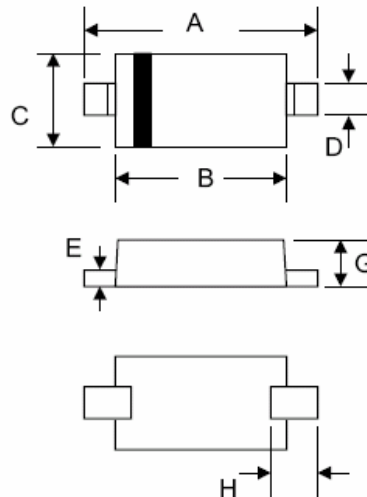




Technical Data
Data Sheet N0585, Rev. -

Features

- High Conductance
- Fast Switching
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose and Switching
- Plastic Material – UL Recognition Flammability Classification 94V-O
- This is a Pb - Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request



SOD-323				
Dim	Min	Max	Min	Max
A	2.30	2.70	0.091	0.106
B	1.75	1.95	0.069	0.077
C	1.15	1.35	0.045	0.053
D	0.25	0.35	0.010	0.014
E	0.05	0.15	0.002	0.006
G	0.70	0.95	0.028	0.037
H	0.30	—	0.012	—
	In mm		In inch	

Mechanical Data

- Case: SOT-323, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: See Diagram
- Weight: 0.006 grams (approx.)
- Mounting Position: Any
- Marking: A6

Maximum Ratings @T_A=25°C unless otherwise specified

Characteristic	Symbol	BAS16WS	Unit
Non-Repetitive Peak Reverse Voltage	V _{RM}	100	V
Peak Repetitive Reverse Voltage	V _{R(RM)}	75	V
Working Peak Reverse Voltage	V _{R(WM)}		
DC Blocking Voltage	V _R		
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	I _{FSM}	2.0	A
@ t = 1.0μs		1.0	
@ t = 1.0s			
Power Dissipation (Note 1)	P _d	200	mW
Typical Thermal Resistance, Junction to Ambient Air (Note 1)	R _{θJA}	625	K/W
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +150	°C



Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	BAS16WS	Unit
Forward Voltage Drop @ $I_F = 10\text{mA}$	V_{FM}	0.855	V
Peak Reverse Leakage Current @ $V_R = 75\text{V}$	I_{RM}	1.0	μA
Junction Capacitance ($V_R = 0\text{V DC}$, $f = 1.0\text{MHz}$)	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 $I_F = I_R = 10\text{mA}$, $I_{RR} = 0.1 \times I_R$, $R_L = 100\Omega$.

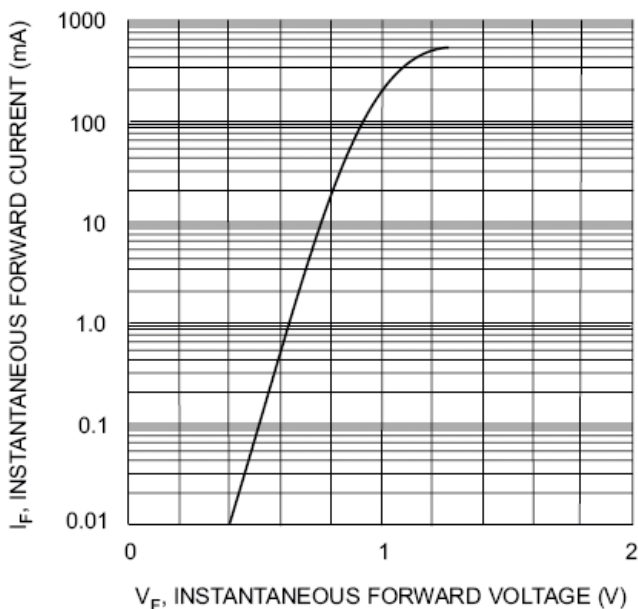


Fig. 1 Forward Characteristics

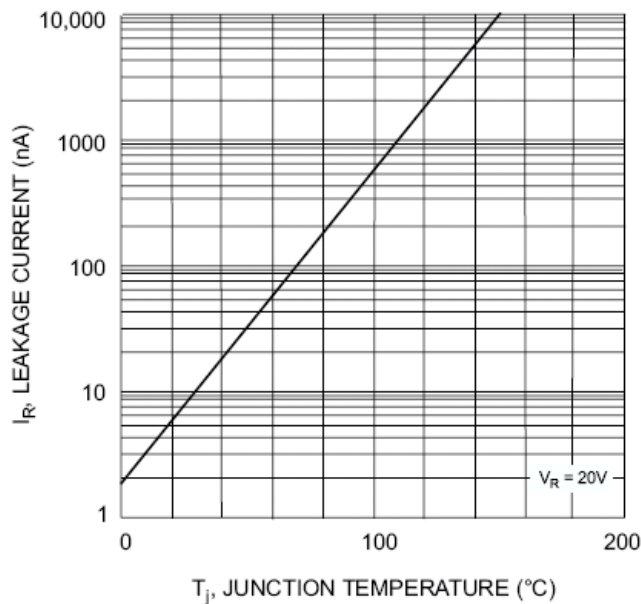


Fig. 2 Leakage Current vs Junction Temperature



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