

Small Signal Product

## Hermetically Sealed Glass High Voltage Switching Diodes

**FEATURES**

- High voltage switching device
- Ideal for automated placement
- Hermetically sealed glass
- Compression bonded construction
- All external surfaces are corrosion resistant and leads are readily solderable
- RoHS compliant


**MINI MELF**

**MECHANICAL DATA**

- Polarity: Indicated by black cathode band

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T <sub>A</sub> =25°C unless otherwise noted)			
PARAMETER	SYMBOL	VALUE	UNIT
Power Dissipation	P <sub>D</sub>	500	mW
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	250	V
Average Rectified Forward Current	I <sub>F(AV)</sub>	200	mA
Non-Repetitive Peak Forward Surge Current	I <sub>FSM</sub>	Pulse Width = 1.0 s	1.0
		Pulse Width = 1.0 μs	4.0
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-65 to +200	°C

**Electrical Characteristics**

PARAMETER	SYMBOL	MIN	MAX	UNIT	
Breakdown Voltage	B <sub>V</sub>	BAV100 I <sub>R</sub> = 100 μA	60	-	V
		BAV101 I <sub>R</sub> = 100 μA	120		
		BAV102 I <sub>R</sub> = 100 μA	200		
		BAV103 I <sub>R</sub> = 100 μA	250		
Forward Voltage	V <sub>F</sub>	-	1.0	V	
Peak Reverse Current	I <sub>R</sub>	BAV100 V <sub>R</sub> = 50 V	-	100	nA
		BAV101 V <sub>R</sub> = 100 V		100	
		BAV102 V <sub>R</sub> = 150 V		100	
		BAV103 V <sub>R</sub> = 200 V		100	
Thermal Resistance, Junction to Ambient	R <sub>θJA</sub>	350		°C/W	
Junction Capacitance	C <sub>J</sub>	-	5.0	pF	
Reverse Recovery Time	t <sub>rr</sub>	-	50	ns	

 Notes : Reverse recovery test conditions : I<sub>F</sub> = I<sub>R</sub> = 30 mA , I<sub>rr</sub> = 30 mA , R<sub>L</sub> = 100 Ω

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RATINGS AND CHARACTERISTICS CURVES

( $T_A=25^\circ\text{C}$  unless otherwise noted)

Fig. 1 Reverse Current VS. Junction Temperature

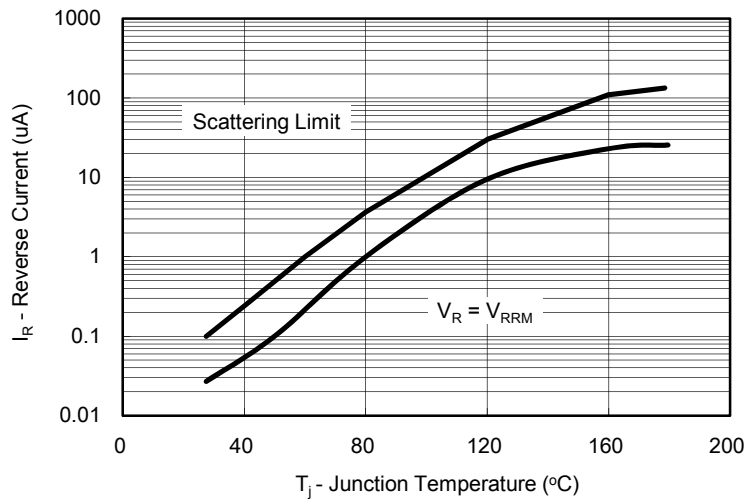


Fig. 2 Forward Current VS. Forward Voltage

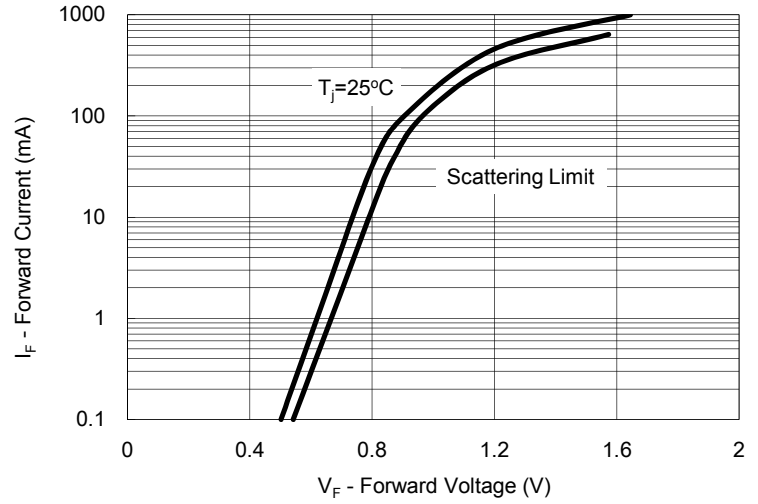
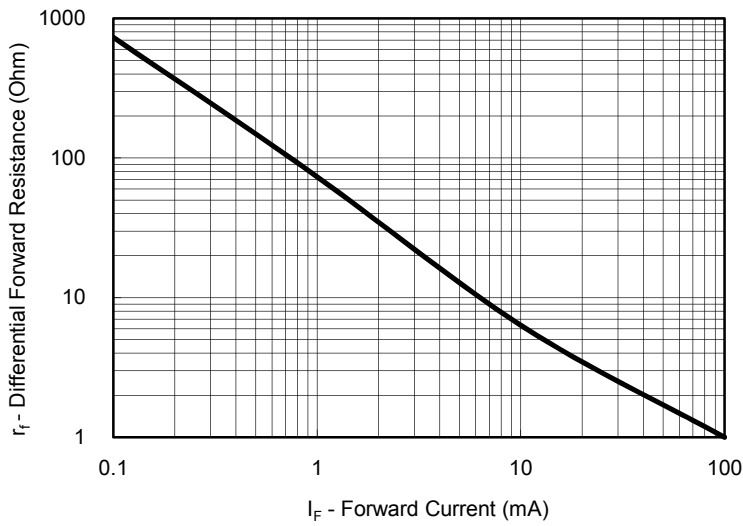


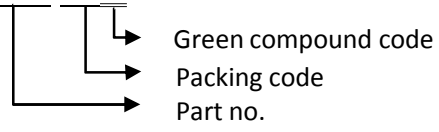
Fig. 3 Differential Forward Resistance VS. Forward Current



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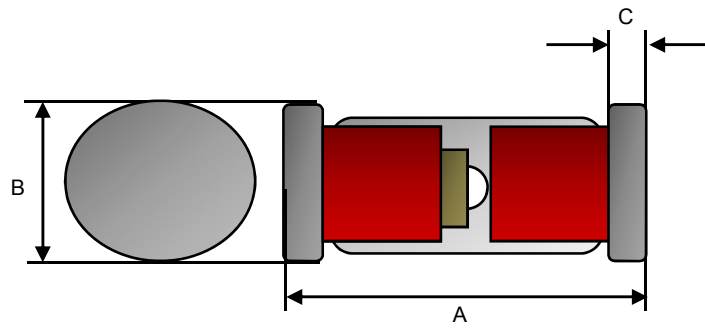
ORDER INFORMATION (EXAMPLE)

**BAV100 LOG**



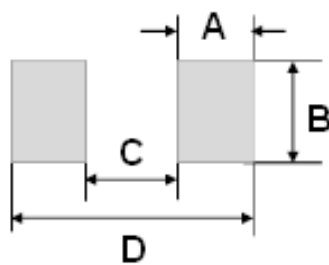
DIMENSIONS

**MINI MELF**



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	3.30	3.70	0.130	0.146
B	1.40	1.60	0.055	0.063
C	0.20	0.50	0.008	0.020

SUGGESTED PAD LAYOUT



DIM.	Unit (mm)	Unit (inch)
	Typ.	Typ.
A	1.25	0.049
B	2.00	0.079
C	2.50	0.098
D	5.00	0.197

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