

Diodes

BA Series

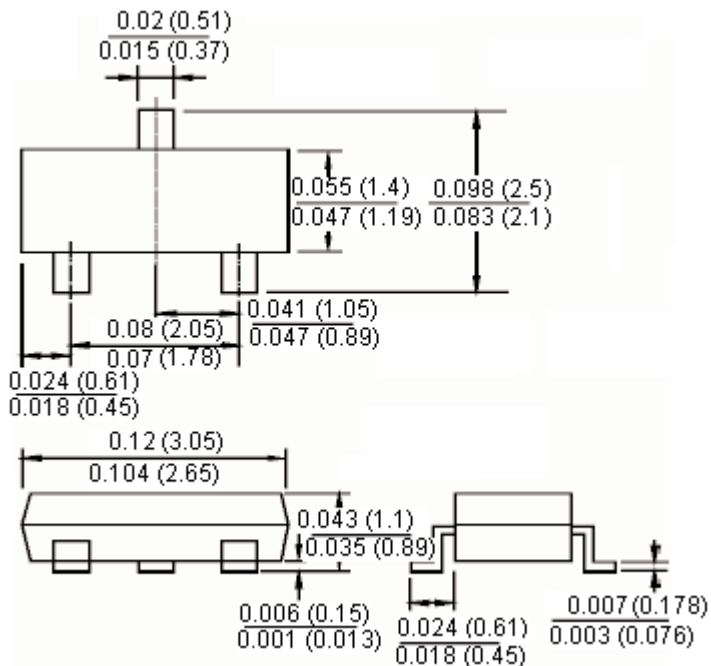


Features:

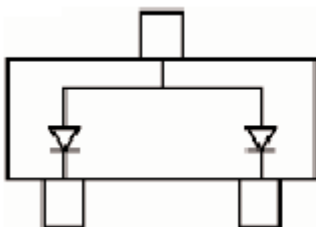
- Fast switching speed
- Surface mount package ideally suited for automatic insertion
- For general purpose switching applications
- High conductance



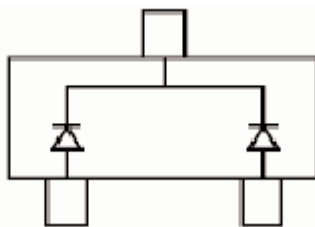
SOT-23



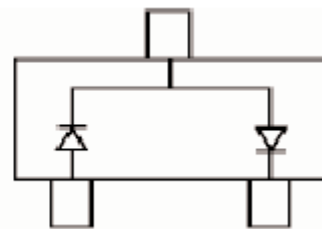
Dimensions : Inches (Millimetres)



BAW56 Marking : A1



BAV70 Marking : A4



BAV99 Marking : A7

Mechanical Data

Case	: SOT-23, moulded plastic
Terminals	: Solderable per MII-STD-202, Method 208
Polarity	: See diagram
Marking	: BAW56 : A1, BAV70 : A4, BAV99 : A7
Weight	: 0.008 g (approximately)

Maximum Ratings $T_A = 25^\circ\text{C}$ unless otherwise specified

Type Number	Symbol	BAW56 / BAV70 / BAV99	Units
Reverse Voltage	V_R	75	V
Forward Current	I_F	200	mA
Peak Forward Surge Current	$I_{FM} \text{ (surge)}$	500	
Power Dissipation	P_D	225	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	556	$^\circ\text{C} / \text{W}$
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to 150	

Electrical Characteristics

Type Number	Symbol	Minimum	Maximum	Units
Reverse Breakdown Voltage $I_R = 100 \mu\text{A}$	V_R	75	-	V
Forward Voltage $I_F = 1.0 \text{ mA}$ $I_F = 10 \text{ mA}$ $I_F = 50 \text{ mA}$ $I_F = 150 \text{ mA}$	V_F	-	0.715 0.855 1 1.25	
Reverse Current $V_R = 25 \text{ V}$ $V_R = 75 \text{ V}$	I_R	-	30 2	nA μA
Capacitance Between Terminals $V_R = 0, f = 1 \text{ MHz}$	C_j	-	1.5	pF
Reverse Recovery Time (Note 1)	t_{rr}	-	6	nS

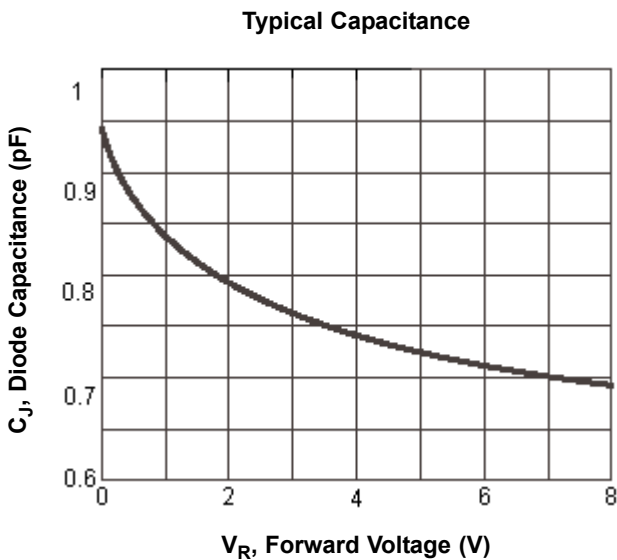
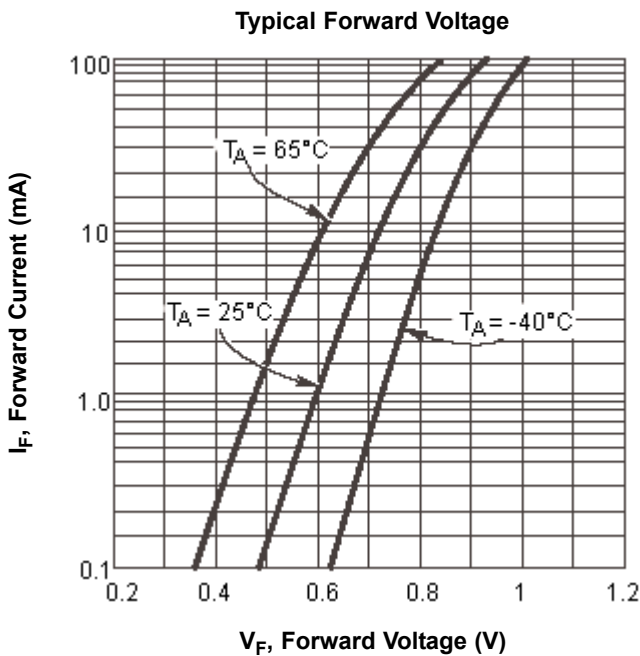
Note 1 : Reverse recovery test conditions : $I_F = I_R = 10 \text{ mA}$, $I_{rr} = 0.1 \times I_R$, $R_L = 100 \Omega$

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BA Series



Ratings and Characteristic Curves (BAW56 / BAV70 / BAV99)



Part Number Table

Description	Part Number
Diode, Dual, Small Signal, SOT23	BAV70
Diode, Dual, Small Signal, 75 V, SOT23	BAV99
Diode, Small Signal SOT23	BAW56

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