

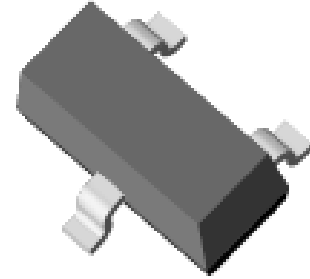


# DUAL SURFACE MOUNT SWITCHING DIODE BAV99

## Dual Surface Mount Switching Diode

### Features

- Guard ring construction for transient protection
- Fast Switching speed
- Low reverse leakage
- High temperature soldering guaranteed: 260°C /10 second, 0.375"(9.5mm) lead length



RoHS  
COMPLIANT

### Mechanical Data

<b>Case:</b>	SOT-23, molded plastic		
<b>Pingout:</b>	See diagram	<b>Pin out</b>	
<b>Terminals:</b>	Solderable per MIL-STD-202E, Method 208C		
<b>Polarity:</b>	Color band denotes cathode end		
<b>Mounting position:</b>			
<b>Weight:</b>	0.0045 Ounce, 0.008 gram		

SOT-23

### Maximum Ratings ( $T_{Ambient}=25^{\circ}C$ unless noted otherwise)

Symbol	Description	BAV99	Unit	Conditions
VRRM	Non-Repetitive Peak Reverse Voltage	75	V	
IFM	Forward Continuous Current	300	mA	Note 1
t <sub>rr</sub>	Max Reverse Recovery Time	4	nS	IF= 10mA, IR=10mA, IRR=1mA, RL=100Ω
IFSM	Non-Repetitive Peak Forward Aurge Current	2.0	Amps	T=1.0μS, T=1.0S
		1.0		
PTOT	Power dissipation	200	mW	Note 1
TJ, TSTG	Operating and Storage Temperature	-55 to +125 / -55 to +150		°C

### Electrical Characteristics ( $T_{Ambient}=25^{\circ}C$ unless noted otherwise)

Symbol	Description	BAV99	Unit	Conditions
VF	Max Instantaneous Forward Voltage	0.715	V	1.0mA
		0.0855		10mA
		1.0		50mA
		1.25		150mA
IR	Max DC Reverse Current at Rated DC Blocking Voltage	2.5	μA	VR=75V
		50		VR=75V, TJ=150°C
		30		VR=25V, TJ=150°C
CJ	Typical Junction Capacitance	2.0	pF	Vf=1V, f=1MHZ
Rθ-JA	Typical Thermal Resistance	355	°C/W	

#### Note:

1. Valid provided leads kept at ambient temperature

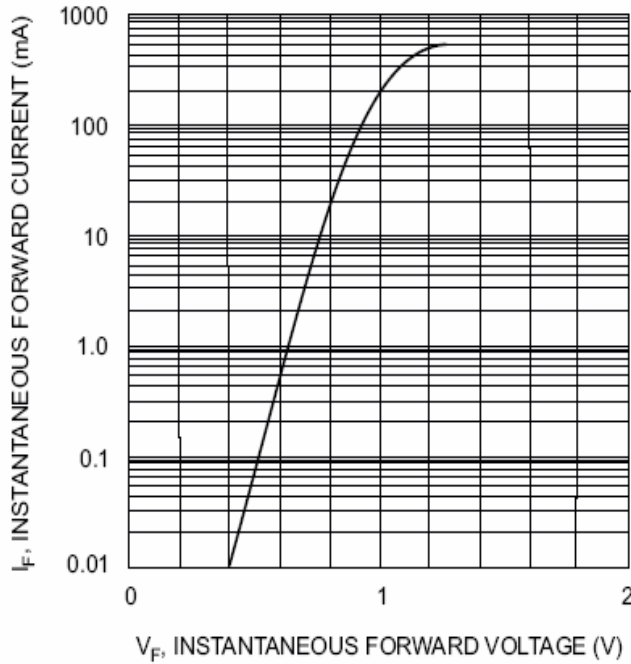
**Ratings And Characteristic Curve**


Fig. 1 Forward Characteristics

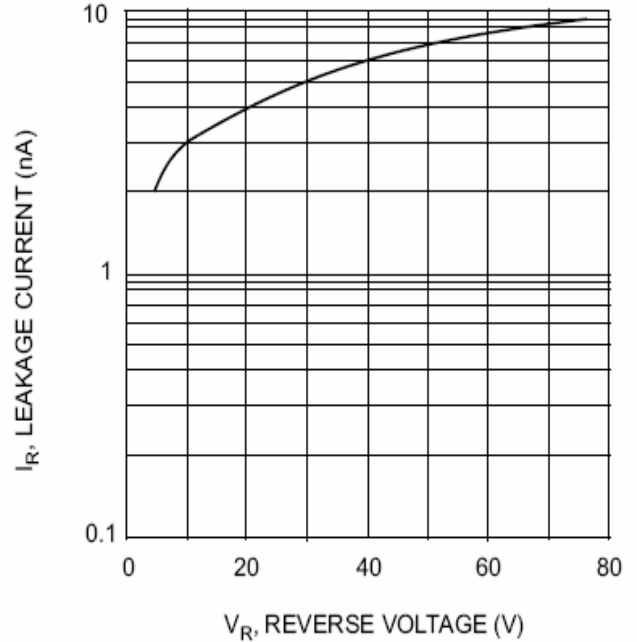


Fig. 2 Typical Leakage Current vs Reverse Voltage

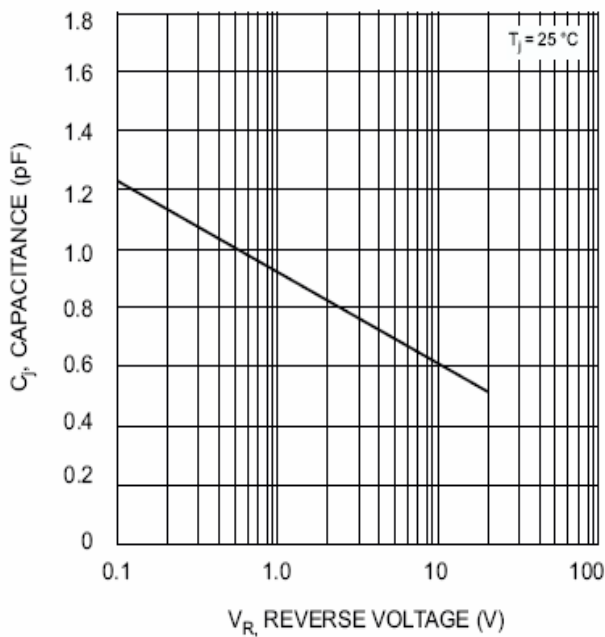
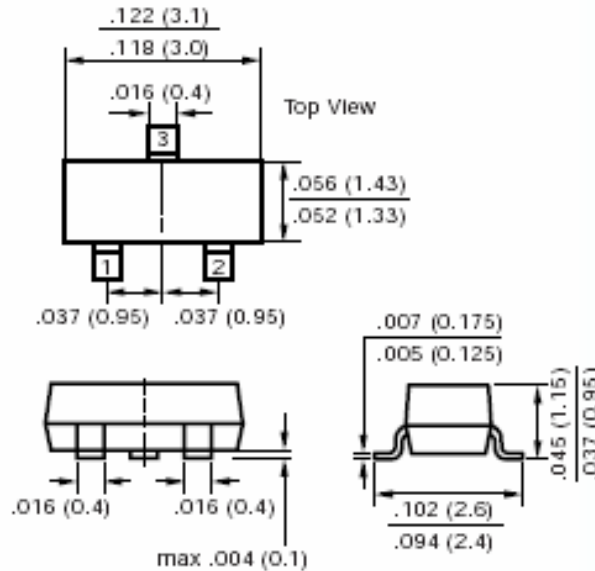


Fig. 3 Typical Junction Capacitance vs Reverse Voltage

Dimensions in inch (mm)

**SOT-23****Contact us:****US HEADQUARTERS****MEI SEMI INC.**

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