

BAS16WX

Features

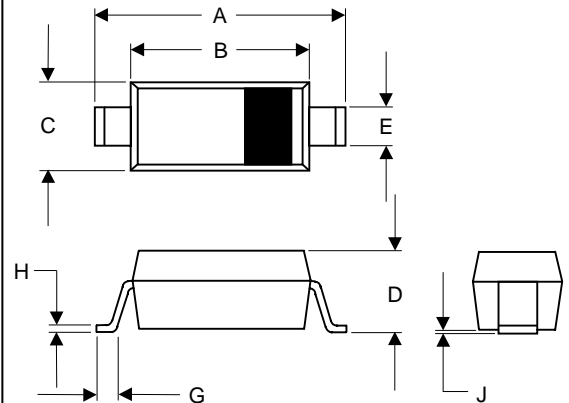
- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance

High Speed Switching Diode 350mW

Mechanical Data

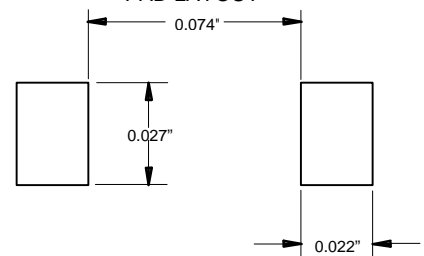
- Case: SOD-323, Molded Plastic
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: Indicated by Cathode Band
- Weight: 0.008 grams (approx.)
- Marking Code: BAS16WX=T4

SOD323



DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.090	.107	2.30	2.70	
B	.063	.071	1.60	1.80	
C	.045	.053	1.15	1.35	
D	.031	.045	0.80	1.15	
E	.010	.016	0.25	0.40	
G	.004	.018	0.10	0.45	
H	.004	.010	0.10	0.25	
J	-----	.006	-----	0.15	

SUGGESTED SOLDER PAD LAYOUT



Maximum Ratings @ 25°C Unless Otherwise Specified

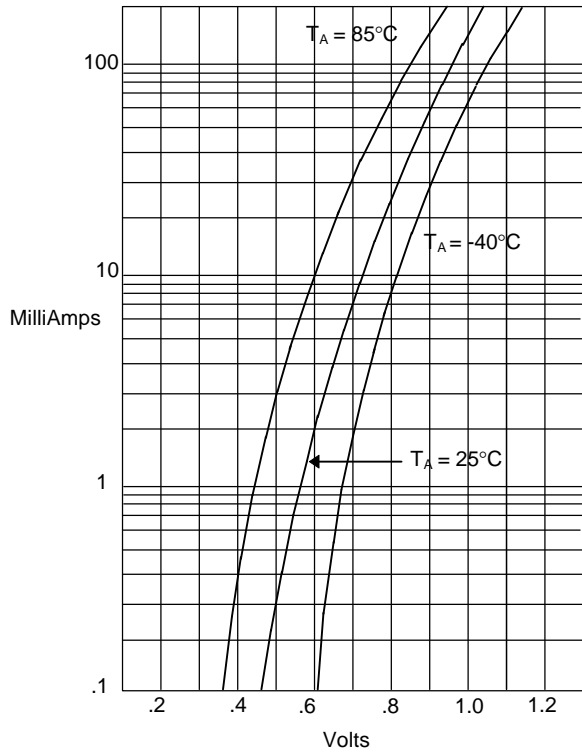
Non-Repetitive Peak Reverse Volt.	V_{RM}	85	V
Peak Repetitive Reverse Voltage	V_{RRM}		
Working Peak Reverse Voltage	V_{RWM}	75	V
DC Blocking Voltage	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Forward Continuous Current(Note1)	I_{FM}	200	mA
Average Rectified Output Current	I_o	100	mA
Non-Repetitive Peak @ $t \leq 1.0s$	I_{FSM}	2	A
Forward Surge Current @ $t = 10\mu s$		1	
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		$I_F = 150mA$
Maximum Peak Reverse Current	I_{RM}	1.0	uA	$V_R = 75V T_j = 25^\circ C$
		50		uA
Junction Capacitance	C_j	2	pF	$V_R = 0V, f = 1.0MHz$
Reverse Recovery Time	t_{rr}	6	ns	$I_F = I_R = 10mA, I_{rr} = 0.1I_R, R_L = 100 OHM$

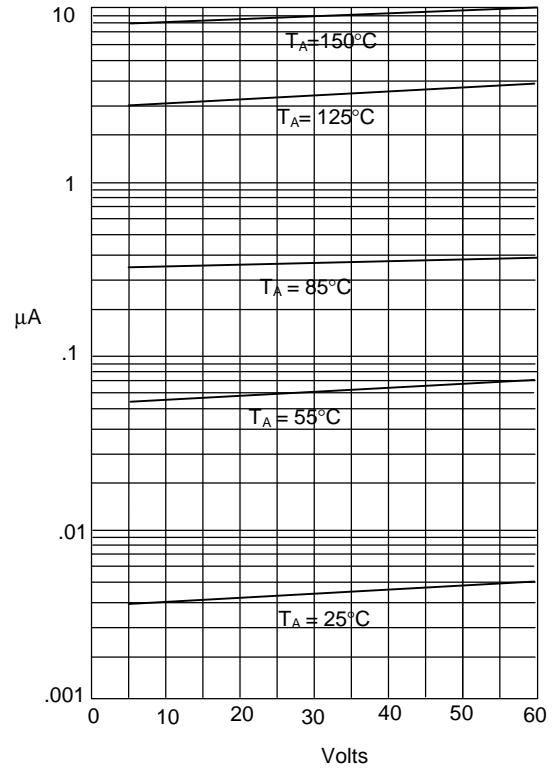
Note: 1. Valid provided that terminals are kept at ambient temperature

Figure 1
Typical Forward Characteristics



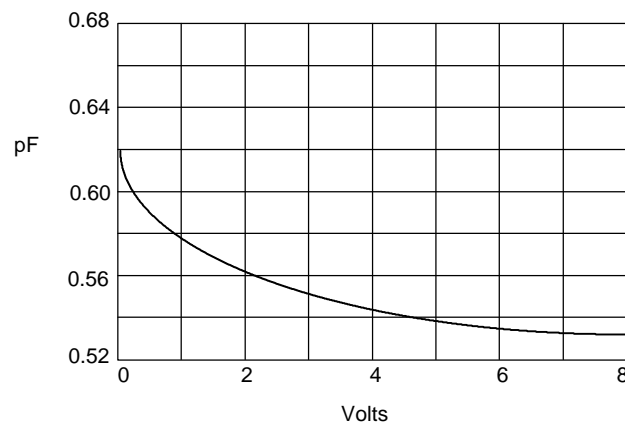
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Typical Reverse Characteristics



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

Figure 3
Diode Capacitance



Diode Capacitance - pF *versus*
Reverse Voltage - Volts