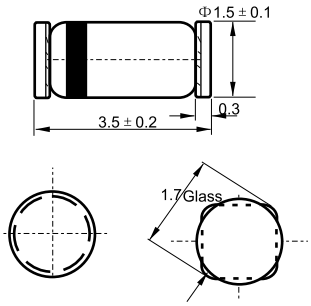
BAV100/101/102/103

500mW.Hermetically Sealed Glass High Voltage Switching Dides

MINI MELF



Dimension in millimeters

Features

- ✧ High Voltage Switching Device
- ✧ Mini Melf package
- ✧ Surface device type mounting
- ✧ Hermetically sealed glass
- ✧ Compression bonded construction
- ✧ All external surface are corrosion resistant and leads are readily solderable
- ✧ RoHS compliant
- ✧ Matte Tin (Sn) lead finish
- ✧ Color band indicates Negative Polarity

Maximum Ratings and Electrical Characteristics

Rating at 25°Cambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%

Maximum Ratings

Type Number	Symbol	Value	Units
Repetitive Peak Reverse Voltage	V_{RRM}	250	V
Average Rectified Forward Current	$I_{F(AV)}$	200	mA
Non- Repetitive Peak Forward Surge Current Pulse Width =1.0 Second Pulse Width = 1.0 usecond	I_{FSM}	 1.0 4.0	A
Power Dissipation	Pd	500	mW
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to + 200	°C

Electrical Characteristics

Type Number		Symbol	Min	Max	Units
Breakdown Voltage	BAV100 IR=100uA BAV101 IR=100uA BAV102 IR=100uA BAV103 IR=100uA	B_V	60 120 200 250		V
Forward Voltage	IF= 100mA	VF		1.0	V
Peak Reverse Current	BAV100 VR=50V BAV101 VR=100V BAV102 VR=150V BAV103 VR=200V	IR	-	100 100 100 100	nA
Thermal Resistance, Junction to Ambient		$R_{\Theta JA}$		350	°C/W
Junction Capacitance	VR=0, f=1.0MHz	Cj	-	5.0	pF
Reverse Recovery Time (Note)		trr	-	50	nS

Notes: Reverse Recovery Test Conditions: IF=IR=30mA, Irr=3mA, R_L=100Ω.

RATINGS AND CHARACTERISTIC CURVES (BAV100/101/102/103)

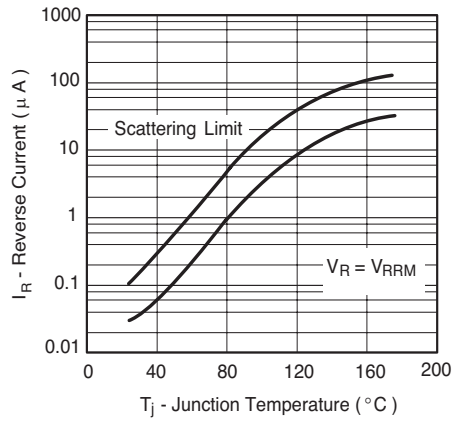


Fig. 1 Reverse Current vs. Junction Temperature

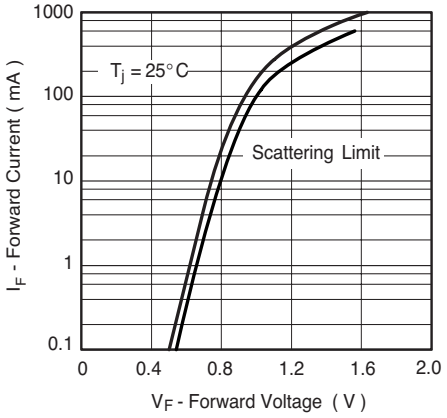


Fig. 2 Forward Current vs. Forward Voltage

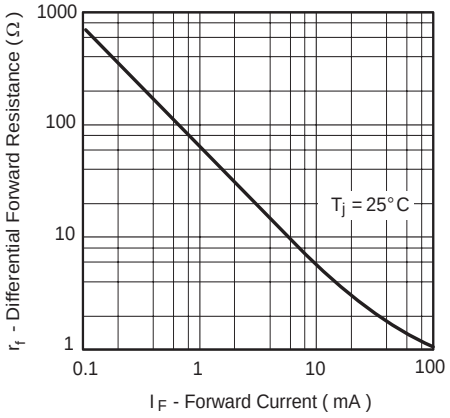


Fig. 3 Differential Forward Resistance vs. Forward Current