



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

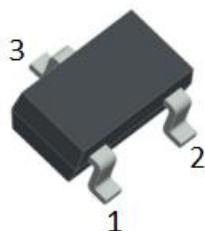
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BAV70W SWITCHING DIODE

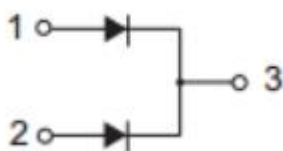


SOT-323

Features

- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance
- This is a Pb – Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Schematic & Pin Configuration



Mechanical Characteristics

- Case: SOT-323, Molded Plastic
- Terminals: Plated leads Solderable per MIL-STD-202, Method 208
- Weight: 0.0052g
- Mounting Position: Any

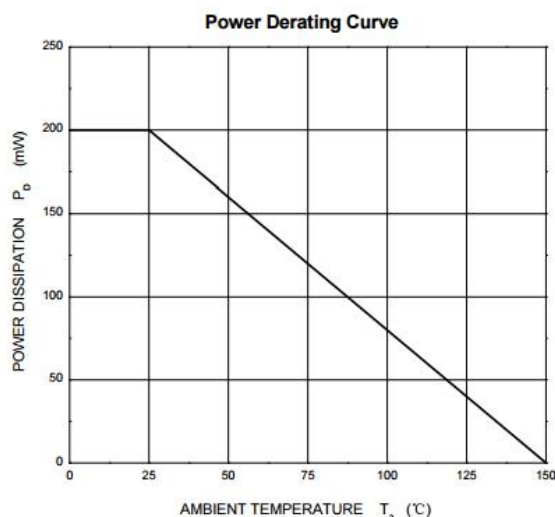
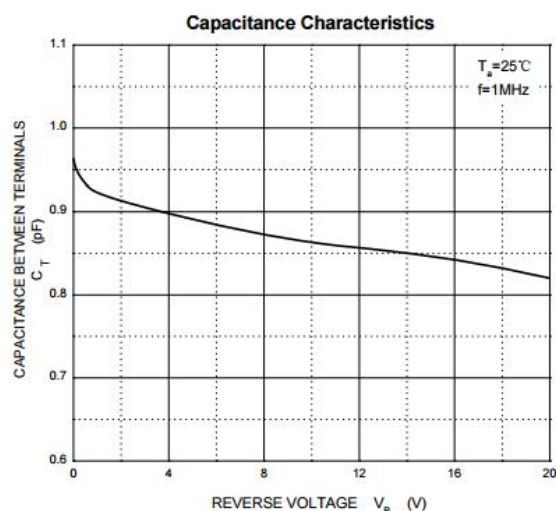
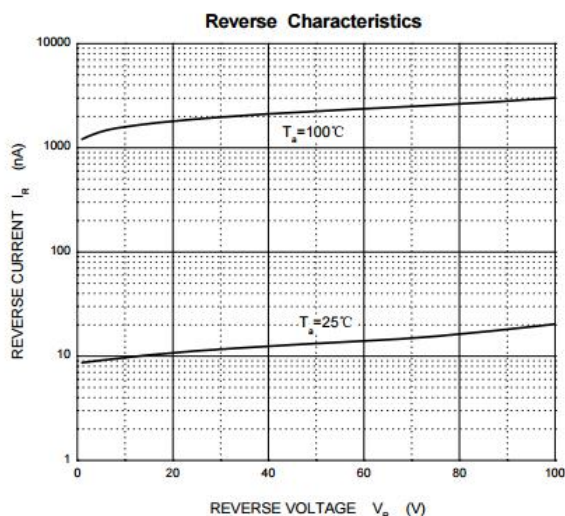
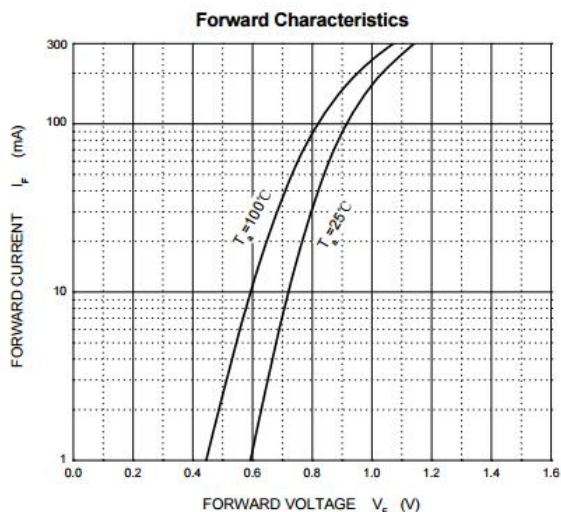
Maximum Ratings@T_A=25°C unless otherwise specified

Characteristic	Symbol	Value	Units
Non-Repetitive Peak Reverse Voltage	V _{RM}	100	V
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	75	V
RMS Reverse Voltage	V _{R(RMS)}	53	V
Forward Continuous Current	I _{FM}	300	mA
Average Rectified Output Current	I _O	150	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms	I _{FSM}	2.0	A
Power Dissipation	P _D	200	mW
Thermal Resistance, Junction to Ambient	R _{θJA}	625	°C/W
Junction and Storage Temperature Range	T _J , T _{STG}	-65 to +150	°C

Electrical Characteristics @T_A=25°C unless otherwise specified

Characteristics	Symbol	Condition	Max.	Units
Forward Voltage Drop*	V _F	@ 1mA, Pulse, T _J = 25 °C @ 10mA, Pulse, T _J = 25 °C @ 50mA, Pulse, T _J = 25 °C @ 150mA, Pulse, T _J = 25 °C	0.715 0.855 1.0 1.25	V
Reverse Current*	I _{R1}	@V _R = 75V, Pulse, T _J = 25 °C	2.5	μA
	I _{R2}	@ V _R = 20V, Pulse, T _J = 25°C	25	nA
Capacitance between terminals	C _T	@V _R = 0 V, T _c =25°C, f _{sig} = 1MHz	2	pF
Reverse Recovery Time	t _{rr}	I _F =10mA I _R = 10mA T _J = 25 °C I _{rr} =1 mA R _L =100Ω	4	ns

* Pulse width < 300 μs, duty cycle < 2%

Ratings and Characteristics Curves


Ordering Information

Device	Package	Shipping
BAV70W	SOT-323 (Pb-Free)	3000pcs / reel

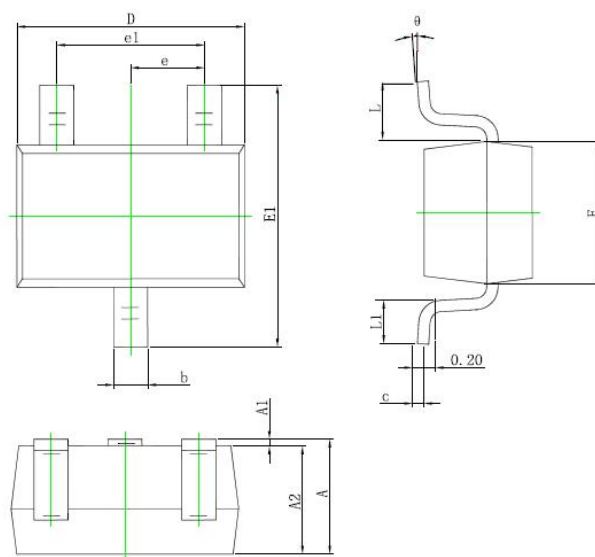
For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

Marking Diagram



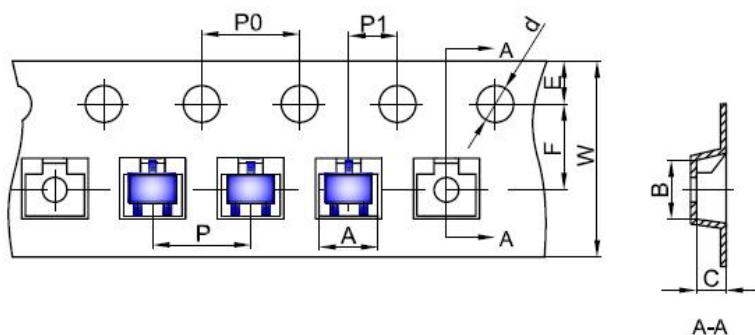
KA3 = Marking Code

Mechanical Dimensions SOT-323



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
b	0.200	0.400	0.008	0.016
c	0.080	0.150	0.003	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.450	0.085	0.096
e	0.650 TYP.		0.026 TYP.	
e1	1.200	1.400	0.047	0.055
L	0.525 REF.		0.021 REF.	
L1	0.260	0.460	0.010	0.018
Ø	0°	8°	0°	8°

Carrier Tape Specification SOT-323



SYMBOL	Millimeters	
	Min.	Max.
A	2.20	2.30
B	2.50	2.60
C	1.14	1.24
d	1.45	1.65
E	1.65	1.85
F	3.40	3.60
P	3.90	4.10
P0	3.90	4.10
P1	1.90	2.10
W	7.90	8.30

Technical Data
Data Sheet N0593, Rev. A



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