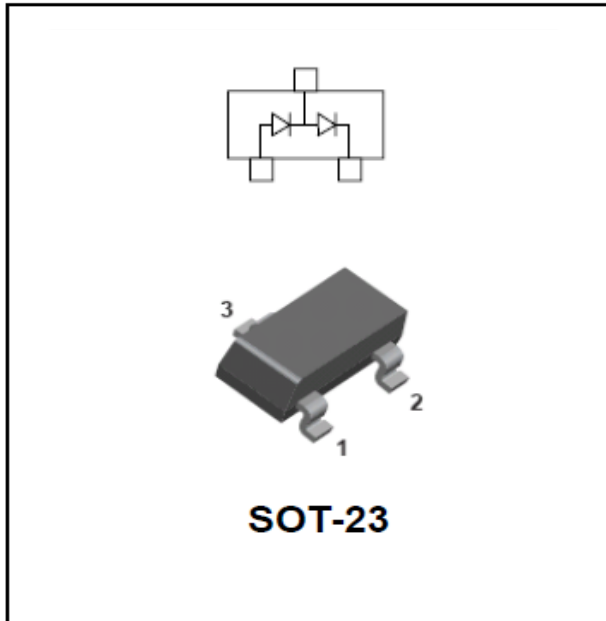


Dual Switching Diode



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:** A7

■ 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	200
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}	°C/W	357
Operating Junction Temperature	T_J	°C	-55 to +150
Storage Temperature	T_{STG}	°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
BAV99	F2	Approximate 0.008	3000	30000	120000	7" reel

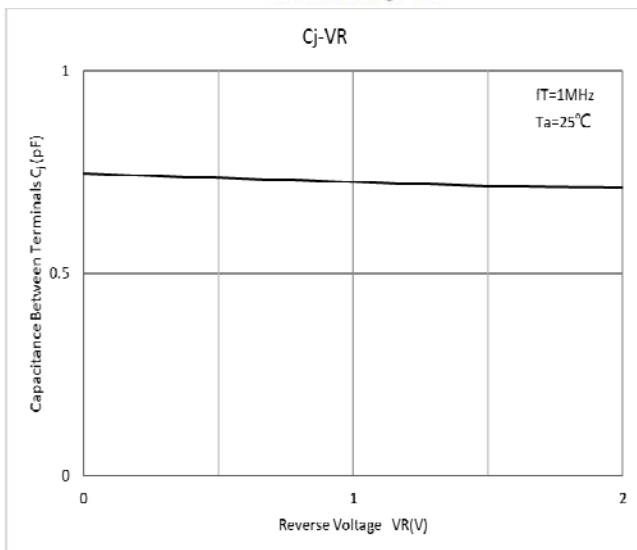
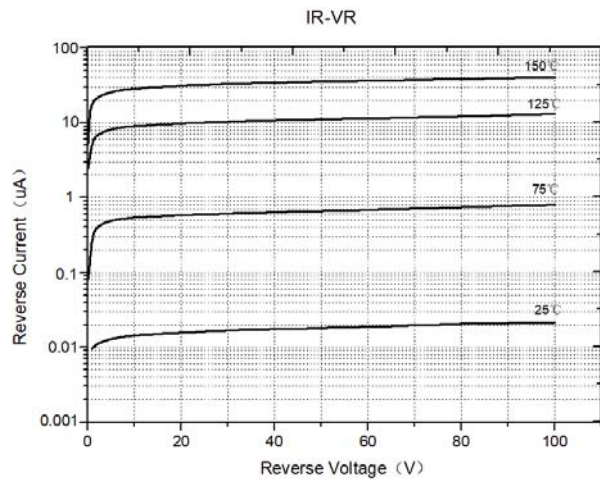
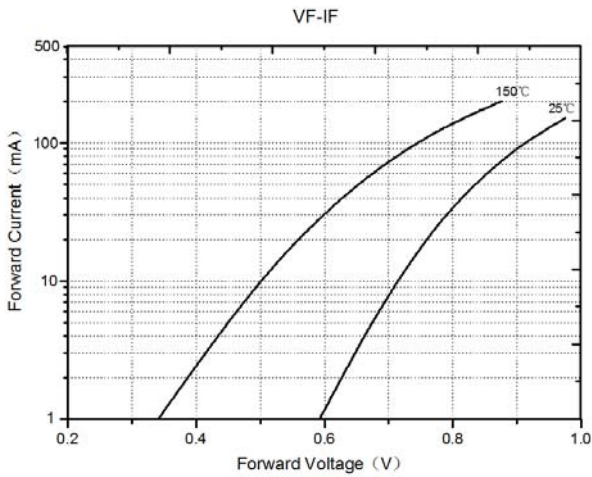


BAV99

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

Item	Symbol	Unit	Conditions	Value
Reverse Voltage	V_R	V	$I_R=100\mu A$	75
Forward Voltage	V_F	V	$I_F=1mA$	0.715
			$I_F=10mA$	0.855
			$I_F=50mA$	1.00
			$I_F=150mA$	1.25
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	$I_F=10mA, V_R=6V, R_L=100\Omega, I_{rr}=1mA$	4

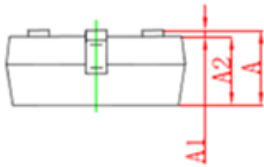
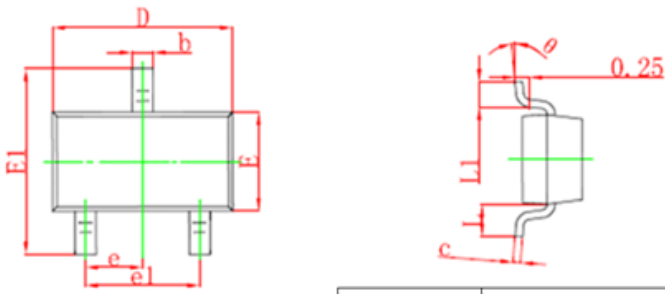
■ Typical Characteristics (Per Leg)





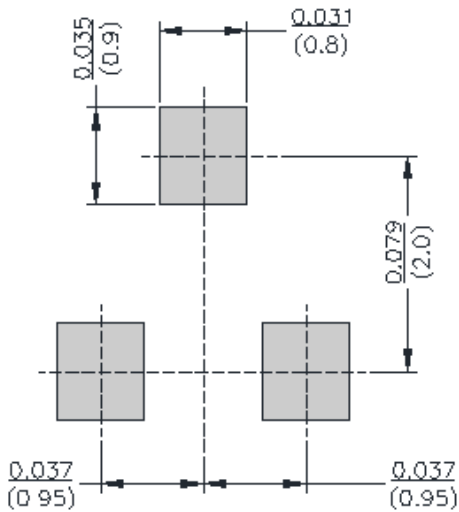
BAV99

■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	0.950TYP		0.037TYP	
e1	1.800	2.000	0.071	0.079
L	0.550REF		0.022REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°

■SOT-23 Suggested Pad Layout





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