Innovative Service Around the Globe YAGEO

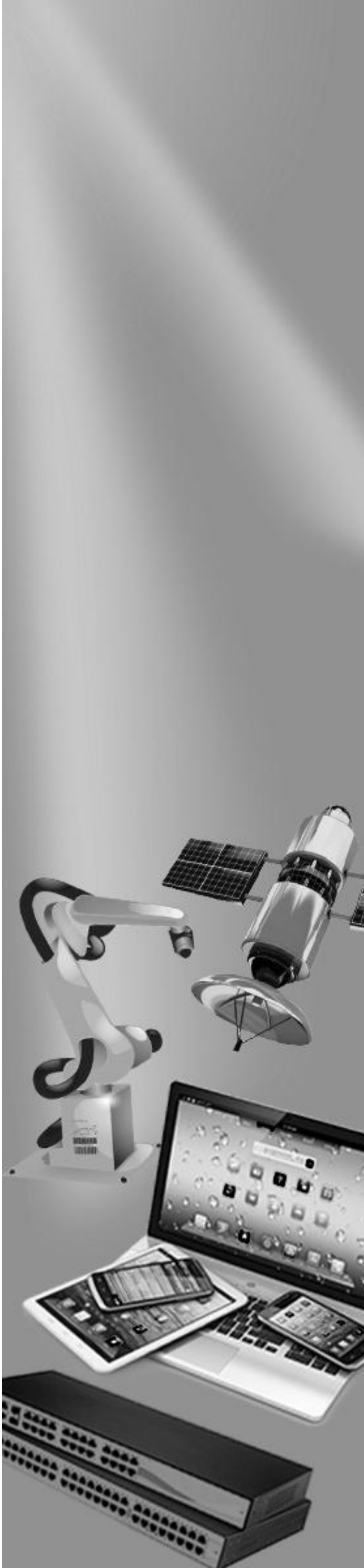
DATA SHEET

SWITCHING DIODE
GENERAL PURPOSE

BAV70

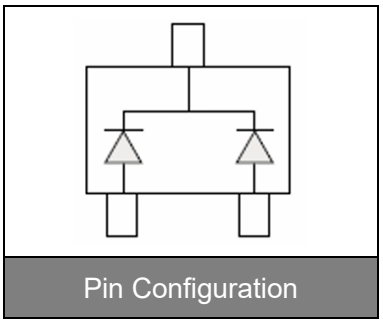
RoHS compliant & Halogen free

Product specification– August 27, 2026 V.0



Switching Diode

Features


Pin Configuration

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

Absolute Maximum Ratings (Ta = 25℃)

Parameter	Symbol	Value	Unit
Maximum Peak Reverse Voltage	V_{RRM}	100	V
Reverse Voltage	V_R	75	V
Forward Continuous Current@f>=50Hz, Per Leg	I_F	150	mA
Non-Repetitive Peak Forward Surge Current@8.3ms, Half sinewave, Per Leg	I_{FSM}	2.0	A
Power Dissipation	P_D	350	mW
Thermal Resisance	R_{thJA}	357	℃/W
Junction Temperature	T_j	-55 to +150	℃
Storage Temperature Range	T_{stg}	- 55 to + 150	℃

Characteristics at Ta = 25℃

Parameter	Symbol		Min.	Max.	Unit
Reverse Breakdown Voltage	$V_{(BR)R}$	I_R=2.5uA	75	-	V
Forward Voltage	V_F	I_F=1mA		715	mV
Forward Voltage	V_F	I_F=10mA		1	V
Forward Voltage	V_F	I_F=50mA		1	V
Forward Voltage	V_F	I_F=150mA		1.25	V
Reverse Current	I_R	V_R =75V		2.5	μA
Typical Junction Capacitance	C_j	f=1.0MHz, VR=0V	-	4	pF
Reverse Recovery Time	T_{rr}	IF=10mA, VR=6V, RL=100Ω.	-	4	ns

Electrical Characteristic Curves

Figure 1. Capacitance characteristics

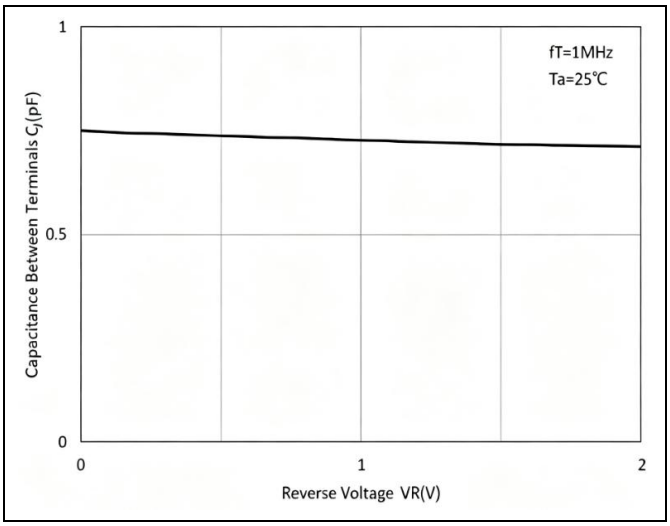


Figure 2. Reverse Characteristics

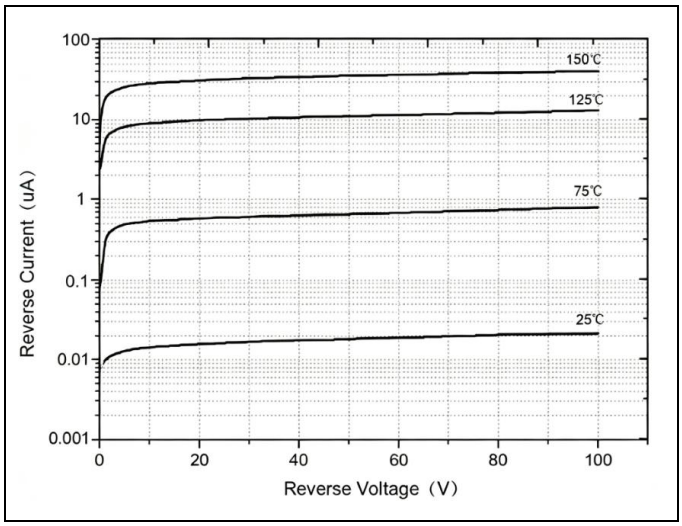
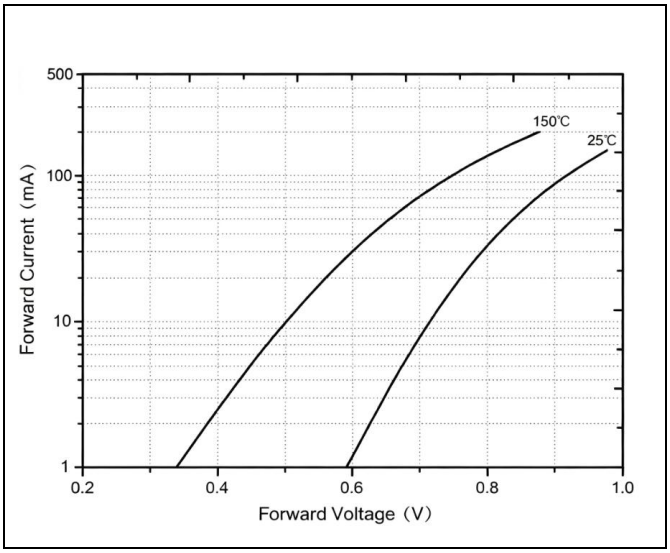
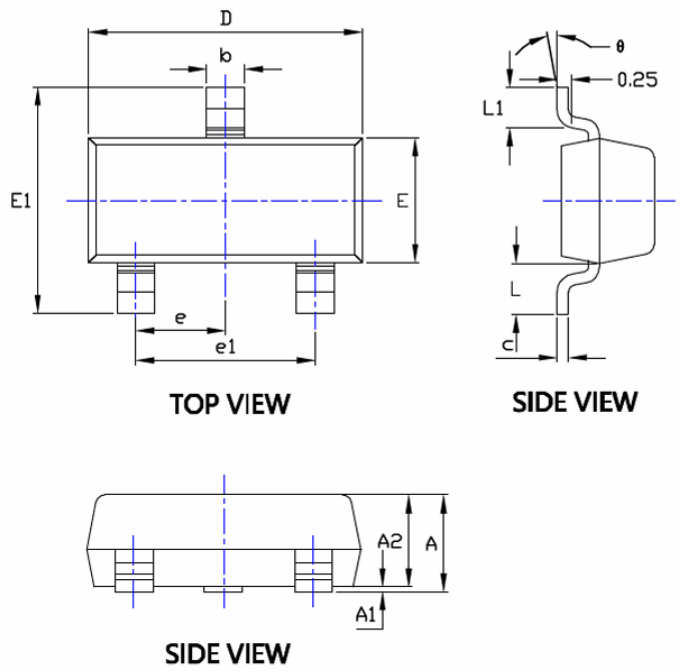


Figure 3. Forward Characteristics



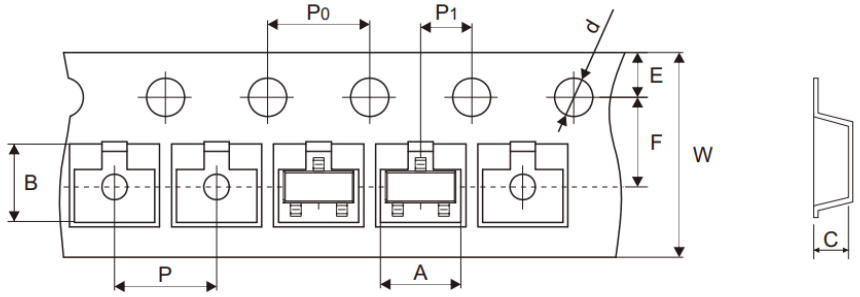
Dimensions (SOT-23)



Symbol	Dimension (mm)			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	0.90	1.15	0.035	0.045
A1	0.00	0.10	0.000	0.004
A2	0.90	1.05	0.035	0.041
b	0.30	0.50	0.012	0.020
c	0.10	0.20	0.004	0.008
D	2.80	3.00	0.110	0.118
E	1.20	1.40	0.047	0.055
E1	2.25	2.55	0.089	0.100
e	0.95 TYP		0.037 TYP	
e1	1.80	2.00	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.30	0.50	0.012	0.020

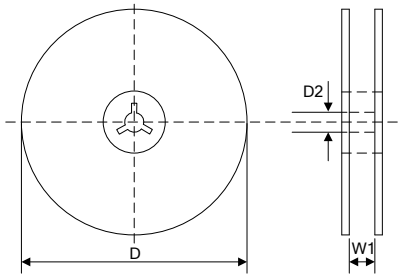
Packaging

Tape



Symbol	Dimension (mm)
W	8.00+0.30
P	4.00±0.10
P0	4.00±0.10
P1	2.00±0.10
E	1.75±0.10
F	3.50±0.10
A	3.15±0.10
B	2.76±0.10
C	1.25±0.10
d	Φ1.60±0.10

Reel



D	Φ178.0±2.0
D2	Φ13.3±0.30
W1	9.6±2.0
Quantity: 3000PCS	

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