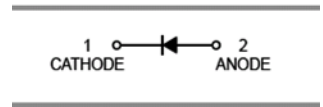


Silicon Epitaxial Planar Diode



Features:

- Fast Switching Speed : $t_{rr} = 4\text{ns}$ (Typ)
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance
- Available in Lead Free Version



SOD-323

Applications:

Surface mount fast switching diode

Max. Rating @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Limits	Unit
Non-Repetitive peak reverse voltage	V_{RM}	100	V
Peak repetitive peak reverse voltage Working peak reverse voltage DC reverse voltage	V_{RRM} V_{RMS} V_R	75	V
RMS reverse voltage	$V_{R(RMS)}$	53	V
Average rectified output current	I_O	150	mA
Non-Repetitive peak forward surge current @ $t = 1\mu\text{s}$ @ $t = 1\text{s}$	I_{FSM}	2 1	A
Power dissipation	P_D	200	mW
Thermal resistance, junction to ambient air	$R_{\theta JA}$	625	$^\circ\text{C/W}$
Operating and storage temperature range	T_j, T_{STG}	-65 to +150	$^\circ\text{C}$

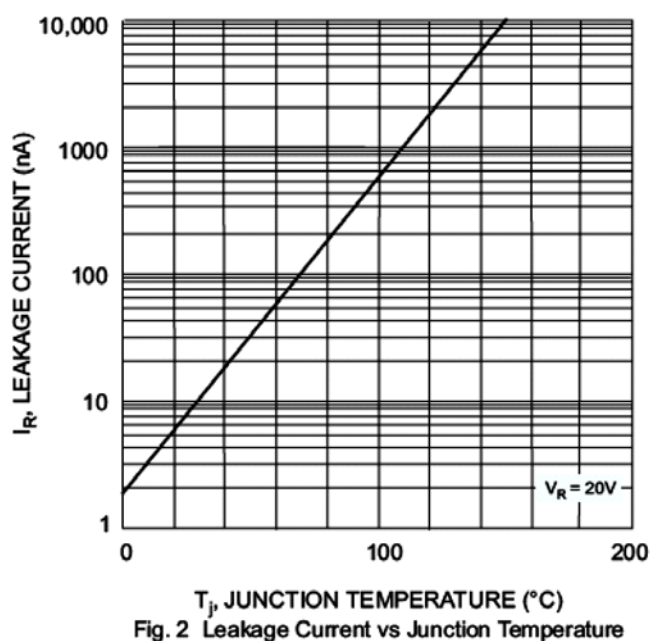
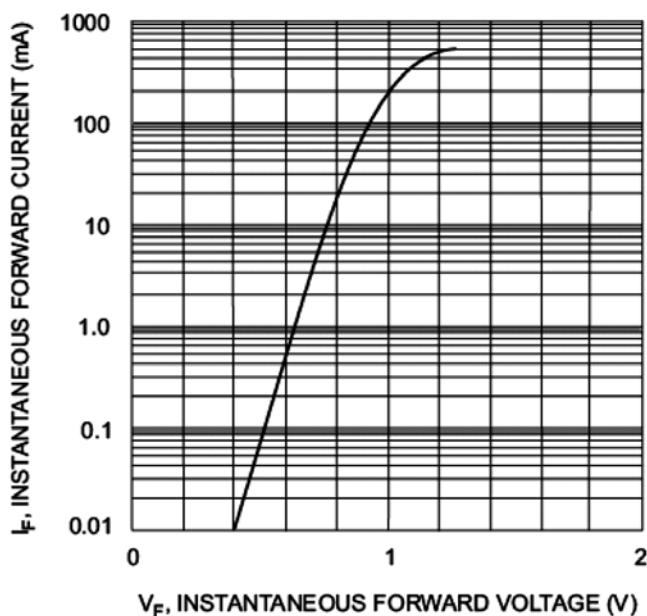
Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Conditions	Min.	Max.	Unit
Reverse breakdown voltage	$V_{(BR)R}$	$I_R = 1\mu\text{A}$	75	-	V
Forward voltage	V_F	$I_F = 1\text{mA}$ $I_F = 10\text{mA}$ $I_F = 50\text{mA}$ $I_F = 150\text{mA}$	-	0.715 0.855 1 1.25	V
Reverse current	I_R	$V_R = 75\text{V}$ $V_R = 20\text{V}$	-	1 25	μA nA
Capacitance between terminals	C_T	$V_R = 1\text{V}, f = 1\text{MHz}$	-	2	pF
Junction capacitance	C_J	$I_F = I_R = 10\text{mA}$, $I_{rr} = 0.1 \times I_R, R_L = 100\Omega$	-	4	ns

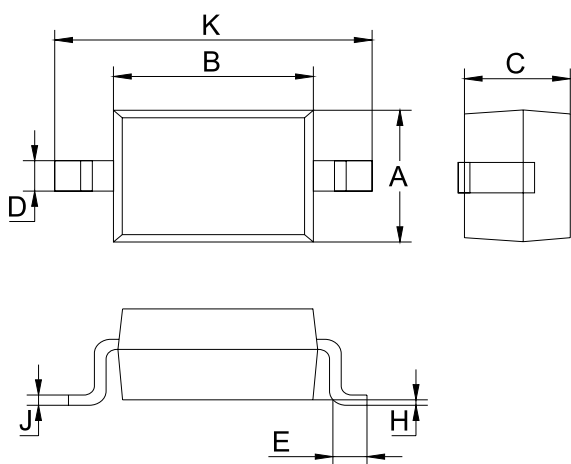
Silicon Epitaxial Planar Diode



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



Plastic surface mounted package

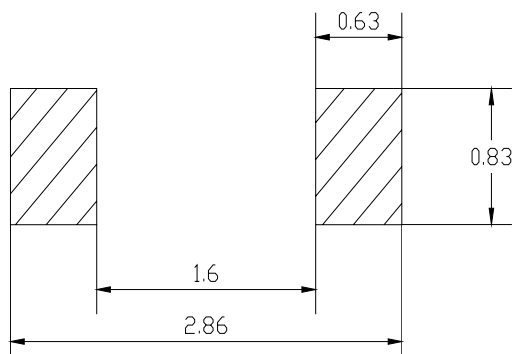


SOD-323		
Dim	Min	Max
A	1.275	1.325
B	1.675	1.725
C	0.9 Typical	
D	0.25	0.35
E	0.27	0.37
H	0.02	0.1
J	0.1 Typical	
K	2.6	2.7
All Dimensions in mm		

Silicon Epitaxial Planar Diode



Soldering Footprint



Unit : mm

Package Information

Device	Package	Shipping
BAV16WS-7-F	SOD-323	3,000 / Tape & Reel

Part Number Table

Description	Part Number
Silicon Epitaxial Planar Diode	BAV16WS-7-F

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