Diodes

BA Series



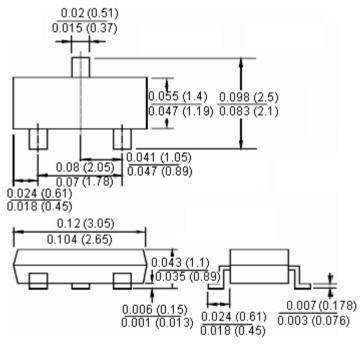


Features:

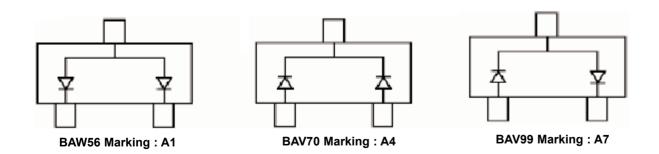


- Fast switching speed
- · Surface mount package ideally suited for automatic insertion
- For general purpose switching applications
- High conductance

SOT-23



Dimensions: Inches (Millimetres)





Diodes

BA Series



Mechanical Data

Case : SOT-23, moulded plastic

Terminals : Solderable per MIIL-STD-202, Method 208

Polarity : See diagram

Marking : BAW56 : A1, BAV70 : A4, BAV99 : A7

Weight : 0.008 g (approximately)

Maximum Ratings $T_A = 25$ °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 (surge)}	500		
Power Dissipation	P _D	225	mW	
Thermal Resistance Junction to Ambient Air	$R_{ heta JA}$	556	°C / W	
Junction Temperature	T _J	150	°C	
Storage Temperature Range	T _{STG}	-55 to 150		

Electrical Characteristics

Type Nu	mber	Symbol	Minimum	Maximum	Units
Reverse Breakdown Voltage	I _R = 100 μA	V _R	75	-	
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	V
Reverse Current	V _R = 25 V V _R = 75 V	I _R	-	30 2	nA μA
Capacitance Between Termina	s V _R = 0, f = 1 MHz	C _j	-	1.5	pF
Reverse Recovery Time (Note	1)	t _{rr}	-	6	nS

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



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Ratings and Characteristic Curves (BAW56 / BAV70 / BAV99)

Typical Forward Voltage

100

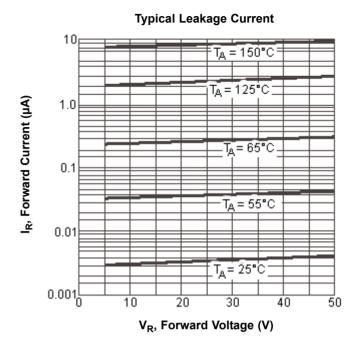
T_A = 65°C

T_A = -40°C

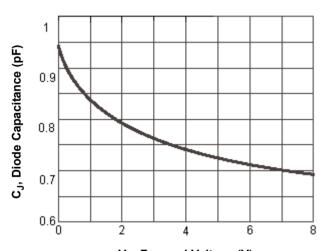
1.0

1.0

V_F, Forward Voltage (V)



Typical Capacitance



V_R, Forward Voltage (V)

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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