

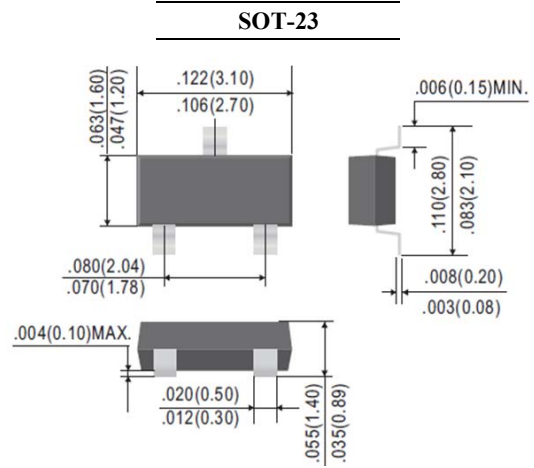
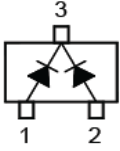


BAV170H

SWITCHING DIODE

FEATURES

- Low leakage switching double diode
- Suffix "H" indicates Halogen-free parts, ex. BAV170H



Dimensions in inch and (millimeter)

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

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	85	V
Reverse voltage	V_R	85	V
Continuous Forward Current	$I_{F(AV)}$	Single Diode	215
		Double Diode	125
Non-Repetitive Peak Forward Surge Current	I_{FSM}	$t=1\mu s$	4.0
		$t=1ms$	1.0
		$t=1s$	0.5
Power Dissipation	P_D	250	mW
Thermal Resistance Junction to Ambient Air (Note 1)	$R_{\theta JA}$	500	$^\circ\text{C}/\text{W}$
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 PC substrate PC board, 2oz copper, with minimum recommended pad layout.

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

Parameter	Conditions	Symbol	Min	Typ.	Max	Unit
Reverse Breakdown Voltage	$I_R=100\mu A$	$V_{BR(R)}$	85	-	-	V
Forward voltage	$I_F=1mA$	V_F	-	-	0.90	V
	$I_F=10mA$		-	-	1.00	
	$I_F=50mA$		-	-	1.10	
	$I_F=150mA$		-	-	1.25	
Reverse Current	$V_R=75V$	I_R	-	-	5	nA
	$V_R=75V, T_J=150^\circ\text{C}$		-	-	80	
Total Capacitance	$V_R=0V, f=1MHz$	C_T	-	2.0	-	pF
Reverse Recovery Time	$I_F=I_R=10mA, I_{tr}=0.1 \times I_R, R_L=100\Omega$	t_{rr}	-	-	3	μs



BAV170H

SWITCHING DIODE

RATINGS AND CHARACTERISTIC CURVES

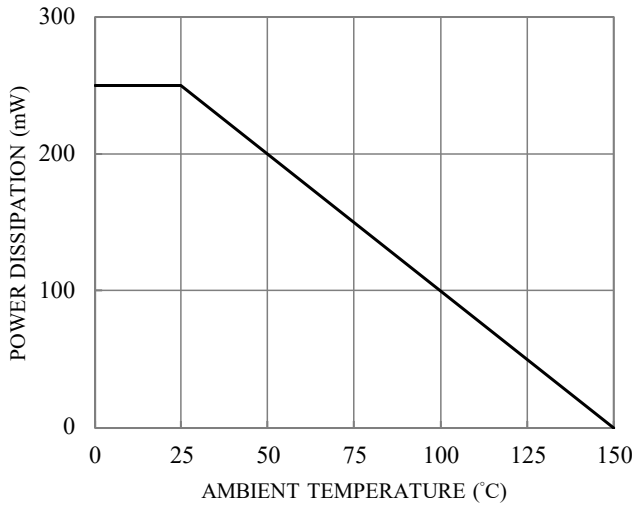


Fig.1-POWER DERATING CURVE

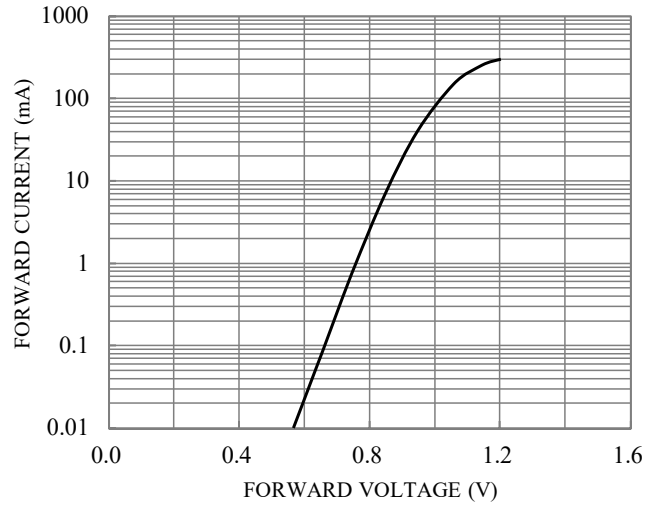


Fig.2-TYPICAL FORWARD CHARACTERISTICS

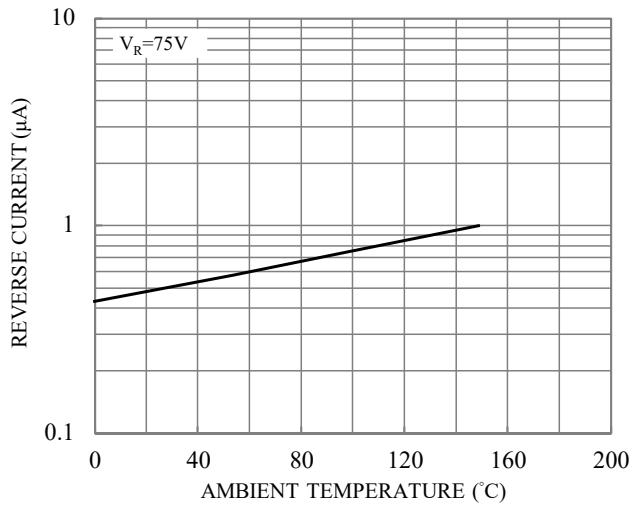


Fig.3-TYPICAL REVERSE CHARACTERISTICS

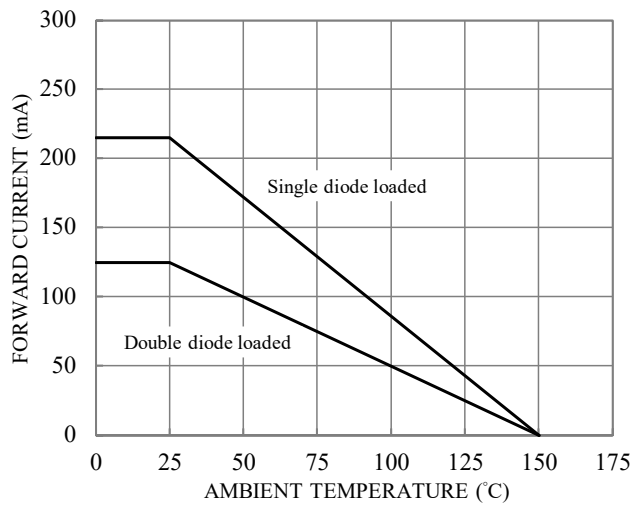
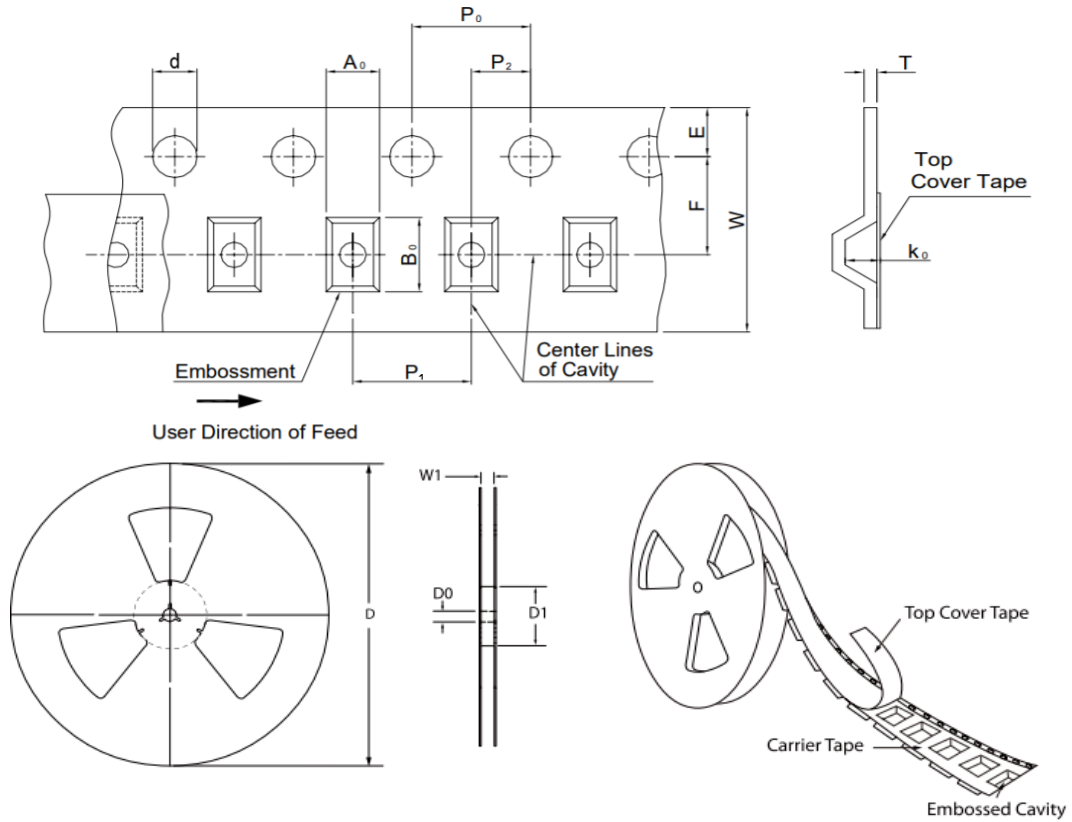


Fig.4-CURRENT DERATING CURVE



BAV170H SWITCHING DIODE

TAPE & REEL SPECIFICATION



Item	Symbol	SOT-23
Carrier width	A ₀	3.30 ± 0.10
Carrier length	B ₀	3.30 ± 0.10
Carrier depth	K ₀	1.55 ± 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	MAX. 0.20
Tape width	W	8.00 ± 0.30
Reel width	W ₁	MAX. 10.00

ORDER INFORMATION

Package	Reel Size	Quantity
SOT-23	7"	3,000

MARKING CODE

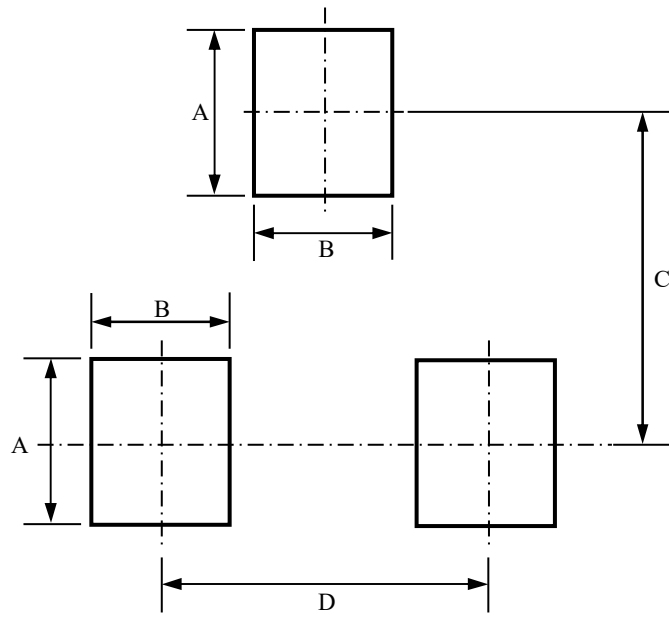
Part Number	Marking Code
BAV170H	C7



BAV170H

SWITCHING DIODE

SUGGESTED SOLDER PAD LAYOUT



Unit :mm

PACKAGE	A	B	C	D
SOT-23	1.00	0.80	2.00	1.90