



Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

Phone: (818) 701-4933 Fax: (818) 701-4939

## **BAV99**

## **Features**

- Low Current Leakage
- Low Cost
- Small Outline Surface Mount Package
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Marking:A7/JG
- Lead Free Finish/Rohs Compliant ("P"Suffix designates RoHS Compliant. See ordering information)
- Halogen free available upon request by adding suffix "-HF"

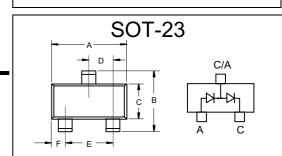
# **Maximum Ratings**

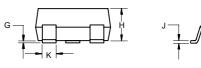
- Operating Temperature: -55°C to +150°C
   Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance; 357K/W Junction To Ambient

## Electrical Characteristics @ 25°C Unless Otherwise Specified

DC Blocking Voltage	$V_R$	70V	
Reverse Breakdown Voltage	$V_{BR}$	100V(Min)	I <sub>R</sub> =100uA
Maximum RMS Voltage	$V_{RMS}$	49V	
Average Rectified Output Current	Io	200mA	
Power Dissipation	P <sub>TOT</sub>	350mW	
Peak Forward Surge	I <sub>FSM</sub>	1.0A	t=1s,Non-Repetitive
Current	'FSM	2.0A	t=1us,Non-Repetitive
Maximum Instantaneous Forward Voltage	V <sub>F</sub> *	715mV	$I_{FM} = 1mA;$
		855mV	$I_{FM} = 10mA;$
		1000mV	$I_{FM} = 50mA;$
		1250mV	$I_{FM} = 150 \text{mA};$
Maximum DC Reverse	I <sub>R</sub>	2.5uA	VR=70Volts TJ = 25°C
Current At Rated DC		50uA	VR=70Volts TJ = 150°C
Blocking Voltage		30uA	VR=25Volts TJ = 150°C
Typical Junction Capacitance	C <sub>J</sub>	2.0pF	Measured at 1.0MHz, VR=0V
Reverse Recovery Time	$T_{rr}$	6nS	IF=10mA , Irr=1mA RL=100 $\Omega$

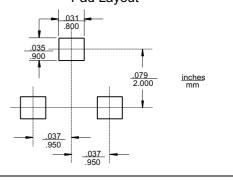
# 350mW 70Volt Dual Series Switching Diode





DIMENSIONS						
	INCHES		MM			
DIM	MIN	MAX	MIN	MAX	NOTE	
Α	.110	.120	2.80	3.04		
В	.083	.104	2.10	2.64		
С	.047	.055	1.20	1.40		
D	.035	.041	.89	1.03		
Е	.070	.081	1.78	2.05		
F	.018	.024	.45	.60		
G	.0005	.0039	.013	.100		
Н	.035	.044	.89	1.12		
J	.003	.007	.085	.180		
K	.015	.020	.37	.51		

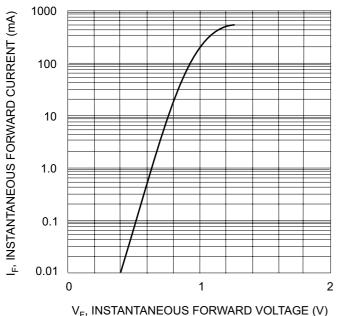
#### Suggested Solder Pad Layout



<sup>\*</sup>Pulse test: Pulse width 300 µsec, Duty cycle 2%

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10,000 100 100 200

V<sub>F</sub>, INSTANTANEOUS FORWARD VOLTAGE (V) Fig. 1 Forward Characteristics

 $\label{eq:total_total_total} \textbf{T}_{j}, \, \text{JUNCTION TEMPERATURE (°C)} \\ \text{Fig. 2 Leakage Current vs Junction Temperature}$ 



### Ordering Information:

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

Note: Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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