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

Pb-Free

RoHS COMPLIANT

MECHANICAL DATA

- Polarity: Indicated by black cathode band

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)			
PARAMETER	SYMBOL	VALUE	UNIT
Power Dissipation	P_D	500	mW
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 s	I_{FSM}	1.0	A
Non-Repetitive Peak Forward Surge Current — Pulse Width = 1.0 μs	I_{FSM}	4.0	A
Operating and Storage Temperature Range	T_J , T_{STG}	-65 to +200	°C

Electrical Characteristics

PARAMETER		SYMBOL	MIN	MAX	UNIT
Breakdown Voltage	BAV100 I_R = 100 μA	B_V	60	-	V
	BAV101 I_R = 100 μA		120		
	BAV102 I_R = 100 μA		200		
	BAV103 I_R = 100 μA		250		
Forward Voltage	I_F = 100 mA	V_F	-	1.0	V
Peak Reverse Current	BAV100 V_R = 50 V	I_R	-	100	nA
	BAV101 V_R = 100 V			100	
	BAV102 V_R = 150 V			100	
	BAV103 V_R = 200 V			100	
Thermal Resistance, Junction to Ambient		$R_{\theta JA}$	350		°C/W
Junction Capacitance	V_R = 0 , f = 1.0 MHz	C_J	-	5.0	pF
Reverse Recovery Time	(Note)	t_{rr}	-	50	ns

Notes : Reverse recovery test conditions : I_F = I_R = 30 mA , I_{rr} = 30 mA , R_L = 100 Ω

RATINGS AND CHARACTERISTICS CURVES

(T_A=25°C unless otherwise noted)

Fig. 1 Reverse Current VS. Junction Temperature

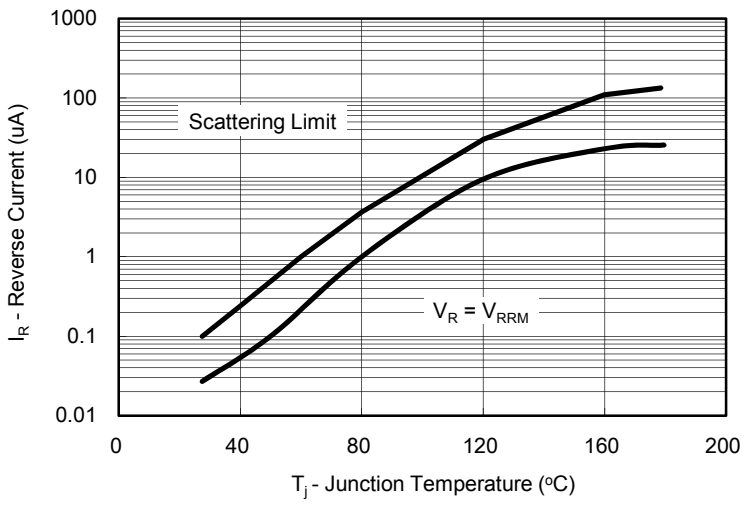


Fig. 2 Forward Current VS. Forward Voltage

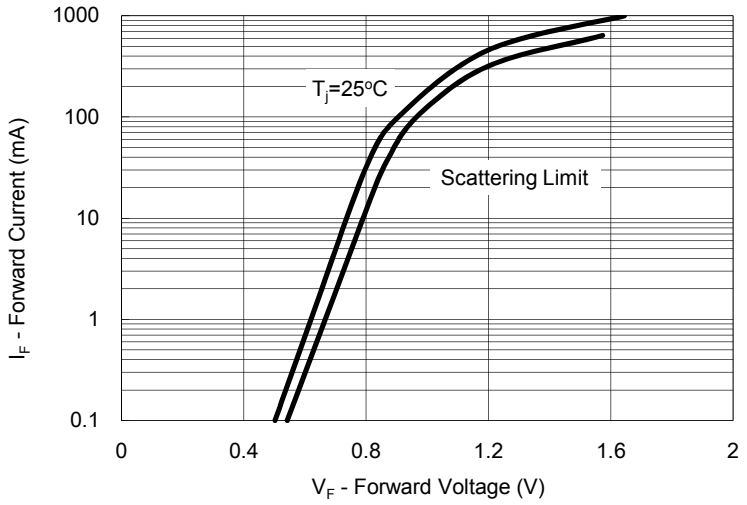
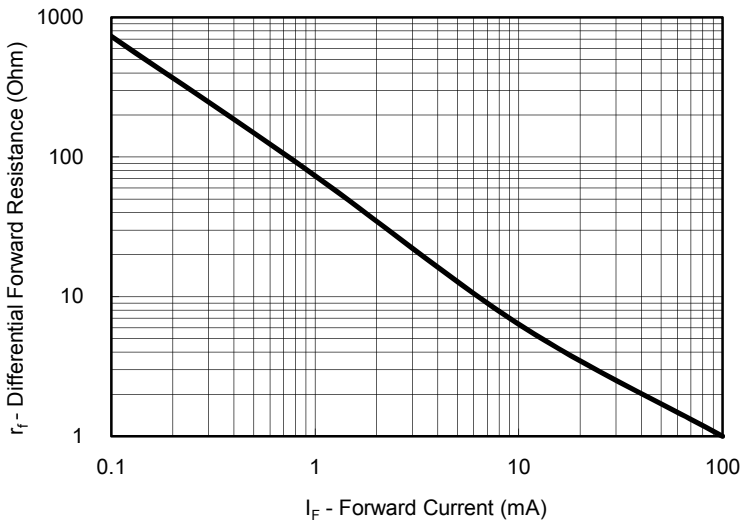
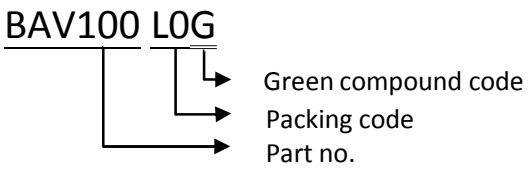


Fig. 3 Differential Forward Resistance VS. Forward Current

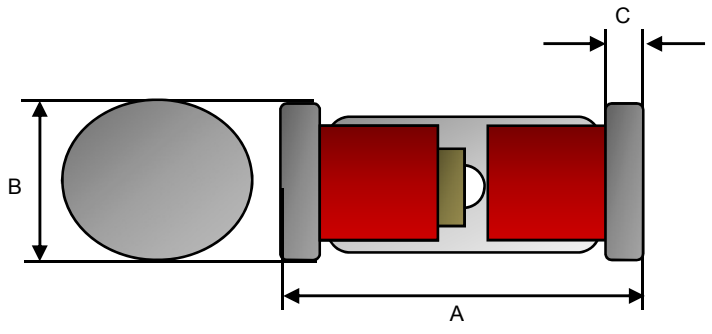


ORDER INFORMATION (EXAMPLE)



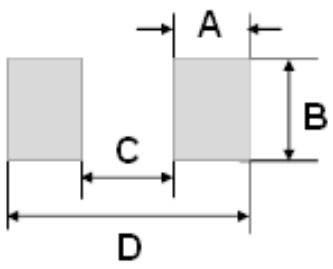
DIMENSIONS

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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