

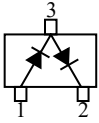


BAV99WH

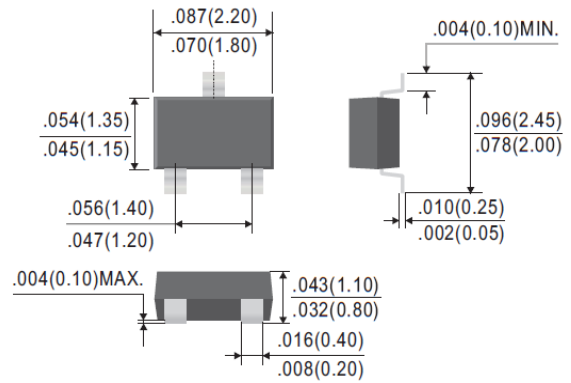
SWITCHING DIODE

FEATURES

- For high-speed switching applications
- Suffix "H" indicates Halogen-free parts, ex. BAV99WH.



SOT-323



Dimensions in inch and (millimeter)

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

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	85	V
Reverse Voltage	V_R	75	V
Continuous Forward Current	Single Diode Load	150	mA
	Double Diode Load	130	
Repetitive Peak Forward Current	I_{FRM}	500	mA
Non-Repetitive Peak Forward Surge Current	$t=1\mu\text{s}$	4.0	A
	$t=1\text{ms}$	1.0	
	$t=1\text{s}$	0.5	
Total Power Dissipation	P_{tot}	200	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	625	$^\circ\text{C}/\text{W}$
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 to +150	$^\circ\text{C}$

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

Parameter	Conditions	Symbol	Max	Unit
Forward voltage	$I_F = 1\text{mA}$	V_F	715	mV
	$I_F = 10\text{mA}$		855	
	$I_F = 50\text{mA}$		1000	
	$I_F = 150\text{mA}$		1250	
Reverse Current	$V_R = 25\text{V}$	I_R	30	nA
	$V_R = 75\text{V}$		1	μA
	$V_R = 25\text{V}, T_J = 150^\circ\text{C}$		30	μA
	$V_R = 75\text{V}, T_J = 150^\circ\text{C}$		50	μA
Diode Capacitance	$V_R = 0\text{V}, f = 1\text{MHz}$	C_d	1.5	pF
Reverse Recovery Time	$I_F = 10\text{mA}, I_R = 60\text{mA}, I_{tr} = 0.1 \times I_R$	t_{rr}	4	ns



BAV99WH SWITCHING DIODE

RATINGS AND CHARACTERISTIC CURVES

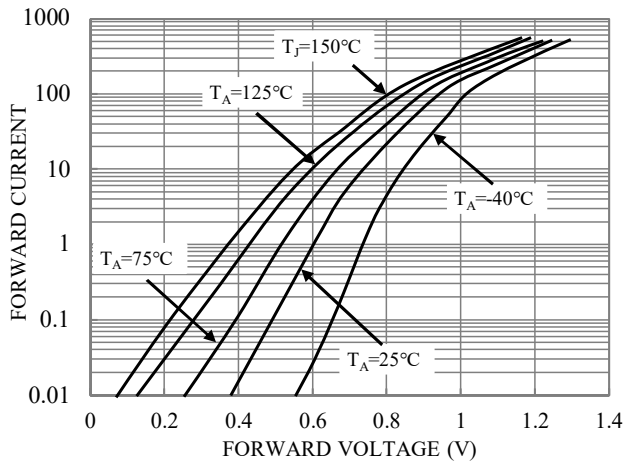


Fig.1-TYPICAL FORWARD CHARACTERISTICS

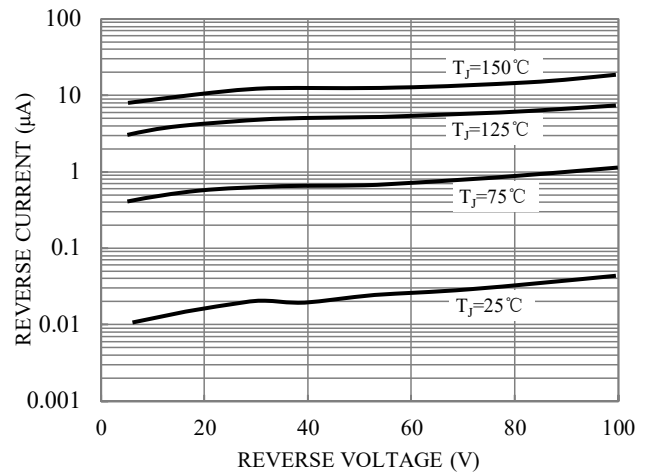


Fig.2-TYPICAL REVERSE CHARACTERISTICS

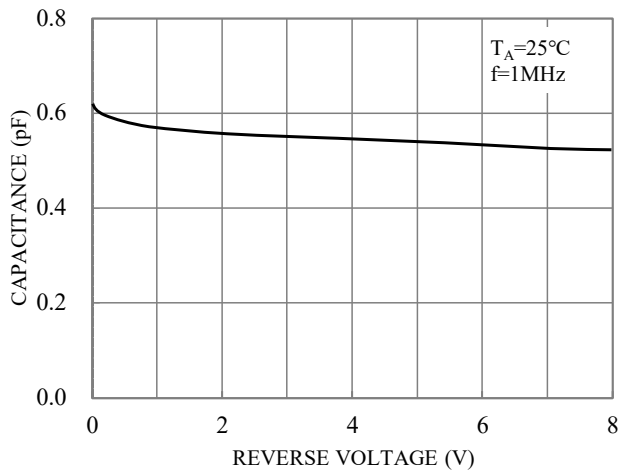
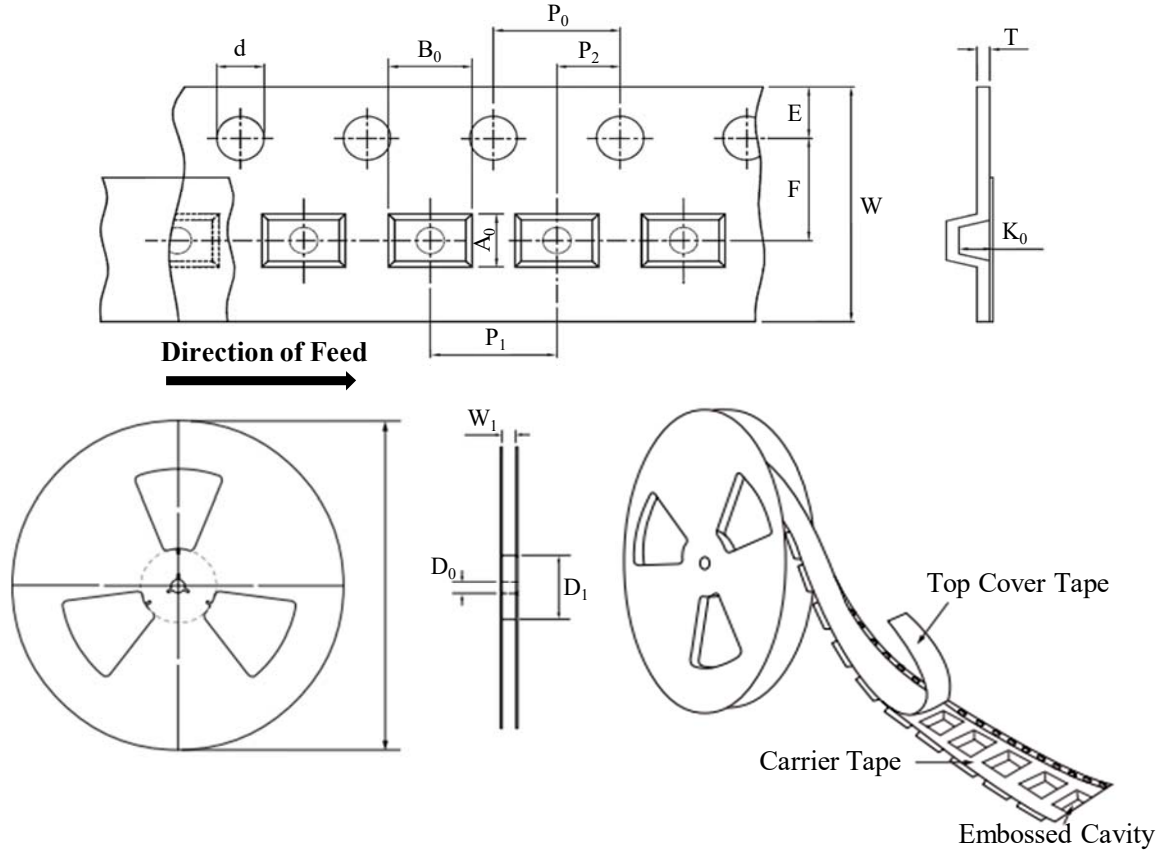


Fig.3-CAPACITANCE



BAV99WH SWITCHING DIODE

TAPE & REEL SPECIFICATION



Item	Symbol	SOT-323
Carrier width	A ₀	2.30 ± 0.10
Carrier length	B ₀	2.30 ± 0.10
Carrier depth	K ₀	1.30 ± 0.10
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

ORDER INFORMATION

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

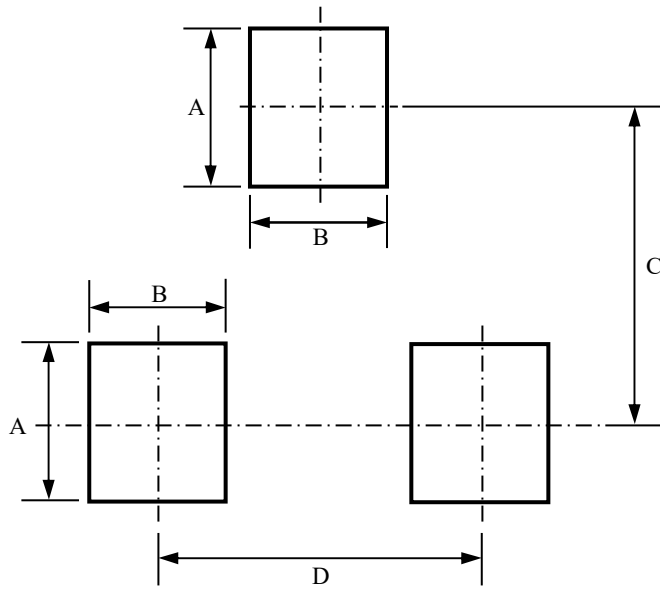
MARKING CODE

Part Number	Marking Code
BAV99WH	A7



BAV99WH SWITCHING DIODE

SUGGESTED SOLDER PAD LAYOUT



Unit :mm

PACKAGE	A	B	C	D
SOT-323	0.80	0.80	1.60	1.30