

## Dual Switching Diode

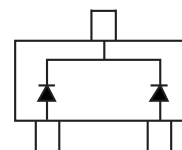
### Features

- 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 Ratings (Ta=25°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>=50Hz, 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 Resistance	$R_{thJA}$	°C/W	357
Storage Temperature	$T_{STG}$	°C	-55 to +150
Operating Junction Temperature	$T_j$	°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

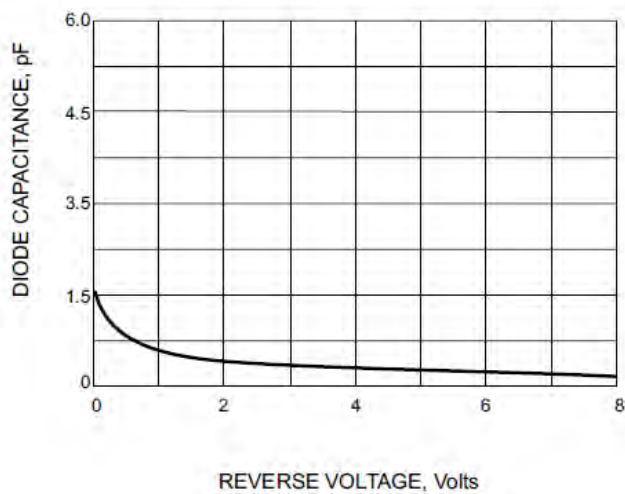
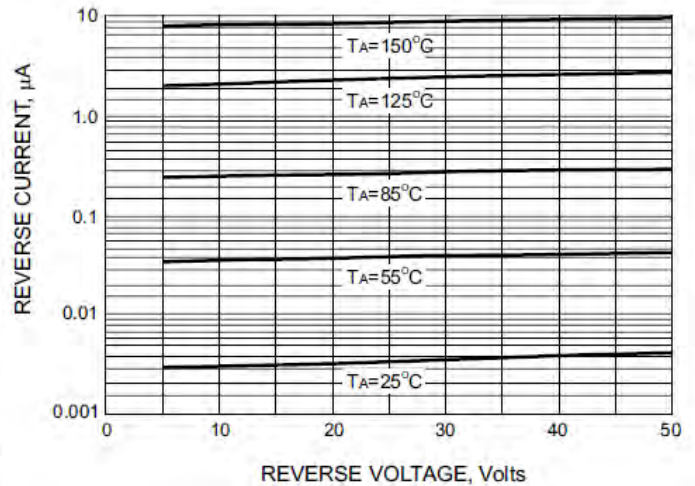
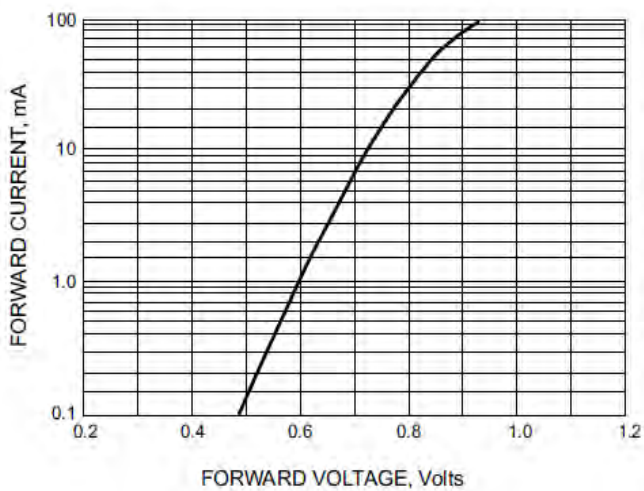


# BAV70

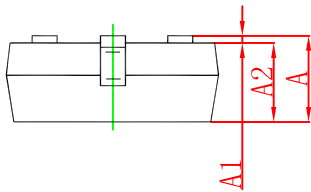
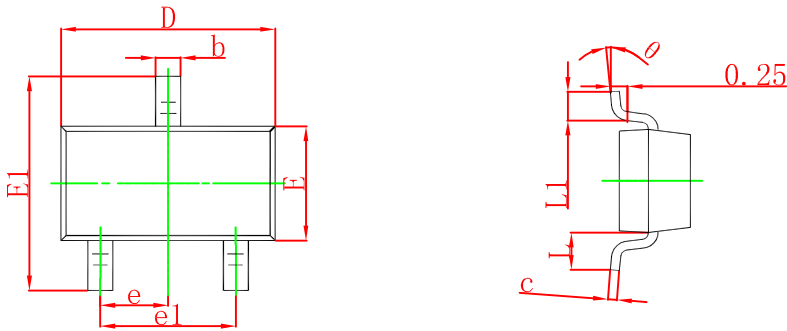
## Electrical Characteristics (Ta=25°C, unless otherwise specified)

Item	Symbol	Unit	Conditions	Value
Reverse Voltage	V <sub>R</sub>	V	I <sub>R</sub> =2.5uA	75
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	V	I <sub>FM</sub> =10mA	1
Maximum DC Reverse Current	I <sub>R</sub>	uA	V <sub>R</sub> =75V	2.5
Typical Junction Capacitance	C <sub>J</sub>	pF	f=1.0MHz, V <sub>R</sub> =0V	4
Reverse Recovery Time	T <sub>rr</sub>	ns	I <sub>F</sub> =10mA, V <sub>R</sub> =6V, R <sub>L</sub> =500Ω, I <sub>rr</sub> =1mA	4

## Typical Characteristics (Per Leg)



## 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	0.100	0.200	0.004	0.008
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
$\theta$	0°	8°	0°	8°

## SOT-23 Suggested Pad Layout

