



Micro Commercial Components



Micro Commercial Components  
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# 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

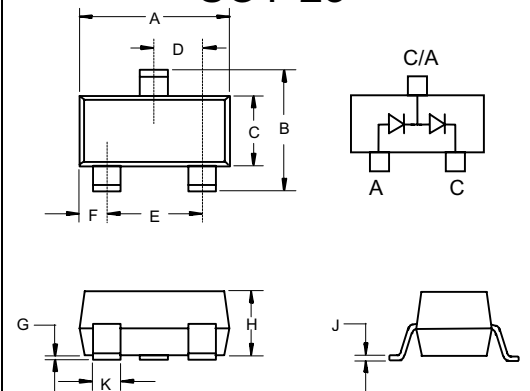
- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance; 357K/W Junction To Ambient

## Electrical Characteristics @ 25°C Unless Otherwise Specified

DC Blocking Voltage	$V_R$	70V	
Reverse Breakdown Voltage	$V_{BR}$	100V(Min)	$I_R = 100\mu A$
Maximum RMS Voltage	$V_{RMS}$	49V	
Average Rectified Output Current	$I_O$	200mA	
Power Dissipation	$P_{TOT}$	350mW	
Peak Forward Surge Current	$I_{FSM}$	1.0A	$t=1s, Non-Repetitive$
		2.0A	$t=1\mu s, Non-Repetitive$
Maximum Instantaneous Forward Voltage	$V_F^*$	715mV	$I_{FM} = 1mA;$
		855mV	$I_{FM} = 10mA;$
		1000mV	$I_{FM} = 50mA;$
		1250mV	$I_{FM} = 150mA;$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	2.5 $\mu A$	$V_R=70Volts$ $T_J = 25^\circ C$
		50 $\mu A$	$V_R=70Volts$ $T_J = 150^\circ C$
		30 $\mu A$	$V_R=25Volts$ $T_J = 150^\circ C$
Typical Junction Capacitance	$C_J$	2.0pF	Measured at 1.0MHz, $V_R=0V$
Reverse Recovery Time	$T_{rr}$	6nS	$I_F=10mA, I_{rr}=1mA$ $RL=100\Omega$

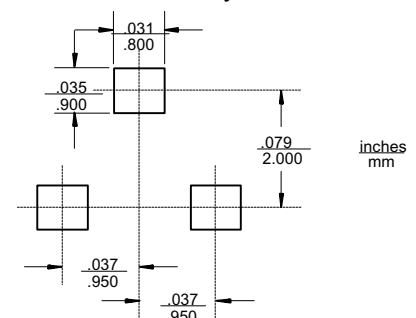
## 350mW 70Volt Dual Series Switching Diode

### SOT-23



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

### Suggested Solder Pad Layout



\*Pulse test: Pulse width 300  $\mu sec$ , Duty cycle 2%

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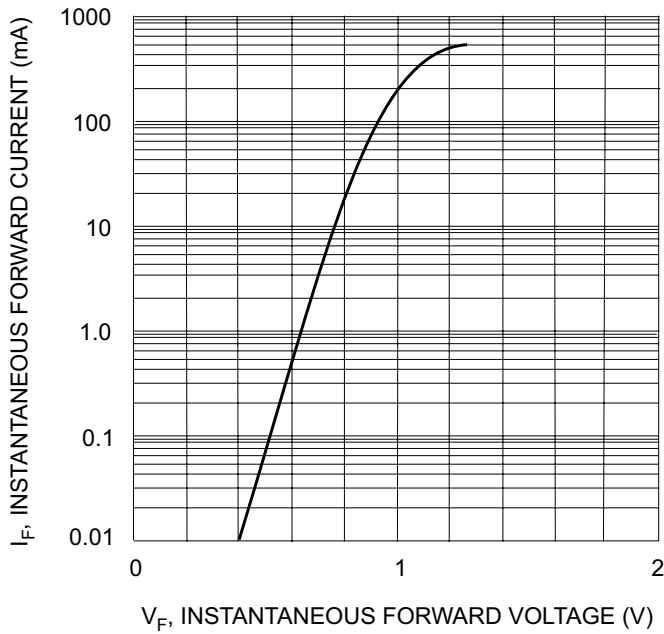


Fig. 1 Forward Characteristics

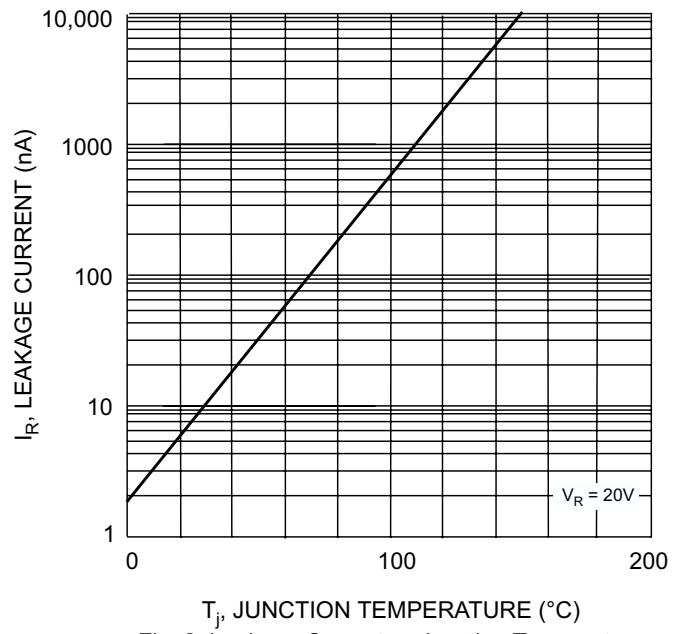


Fig. 2 Leakage Current vs Junction Temperature



**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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