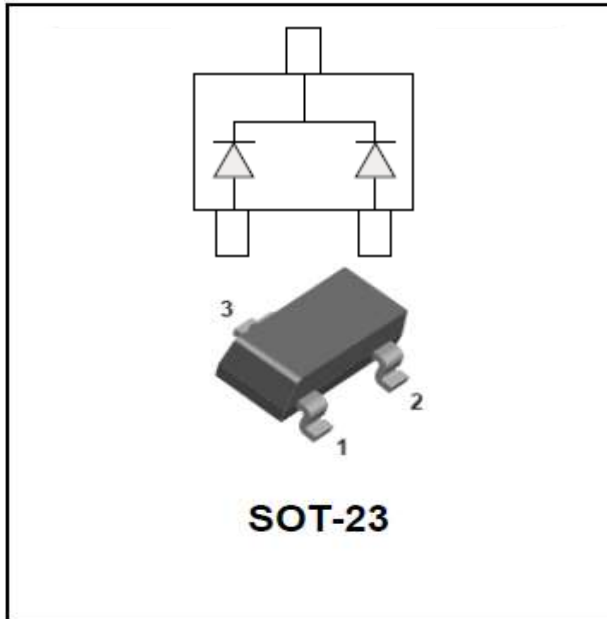


Dual Switching Diode



Features

- Epoxy meets UL-94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Fast switching speed
- High Conductance
- Surface mount package ideally Suited for Automatic Insertion

Mechanical Data

- **Package:** SOT-23
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end
- **Marking:** A4

■ Maximum Rating, ($T_a=25^\circ\text{C}$ Unless otherwise specified)

Item	Symbol	Unit	Value
Peak Reverse Voltage	V_{RRM}	V	100
Reverse Voltage	V_R	V	75
Forward Continuous Current@ $f \geq 50\text{Hz}$, Per Leg	I_F	mA	150
Non-Repetitive Peak Forward Surge Current@8.3ms, Half sine-wave, Per Leg	I_{FSM}	A	2.0
Power Dissipation	P_D	mW	350
Maximum Thermal Resisance	R_{thJA}	$^\circ\text{C}/\text{W}$	357
Storage Temperature	T_{STG}	$^\circ\text{C}$	-55 to +150

■ Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAV70	F2	Approximate 0.008	3000	30000	120000	7" reel

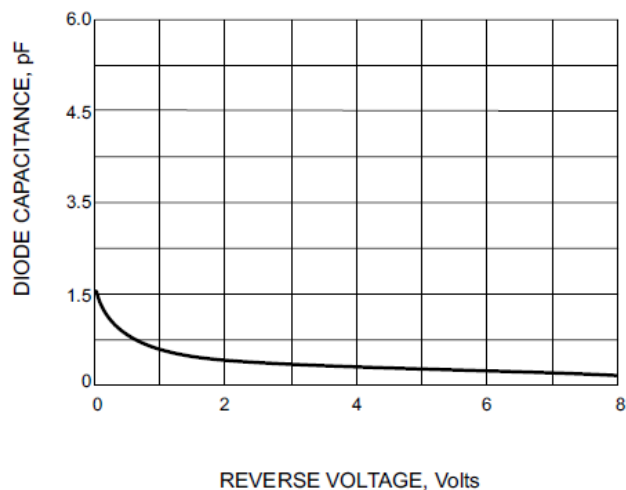
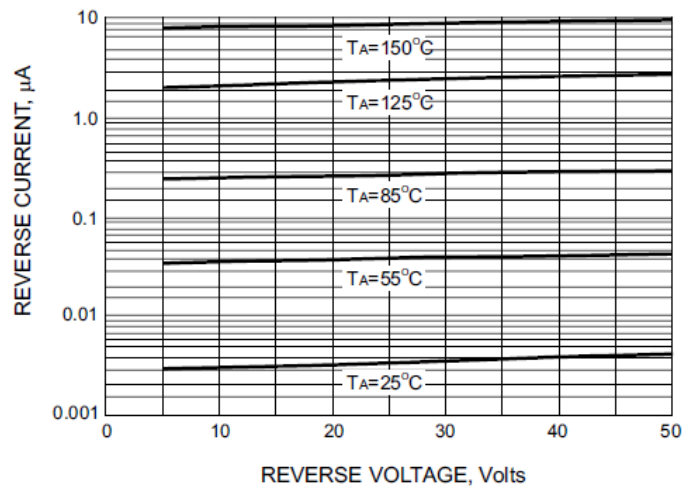
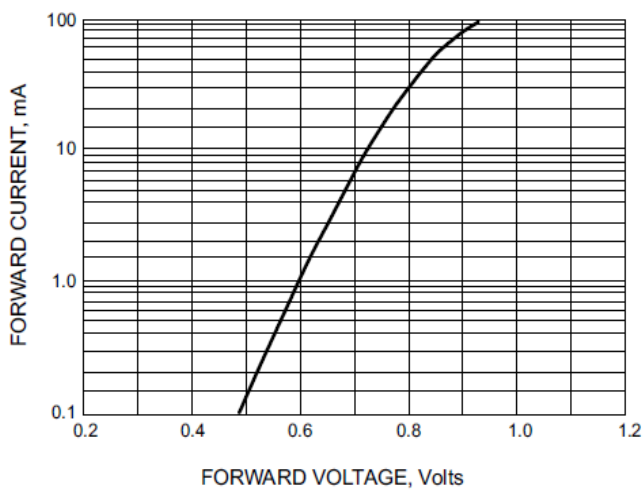


BAV70

■ Electrical Characteristics (T_a=25°C Unless otherwise specified, Per Leg)

Item	Symbol	Unit	Conditions	Value
Reverse Voltage	V _R	V	I _R =2.5μA	75
Maximum Instantaneous Forward Voltage	V _F	V	I _{FM} =10mA	1
Maximum DC Reverse Current	I _R	μA	V _R =75V	2.5
Typical Junction Capacitance	C _J	pF	f=1.0MHz, V _R =0V	4
Reverse Recovery Time	T _{rr}	ns	I _F =10mA, V _R =6V, R _L =500Ω, I _{rr} =1mA	4

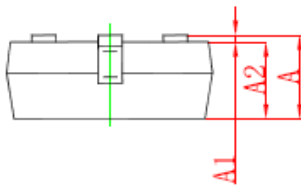
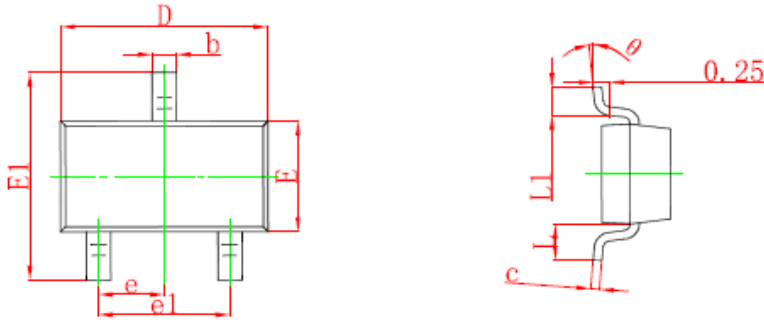
■ Typical Characteristics (Per Leg)





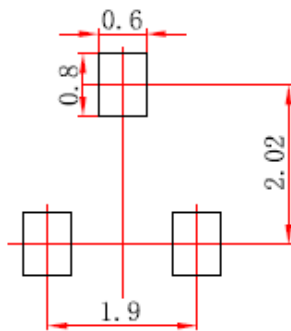
BAV70

■SOT-23 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP		0.037 TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°

■SOT-23 Suggested Pad Layout



- Note:
1. Controlling dimension: In millimeters.
 2. General tolerance: ± 0.05 mm.
 3. The pad layout is for reference purposes only.



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