

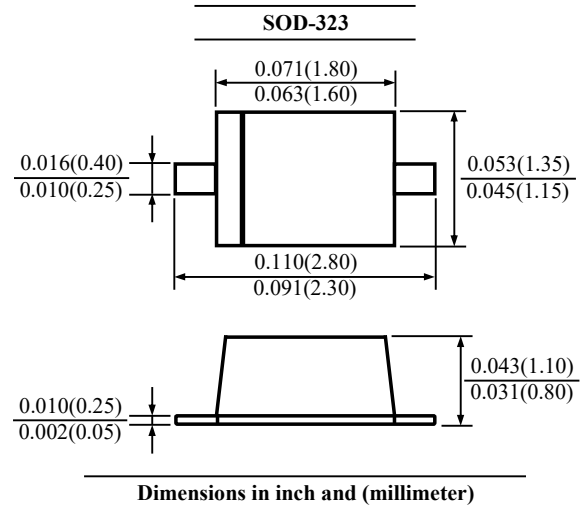


BAV116WSH

SWITCHING DIODE

FEATURES

- Ultra Low Leakage Current
- Suffix "H" indicates Halogen-free parts, ex.BAV116WSH



Maximum Ratings@ $T_A=25\text{ }^\circ\text{C}$

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	110	V
Forward Continuous Current	I_{FM}	215	mA
Repetitive Peak Forward Current	I_{FRM}	500	mA
Non-Repetitive Peak Forward Current	I_{FSM}	at $t=1\text{ s}$	0.5
		at $t=1\text{ ms}$	1.0
		at $t=1\text{ }\mu\text{s}$	4.0
Power Dissipation	P_D	200	mW
Thermal Resistance from Junction to Ambient (Note 1)	$R_{\theta JA}$	625	$^\circ\text{C/W}$
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150	$^\circ\text{C}$

Note :

1. Device mounted on FR-4 substrate PCB board, 2oz copper, with minimum recommended pad layout.

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

Parameter	Conditions	Symbol	Min	Max	Unit
Reverse Breakdown Voltage	$I_R=100\text{ }\mu\text{A}$	$V_{(BR)R}$	110	-	V
Forward Voltage	$I_F=1\text{ mA}$	V_F	-	0.90	V
	$I_F=10\text{ mA}$		-	1.00	
	$I_F=50\text{ mA}$		-	1.10	
	$I_F=150\text{ mA}$		-	1.25	
Reverse current	$V_R=75\text{ V}, T_J=25\text{ }^\circ\text{C}$	I_R	-	5	nA
	$V_R=75\text{ V}, T_J=125\text{ }^\circ\text{C}$		-	80	
Total Capacitance	$V_R=0\text{ V}, f=1\text{ MHz}$	C_T	-	5	pF
Reverse Recovery Time	$I_F=I_R=10\text{ mA}, I_{tr}=0.1\times I_R, R_L=100\text{ }\Omega$	t_{rr}	-	3	μs



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RATINGS AND CHARACTERISTIC CURVES

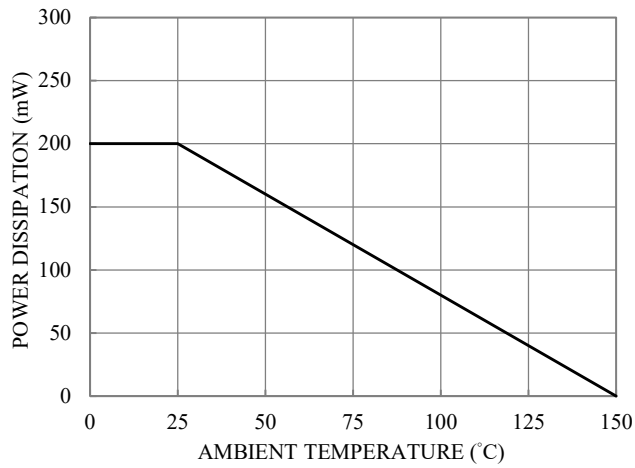


Fig.1-POWER DERATING CURVE

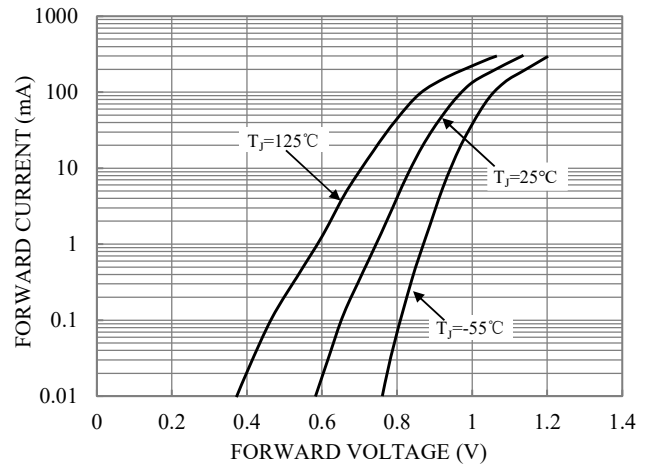


Fig.2-FORWARD CHARACTERISTICS CURVE

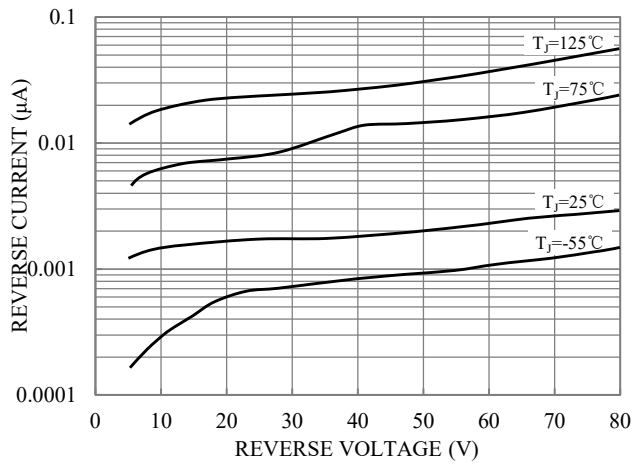


Fig.3-REVERSE CHARACTERISTICS CURVE

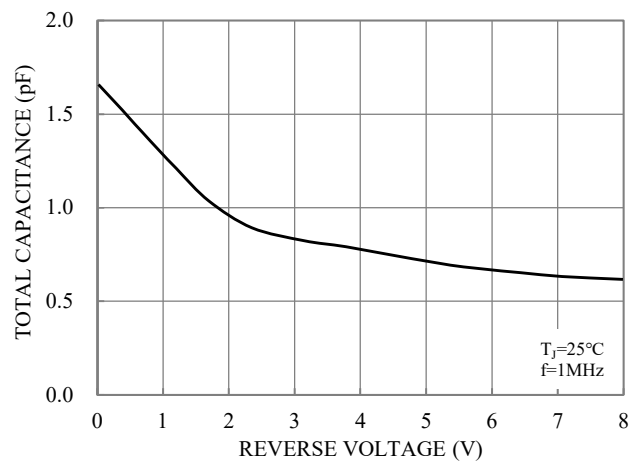


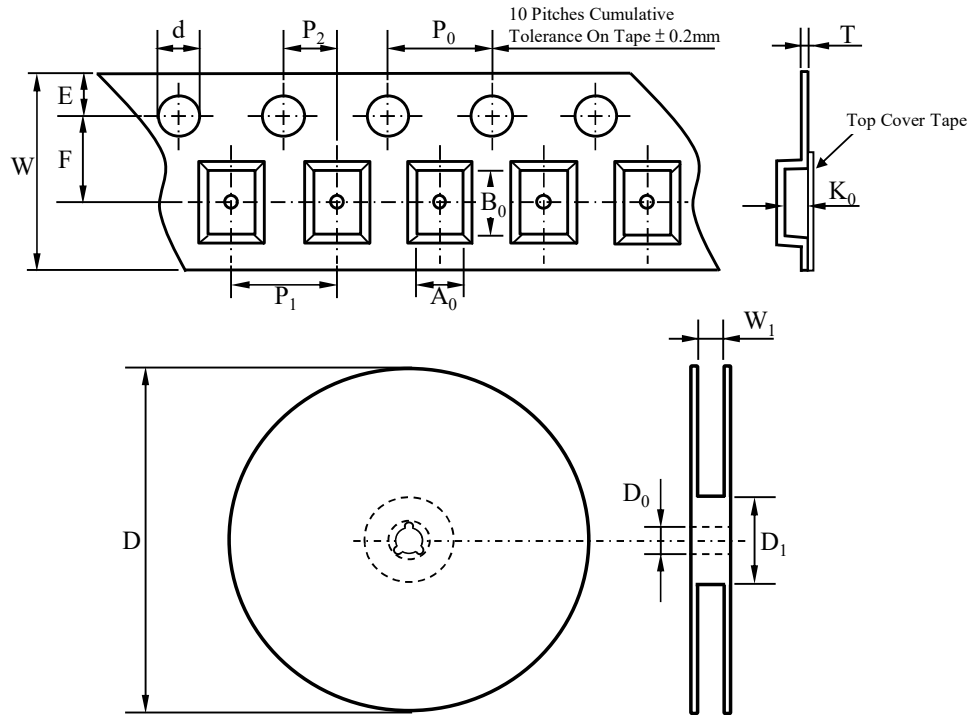
Fig.4-CAPACITANCE CHARACTERISTICS CURVE



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TAPE & REEL SPECIFICATION



Item	Symbol	SOD-323
Carrier width	A ₀	*
Carrier length	B ₀	
Carrier depth	K ₀	
Sprocket hole	d	1.50 ± 0.10
Reel outside diameter	D	178.00 ± 2.00
Feed hole width	D ₀	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	0.20 ± 0.05
Tape width	W	8.00 ± 0.20
Reel width	W ₁	MAX. 14.50

Note *: A₀, B₀, and K₀ are determined by component size. The clearance between the components and the cavity must be within 0.05 mm min. to 0.5 mm max.

ORDER INFORMATION

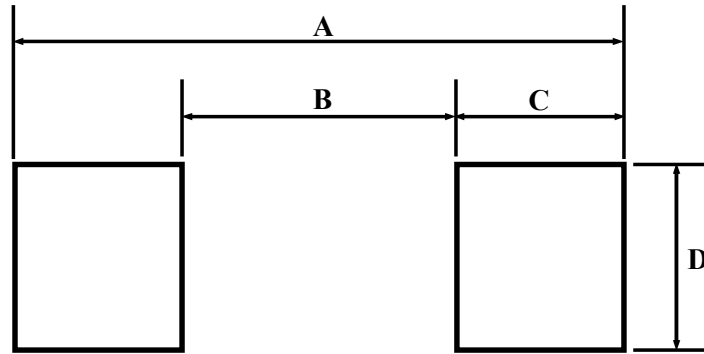
Part Number	Marking Code	Reel Size	Quantity
BAV116WSH	CL	7"	3,000



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SUGGESTED SOLDER PAD LAYOUT



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