

BAS16W

High Speed Switching Diode 350mW

Features

- High Conductance
- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)

Mechanical Data

- Marking: A6 , T6
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1
- 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	V	$I_F = 1.0mA$		
		0.855			$I_F = 10mA$	
		1				$I_F = 50mA$
		1.25				
Maximum Peak Reverse Current	I_{RM}	1.0	uA	$V_R = 75V, T_j = 25^\circ C$		
		50		$V_R = 75V, T_j = 150^\circ C$		
Junction Capacitance	C_j	2	pF	$V_R = 0V, f = 1.0MHz$		
Reverse Recovery Time	t_{rr}	6	ns	$I_F = I_R = 10mA, I_{rr} = 0.1I_R, R_L = 100 OHM$		

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

SOD123

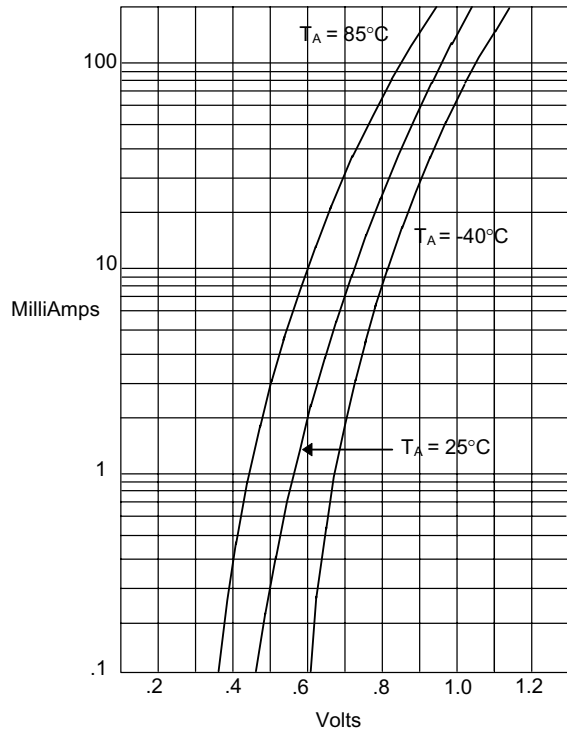
The diagram shows the SOD123 package with dimensions A through J. Dimension A is the total width, B is the width of the body, C is the height, D is the height of the leads, E is the lead thickness, G is the lead width, H is the lead height, and J is the lead pitch.

DIMENSIONS					
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

BAS16W

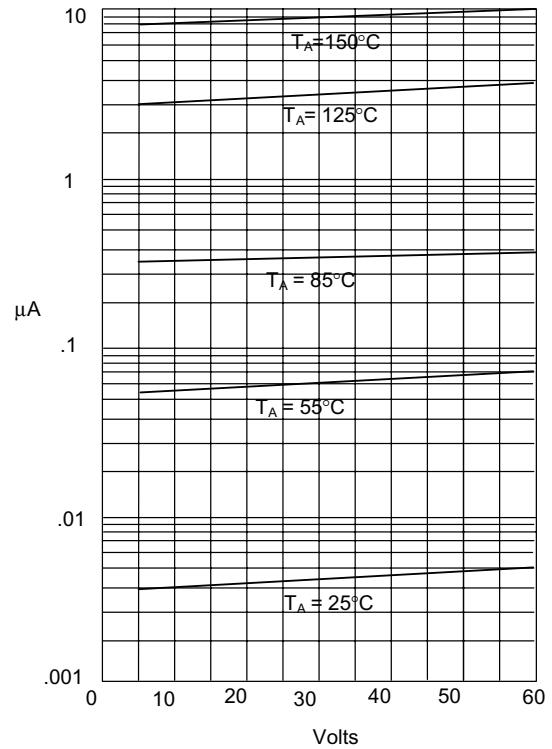
Figure 1
Typical Forward Characteristics



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

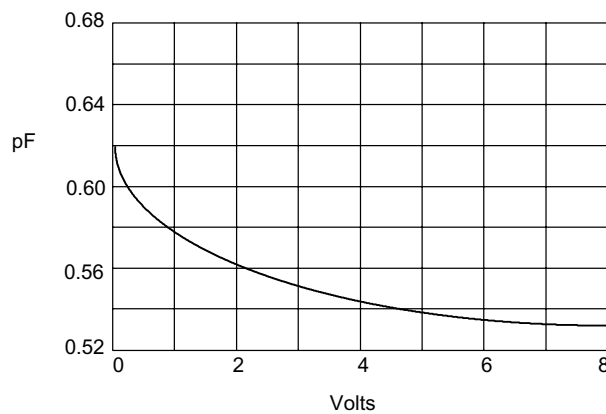
Figure 2

Typical Reverse Characteristics



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

Figure 3
Diode Capacitance



Diode Capacitance - pF *versus*
Reverse Voltage - Volts

Ordering Information

Device	Packing
(Part Number)-TP	Tape&Reel;3Kpcs/Reel