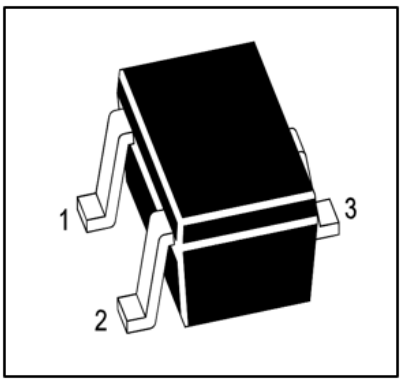
BAV70W

Switching Diode Arrays

Features

- Fast Reverse Recovery Time
- Fast Switching Speed
- Low Capacitance
- Available in Lead Free Version



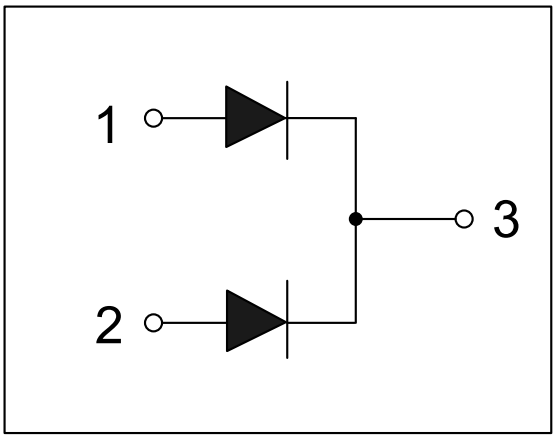
Mechanical Characteristics

- SOT-323 Package
- Molding Compound Flammability Rating: UL 94V-0
- Marking : Marking Code
- RoHS Compliant & HF

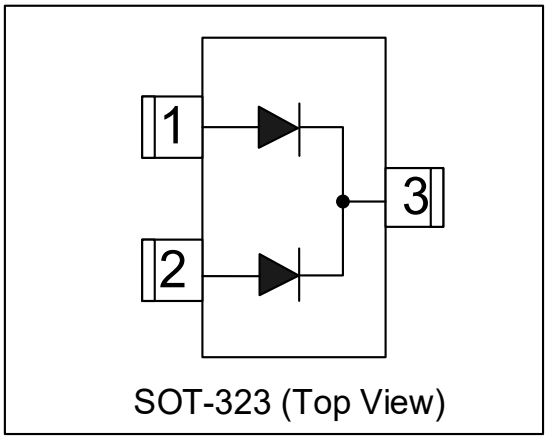
Applications

- Pb-Free Packages are Available
- Signal Termination
- Signal Conditioning
- ESD Suppression
- Transient Suppression

Circuit Diagram



Schematic & PIN Configuration



Absolute Maximum Rating

Characteristic	Symbol	Value	Units
Peak Repetitive Reverse Voltage	V_{RRM}	100	V
Continuous Forward Current	I_F	200	mA
Non-repetitive Peak Forward Surge Current at t=1s at t=1ms at t=1μs	I_{FSM}	0.5 1 4	A
Power Dissipation	P_D	200	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	625	°C/W
Junction Temperature	Tj	150	℃
Storage Temperature Range	Tstg	-55 to +150	℃

Electrical Characteristics

Parameter	Symbol	Conditions	Max.	Units
Forward Voltage	V_F	I_F=1mA I_F=10mA I_F=50mA I_F=150mA	715 855 1 1.25	mV mV V V
Reverse Current	I_R	V_R=25V V_R=75V V_R=25V;Tj=150℃ V_R=75V;Tj=150℃	30 1 30 50	nA μA μA μA
Diode Capacitance	C_d	f=1MHz,V_R=0V	1.5	pF
Reverse Recovery Time	T_{rr}	when switched from I_F=10mA to I_R=10mA; R_L=100Ω; measured at I_R=1mA	4	ns

Typical Characteristics

Fig.1 Forward Characteristics

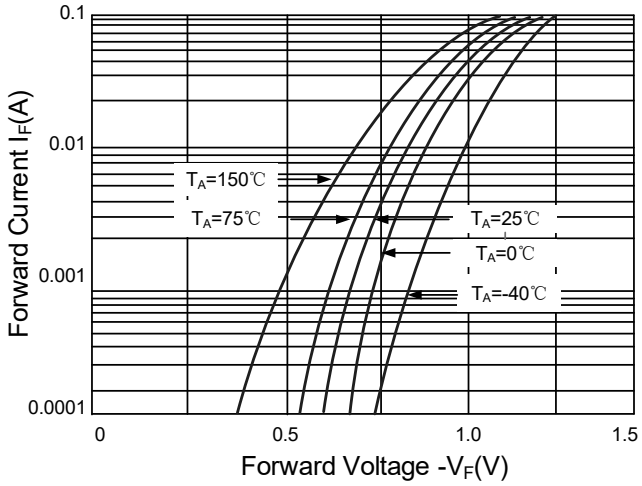


Fig.2 Power Derating Curve

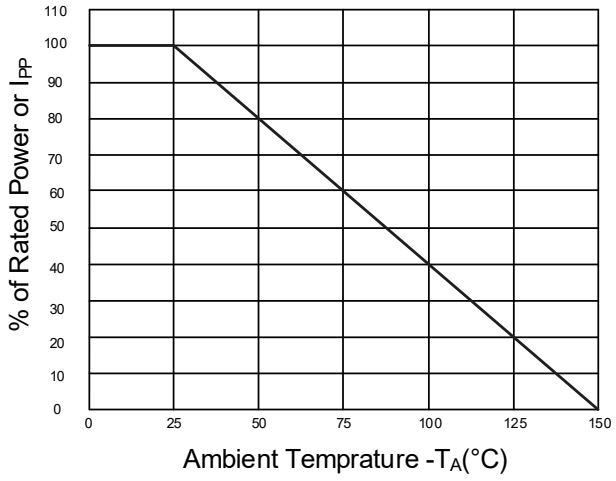


Fig. 3 Normalized Junction Capacitance vs. Reverse Voltage

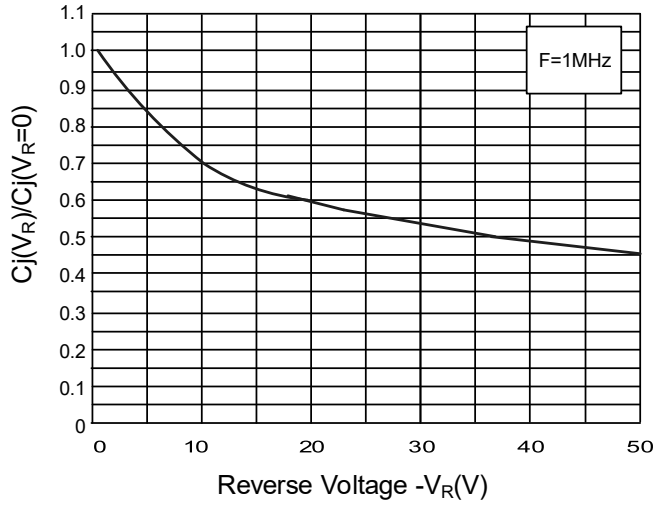
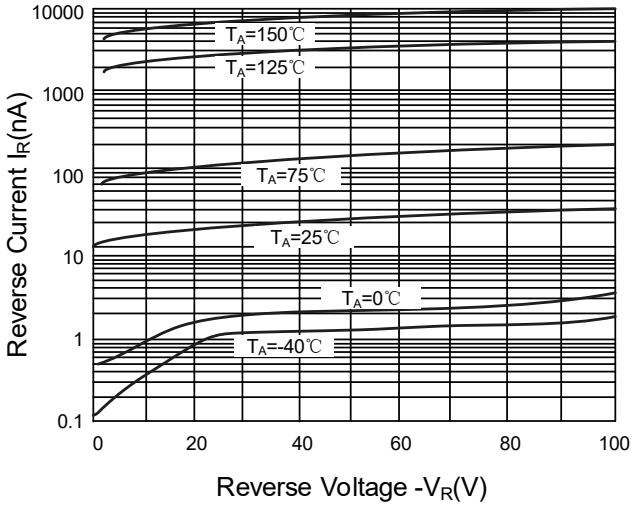
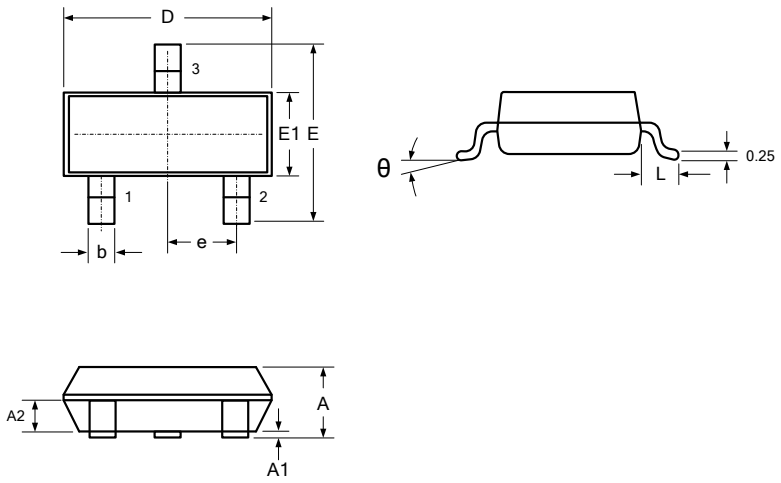


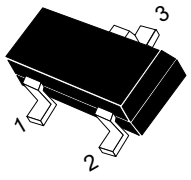
Fig.4 Typical reverse Characteristics



Outline Drawing – SOT-323

PACKAGE OUTLINE

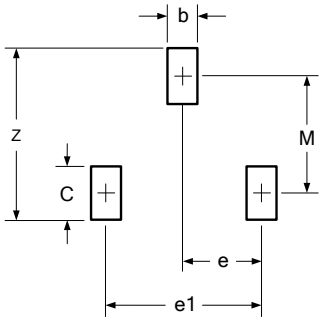




SOT-323

DIMENSIONS

SYMBOL	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
D	2.000	2.200	0.079	0.087
b	0.200	0.400	0.008	0.016
E	2.150	2.450	0.085	0.096
E1	1.150	1.350	0.045	0.053
e	0.650TYP		0.026TYP	
L	0.525 REF		0.021 REF	
θ	0	8°	0	8°



DIMENSIONS		
DIM	INCHES	MILLIMETERS
M	0.076	1.90
C	0.036	0.9
Z	0.108	2.7
e	0.026	0.65
e1	0.052	1.30
b	0.028	0.7

Notes

1. Dimensioning and tolerances per ANSI Y14.5M, 1985.
2. Controlling Dimension: Inches
3. Pin 3 is the cathode (Unidirectional Only).
4. Dimensions are exclusive of mold flash and metal burrs.

Marking Codes

Part Number	BAV70W
Marking Code	KJA

Package Information

Qty：3k/Reel

CONTACT INFORMATION

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WAYON website: **http://www.way-on.com**

For additional information, please contact your local Sales Representative.

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Specifications are subject to change without notice.
The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.
Users should verify actual device performance in their specific applications.