BAW56/BAV70/BAV99

SMD Switching Diode

Reverse Voltage - 70 V
Forward Current - 0.2 A

Features

- Power Dissipation of 225mW
- Fast Switching Device (TRR<6nS)
- High Stability and High Reliability
- Low Reverse Leakage

Mechanical Data

- Case: SOT23 Package
- Case Material: “Green” Molding Compound UL Flammability Classification Rating 94V-0
- Mounting Position : Any

Note: Products with logo HY® or hy are made by HY Electronic (Cayman) Limited.

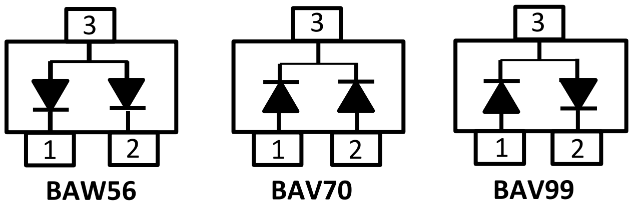
Ordering Information

- Package :SOT23
- Reel Size :7 (inches)
- Quantity Per Reel :3,000 pcs
- Quantity One Box :45,000 pcs
- Quantity One Carton :180,000 pcs

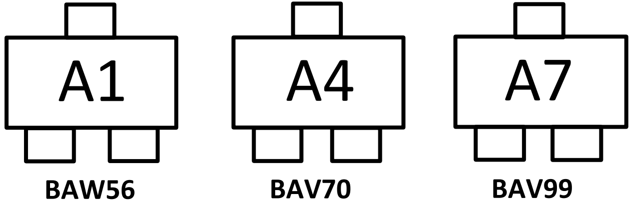
Package Outline

SOT23 Top View

Device Schematic & PIN Configuration



Product Type Marking Code



Maximum Ratings (@TA = +25°C, unless otherwise specified.)

Absolute Ratings

Parameter	Symbol	Value	Unit
Reverse Voltage	V_R	70	V
Average Rectified Output Current	I_O	200	mA
Forward Continuous Current	I_{FM}	400	mA
Non-repetitive Peak Forward Surge Current @ t = 1us;TA=25℃	I_{FSM}	2	A
Power Dissipation	P_d	225	mW
Junction temperature	T_j	150	° C
Storage Temperature Range	T_{STG}	-65 to +150	° C
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	500	° C/W

Electrical Characteristics

Parameter	Test Conditions	Symbol	Min	Typ	Max	Unit
Reverse Voltage	I_B= 100uA	V_{BR}	100	-	-	V
Reverse Leakage Current	V_R= 100V	I_R	-	-	2.5	uA
Forward Voltage	I_F = 1mA	V_F	-	-	0.715	V
	I_F = 10mA		-	-	0.855	
	I_F = 50mA		-	-	1.00	
	I_F = 150mA		-	-	1.25	
Reverse Recovery Time	I_F=I_R=10mA,I_{rr}=0.1*I_R, R_L=100Ω	T_{RR}	-	-	6	ns
Junction Capacitance	V_R = 0V, F = 1MHZ	C_T	-	-	1.5	pF

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Rating and Characteristic Curves

FIG.1 - Forward Characteristics

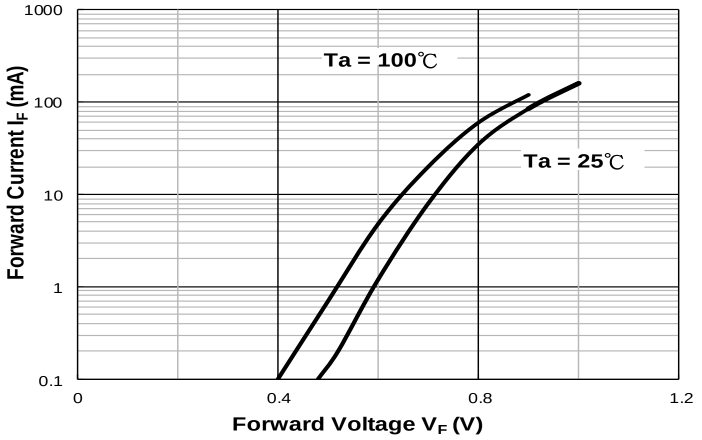


FIG.2 - Reverse Characteristics

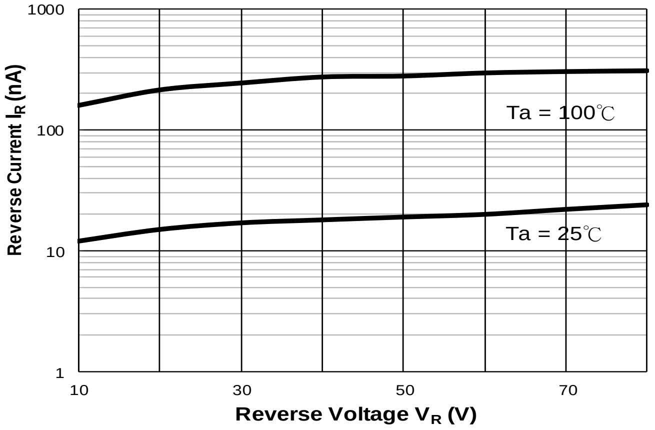


FIG.3 - Power Darating Curve

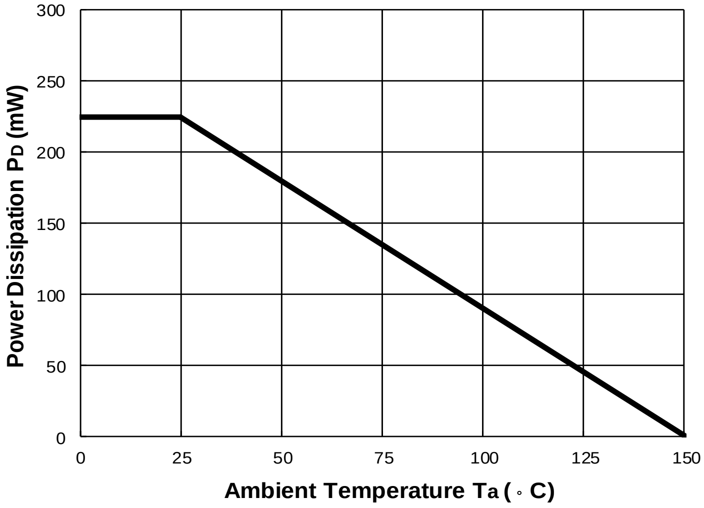
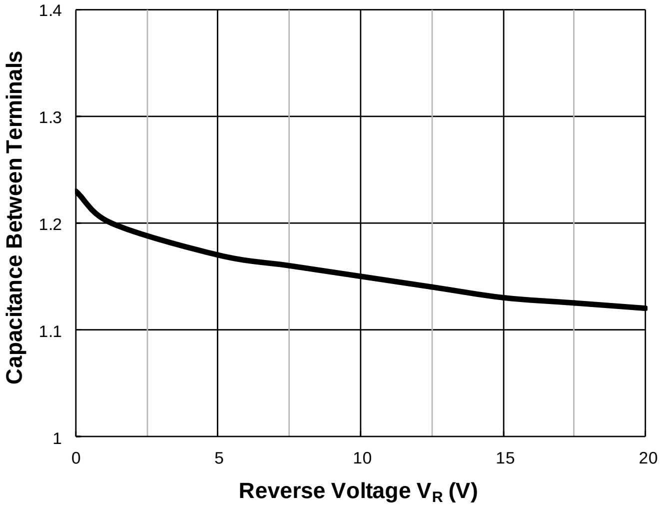
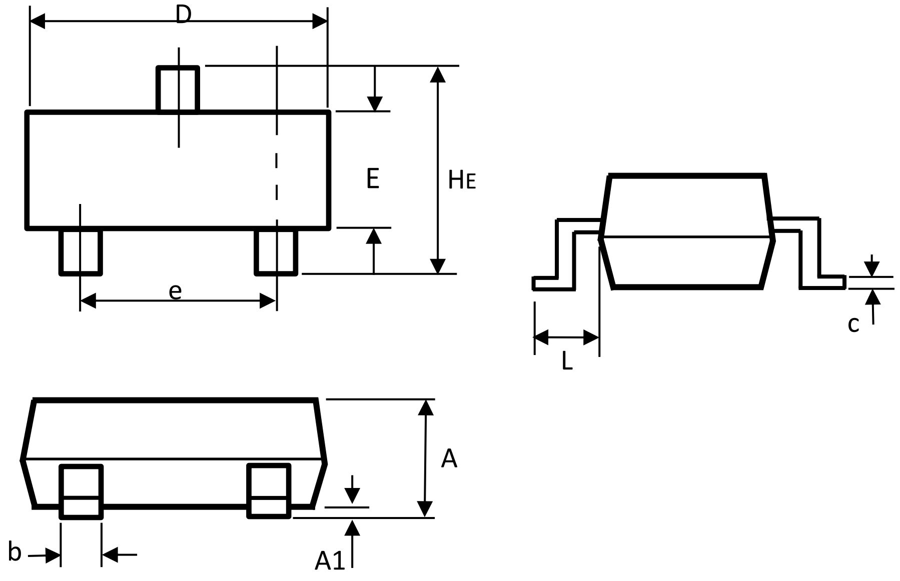


FIG.4 - Capacitance Characteristics



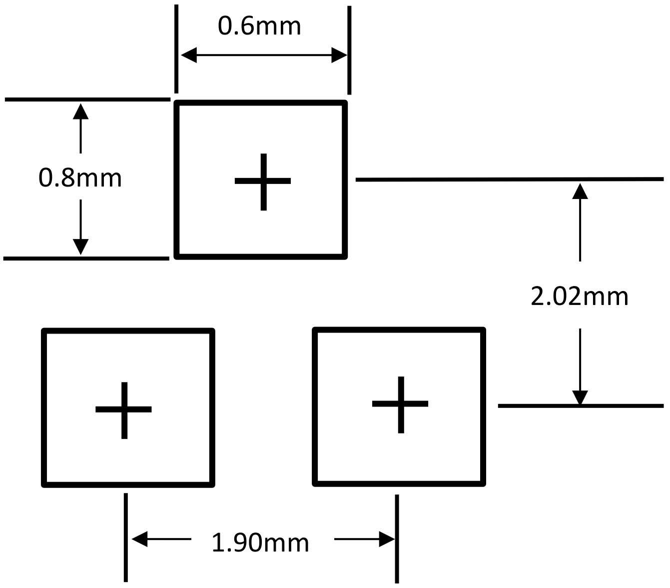
The curve above is for reference only.

Package Outline Dimensions



SOT23 Package		
Dim	Min	Max
A	0.90	1.15
A1	0.00	0.10
b	0.30	0.50
c	0.08	0.15
D	2.80	3.00
E	1.20	1.40
e	1.80	2.00
L	0.55 REF	
HE	2.25	2.55
All Dimensions in mm		

Suggested Soldering Pad Layout



Note:

1.The pad layout is for reference purposes only.

2.General tolerance ±0.05mm

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