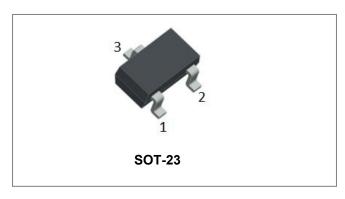






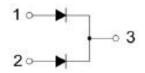
BAV70 SWITCHING DIODE



Features

- High Conductance
- Fast Switching
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose and Switching
- Plastic Material UL Recognition Flammability Classification 94V-O
- 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-23, Molded Plastic
- Terminals: Plated leads Solderable per MIL-STD-202,
 - Method 208
- Mounting Position: Any
- Marking: A4

Maximum Ratings@TA=25°C unless otherwise specified

Characteristic	Symbol	Limits	Units
Reverse Voltage	V_R	70	V
Forward Current	l _F	200	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms	I _{FSM}	2.0	Α
Power Dissipation	P _D	225	mW
Typical Thermal Resistance, Junction to Ambient Air	Reja	556	°C/W
Junction and Storage Temperature Range	T _J , T _{STG}	-55 to +150	°C

Electrical Characteristics @TA=25°C unless otherwise specified

Characteristic	Symbol	Min	Max	Units	Test Condition
Reverse Breakdown Voltage*	V _{BR}	70	-	V	@I _F =100uA
Forward Voltage*	V _F	-	0.715 0.855 1 1.25	V	@I _F =1mA @I _F =10mA @I _F =50mA @I _F =150mA
Reverse Leakage Current*	I _R	ı	2.5	uA	@V _R =70V
Capacitance between terminals	Ст	-	1.5	pF	V _R =0V, f=1.0MHz
Reverse Recovery Time	t _{rr}	-	6.0	ns	$ \begin{array}{c} I_F = I_R = 10 \text{mA}, \\ I_{RR} = 0.1 \times I_R, \ R_L = 100 \Omega \end{array} $

^{*} Pulse width < 300 µs, duty cycle < 2%

Note: 1. Device mounted on fiberglass substrate 40×40×1.5mm

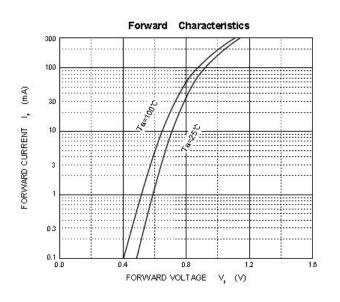
- China Germany Korea Singapore United States
 - http://www.smc-diodes.com sales@ smc-diodes.com •

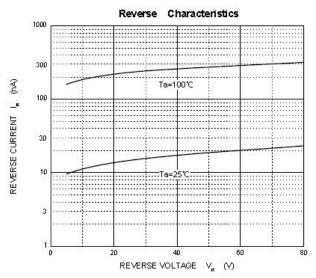


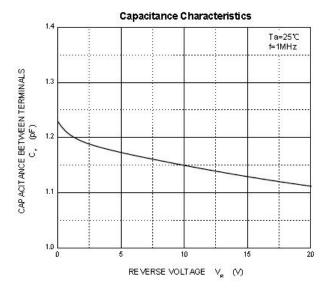


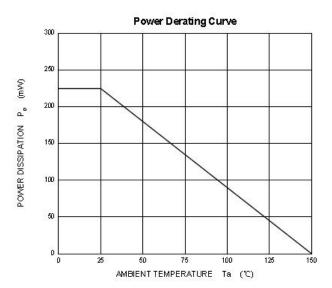


Ratings and Characteristics Curves









[•] China - Germany - Korea - Singapore - United States •







Ordering Information

Device	Package	Shipping
BAV70	SOT-23 (Pb-Free)	3000pcs / reel

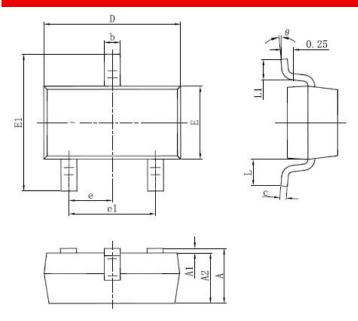
For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

Marking Diagram



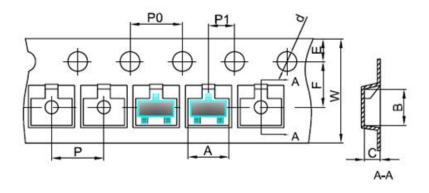
A4 = Marking Code

Mechanical Dimensions SOT-23



CVMDOL	Millim	eters	Inches		
SYMBOL	MIN.	MAX.	MIN.	MAX.	
Α	0.890	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	
С	0.076	0.170	0.003	0.007	
D	2.650	3.050	0.104	0.120	
Е	1.190	1.400	0.047	0.055	
E1	2.100	2.550	0.083	0.100	
е	0.950 TYP.		0.037 TYP.		
e1	1.780	2.050	0.070	0.081	
L	0.550 REF.		0.022 REF.		
L1	0.300	0.500	0.012	0.020	
θ	0°	8°	0°	8°	

Carrier Tape Specification SOT-23



SYMBOL	Millimeters			
STWBUL	Min.	Max.		
Α	3.05	3.25		
В	2.67	2.87		
С	1.12	1.32		
d	1.40	1.60		
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		

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