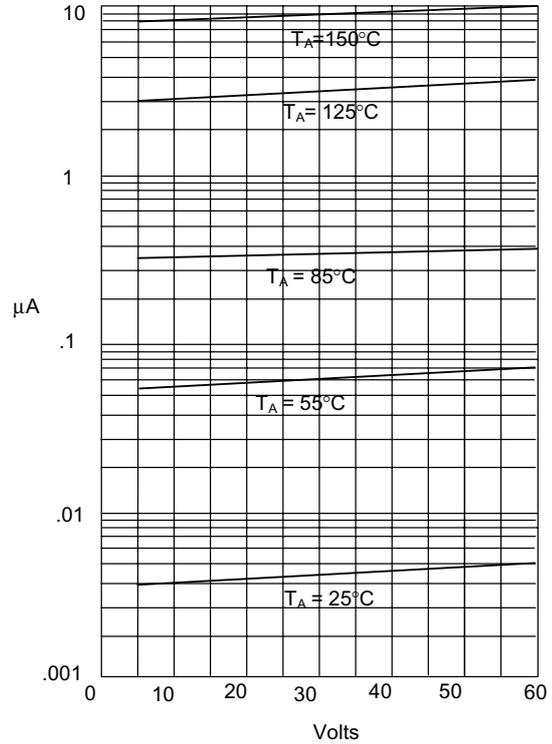
Figure 1  
Typical Forward Characteristics



Instantaneous Forward Current - Amperes *versus*  
Instantaneous Forward Voltage - Volts

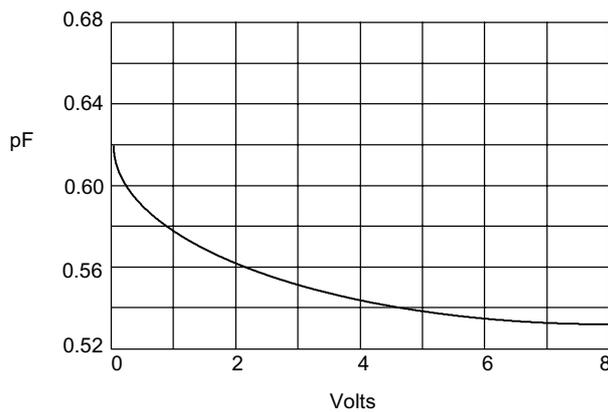
Figure 2

Typical Reverse Characteristics



Instantaneous Reverse Current - MicroAmperes *versus*  
Reverse Voltage - Volts

Figure 3  
Diode Capacitance



Diode Capacitance - pF *versus*  
Reverse Voltage - Volts



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