

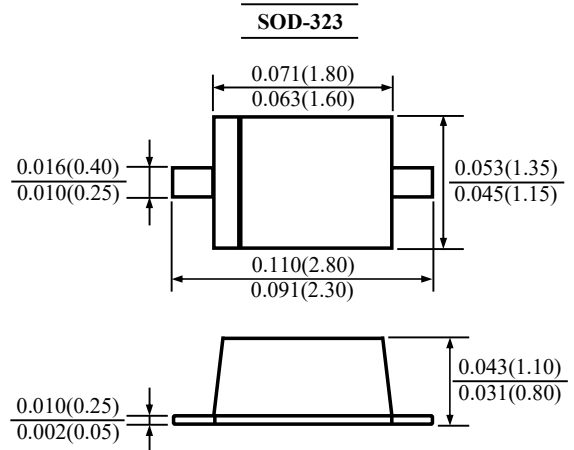


BAS16WSH

SWITCHING DIODE

FEATURES

- Fast Switching Diode
- Suffix "H" indicates Halogen-free parts, ex. BAS16WSH.



Dimensions in inch and (millimeter)

Maximum Ratings ($T_A = 25\text{ }^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	75	V
Peak Reverse Voltage	V_{RM}	100	V
Continuous Forward Current	$I_{F(AV)}$	250	mA
Non-Repetitive Peak Forward Surge Current	I_{FSM}	at $t=1\mu\text{s}$	2.0
		at $t=1\text{ms}$	1.0
		at $t=1\text{s}$	0.5
Total Power Dissipation	P_D	200	mW
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 to +150	$^\circ\text{C}$

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

Parameter	Conditions	Symbol	Min	Max	Unit
Forward Voltage	$I_F=1\text{mA}$	V_F	-	0.715	V
	$I_F=10\text{mA}$		-	0.855	
	$I_F=50\text{mA}$		-	1.000	
	$I_F=150\text{mA}$		-	1.250	
Reverse Breakdown Voltage	$I_R=100\mu\text{A}$	V_{BR}	75	-	V
Reverse Current	$V_R=75\text{V}$	I_R	-	1	μA
	$V_R=25\text{V}, T_J=150^\circ\text{C}$		-	30	
	$V_R=75\text{V}, T_J=150^\circ\text{C}$		-	50	
Diode Capacitance	$V_R=0\text{V}, f=1\text{MHz}$	C_d	-	2	pF
Reverse Recovery Time	$I_F=10\text{mA}$ to $I_R=10\text{mA}$, $I_R=1\text{mA}$, $R_L=100\Omega$	t_{rr}	-	6	ns



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RATINGS AND CHARACTERISTIC CURVES

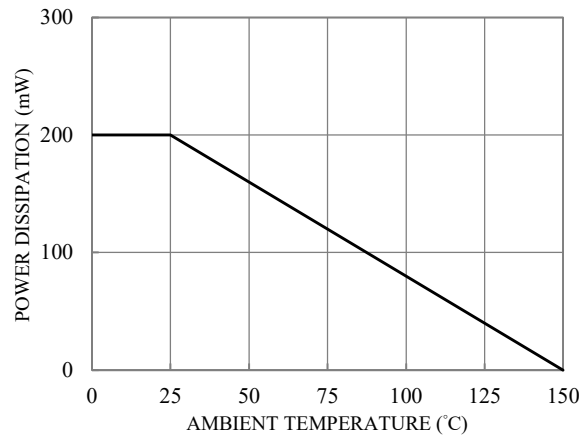


Fig.1-POWER DERATING CURVE

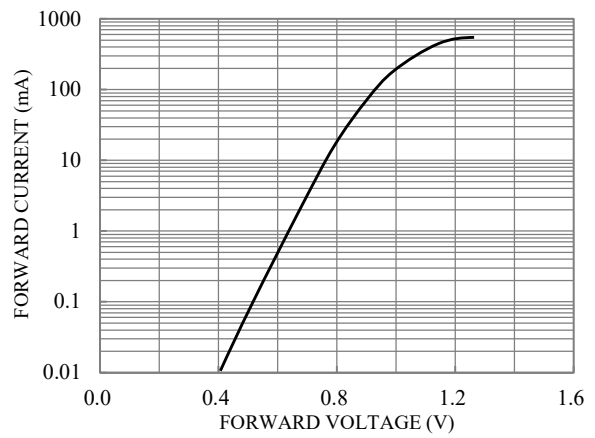


Fig.2-TYPICAL FORWARD CHARACTERISTICS

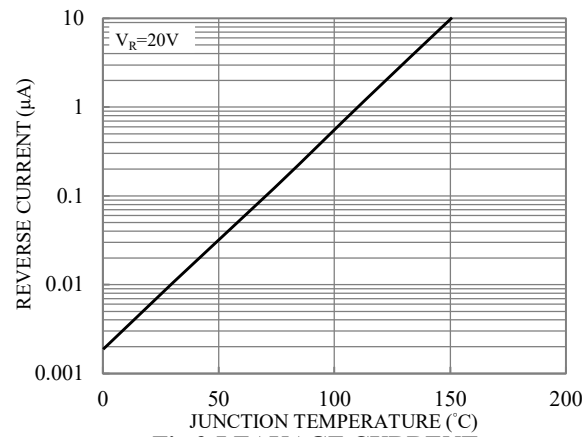


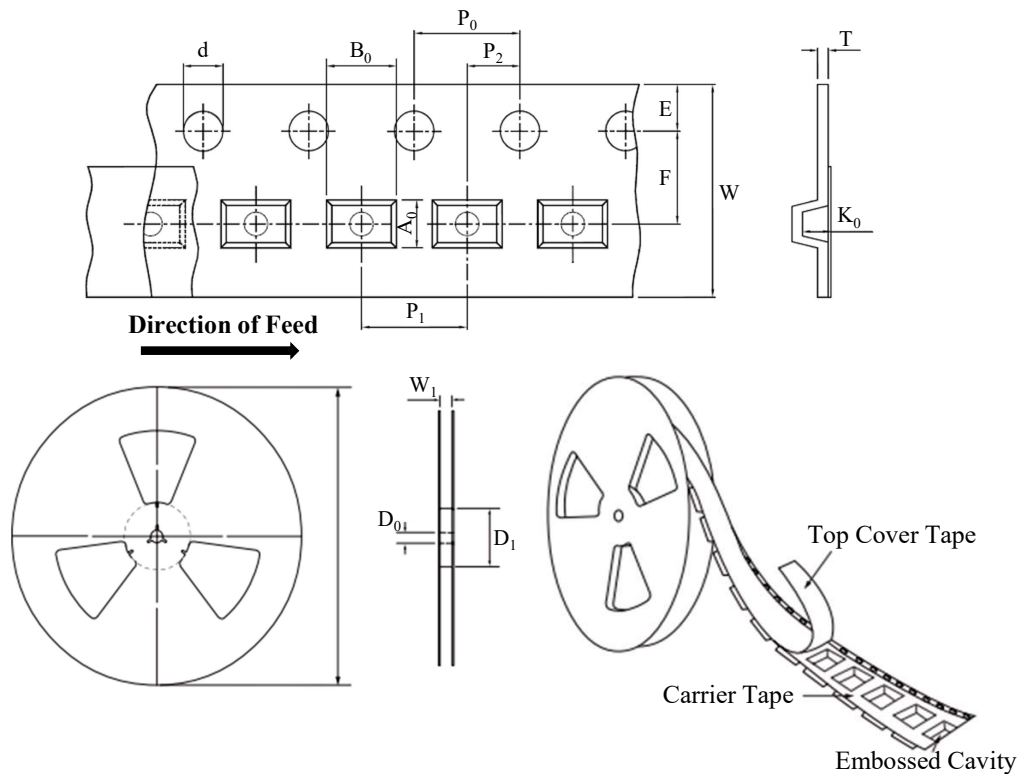
Fig.3-LEAKAGE CURRENT vs. JUNCTION TEMPERATURE



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TAPE & REEL SPECIFICATION



Item	Symbol	SOD-323
Carrier width	A ₀	2.95 ± 0.10
Carrier length	B ₀	1.50 ± 0.10
Carrier depth	K ₀	1.25 ± 0.10
Sprocket hole	d	1.50 ± 0.10
Reel outside diameter	D	178.00 ± 2.00
Feed hole width	D _{0i}	13.00 ± 0.50
Reel inner diameter	D ₁	MIN. 50.00
Sprocket hole position	E	1.75 ± 0.10
Punch hole position	F	3.50 ± 0.10
Sprocket hole pitch	P ₀	4.00 ± 0.10
Punch hole pitch	P ₁	4.00 ± 0.10
Embossment center	P ₂	2.00 ± 0.10
Overall tape thickness	T	0.60 ± 0.10
Tape width	W	8.00 ± 0.30
Reel width	W ₁	MAX. 10.00

ORDER INFORMATION

Package	Reel Size	Quantity
SOD-323	7"	3,000

MARKING CODE

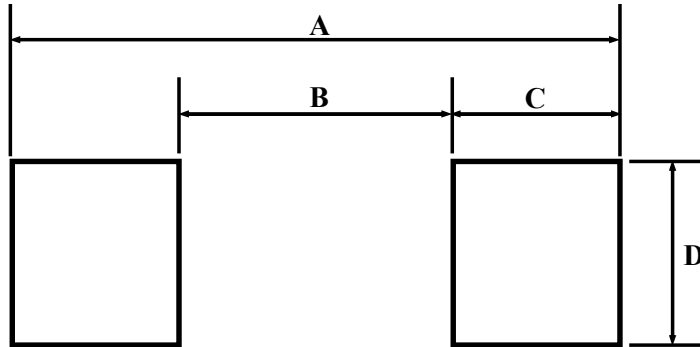
Part Number	Marking Code
BAS16WSH	W2



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SWITCHING DIODE

SUGGESTED SOLDER PAD LAYOUT



Unit :mm

PACKAGE	A	B	C	D
SOD-323	2.90	1.30	0.80	0.90