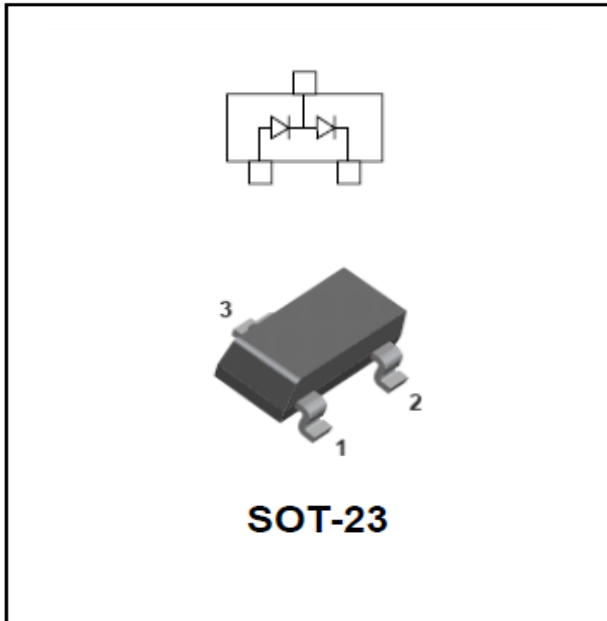


Dual Switching Diode



Features

- Epoxy meets UL-94 V-0 flammability rating
- Moisure 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 Rating, (T_a=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
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

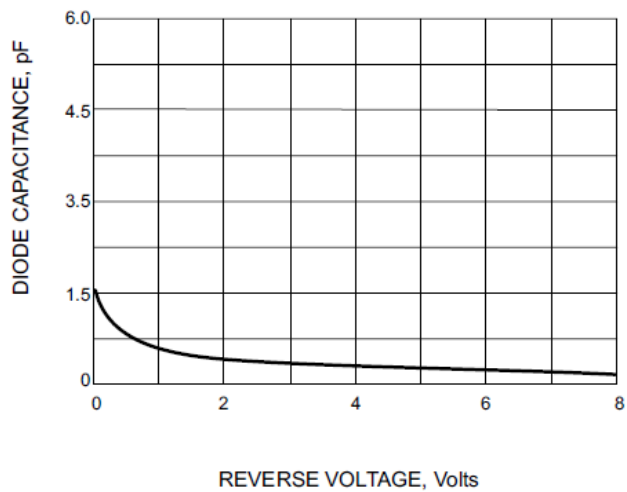
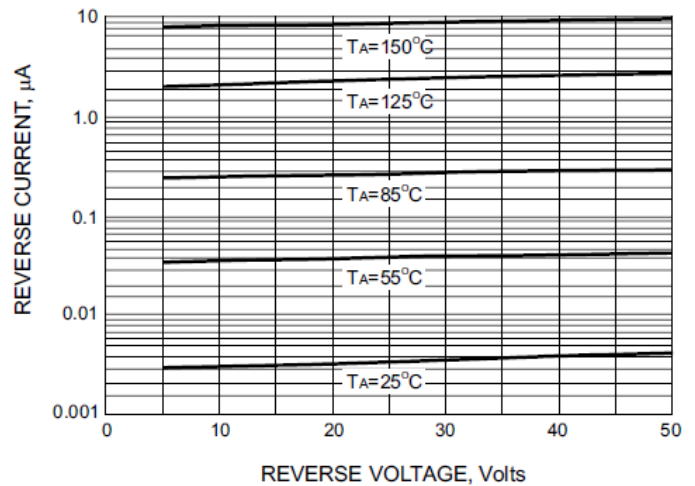
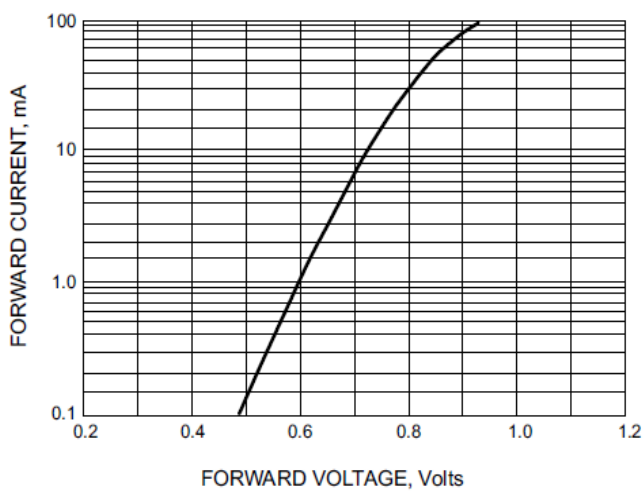


BAV99

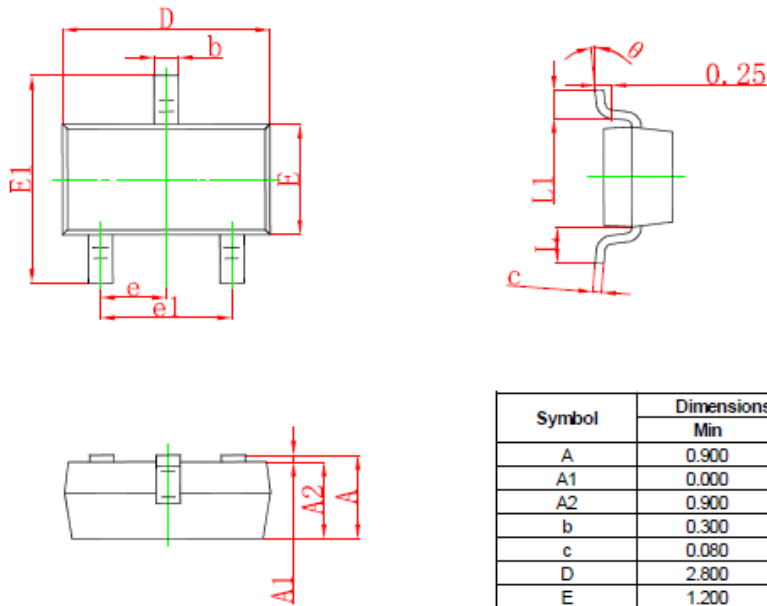
■ Electrical Characteristics ($T_a=25^{\circ}\text{C}$ Unless otherwise specified, Per Leg)

Item	Symbol	Unit	Conditions	Value
Reverse Voltage	V_R	V	$I_R=100\mu\text{A}$	75
Forward Voltage	V_F	V	$I_F=1\text{mA}$	0.715
			$I_F=10\text{mA}$	0.855
			$I_F=50\text{mA}$	1.00
			$I_F=150\text{mA}$	1.25
Maximum DC Reverse Current	I_R	μA	$V_R=75\text{V}$	2.5
Typical Junction Capacitance	C_J	pF	$f=1.0\text{MHz}$, $V_R=0\text{V}$	4
Reverse Recovery Time	T_{rr}	ns	$I_F=10\text{mA}$, $V_R=6\text{V}$, $R_L=500\Omega$, $I_{rr}=1\text{mA}$	4

■ Typical Characteristics (Per Leg)

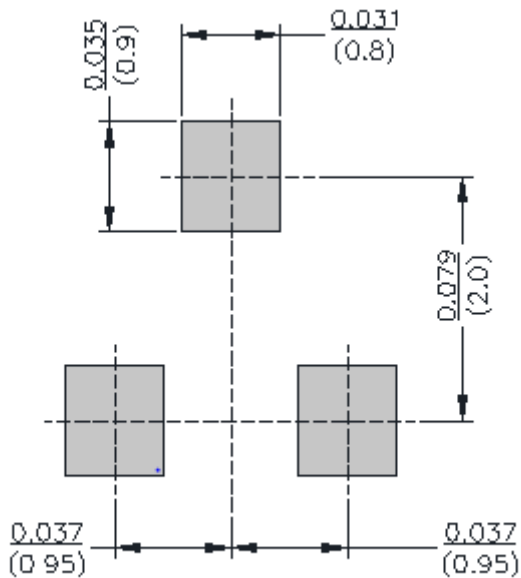


■SOT-23 Package Outline Dimensions



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	0.080	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



Unit: inch(mm)



Disclaimer

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