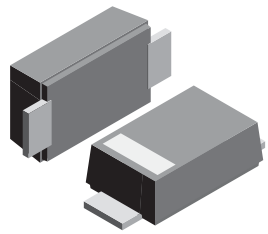
BAS16WS

SURFACE MOUNT FAST SWITCHING DIODE



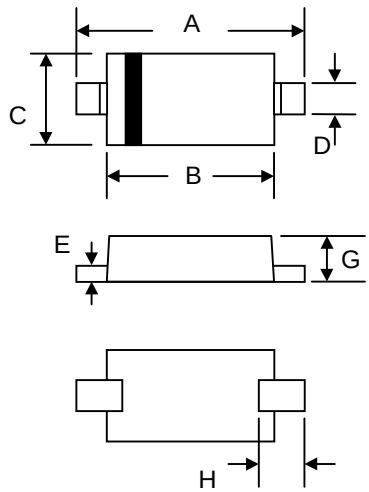
Features

- High Conductance
- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Application
- Plastic Material – UL Recognition Flammability Classification 94V-O

Mechanical Data

- Case: SOD-323, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.004 grams (approx.)

RoHS COMPLIANT



SOD-323		
Dim	**Min**	**Max**
A	2.30	2.70
B	1.75	1.95
C	1.15	1.35
D	0.25	0.35
E	0.05	0.15
G	0.70	0.95
H	0.30	—
All Dimensions in mm		

Maximum Ratings @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	75	V
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Forward Continuous Current (Note 1)	I_{FM}	300	mA
Average Rectified Output Current (Note 1)	I_O	150	mA
Non-Repetitive Peak Forward Surge Current @ t = 1.0µs @ t = 1.0s	I_{FSM}	2.0 1.0	A
Power Dissipation (Note 1)	P_d	200	mW
Typical Thermal Resistance, Junction to Ambient Air (Note 1)	$R_{\theta JA}$	625	K/W
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +150	°C

Electrical Characteristics @T_A=25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Forward Voltage Drop @ I_F = 10mA	V_{FM}	0.855	V
Peak Reverse Leakage Current @ V_R = 75V	I_{RM}	1.0	µA
Junction Capacitance (V_R = 0V DC, f = 1.0MHz)	C_j	2.0	pF
Reverse Recovery Time (Note 2)	t_{rr}	6.0	nS

Note: 1. Valid provided that terminals are kept at ambient temperature.
2. Measured with I_F = I_R = 10mA, I_{RR} = 0.1 x I_R, R_L = 100Ω.

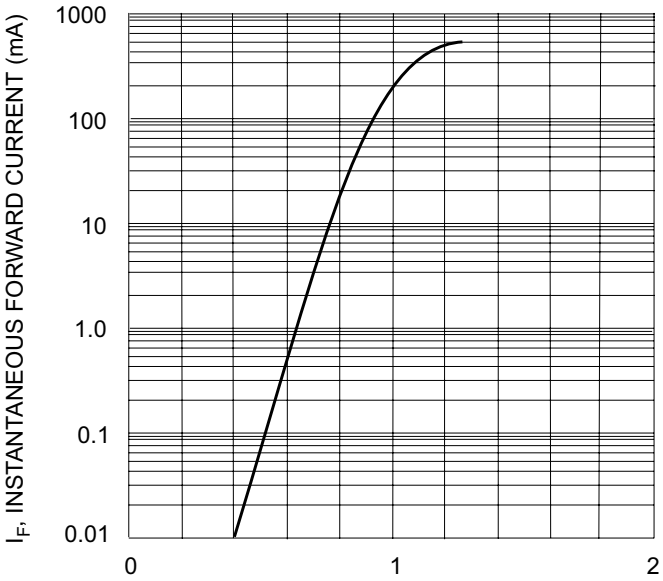


Fig. 1 Forward Characteristics

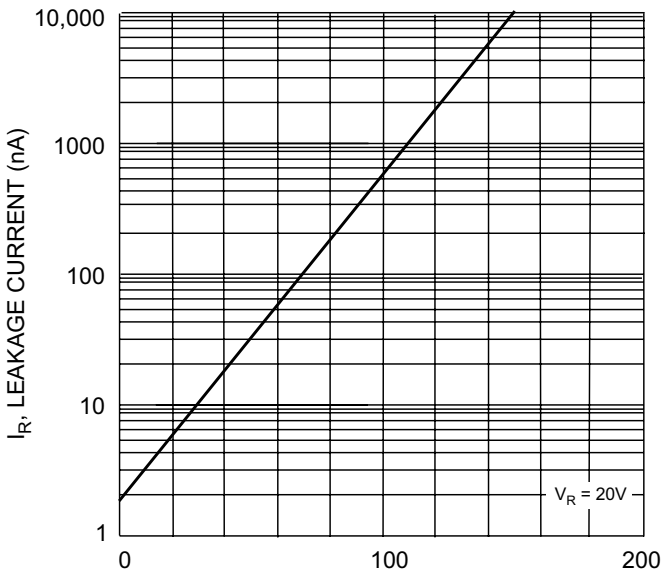


Fig. 2 Leakage Current vs Junction Temperature