

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
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21



MINI MELF



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	I _{FSM}	Pulse width = 1.0 s	1.0
		Pulse width = 1.0 μs	4.0
Operating and storage temperature range	T _J , T _{STG}	-65 to +200	°C

Electrical Characteristics

PARAMETER	SYMBOL	MIN	MAX	UNIT	
Breakdown voltage	B _V	BAV100 I _R = 100 μA	60	-	V
		BAV101 I _R = 100 μA	120		
		BAV102 I _R = 100 μA	200		
		BAV103 I _R = 100 μA	250		
Forward voltage	V _F	-	1.0	V	
Peak reverse current	I _R	BAV100 V _R = 50 V	-	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 _{θJA}	350		°C/W	
Junction capacitance	C _J	-	5.0	pF	
Reverse recovery time	t _{rr}	-	50	ns	

Notes : Reverse recovery test conditions : I_F = I_R = 30 mA , I_{rr} = 3 mA , R_L = 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

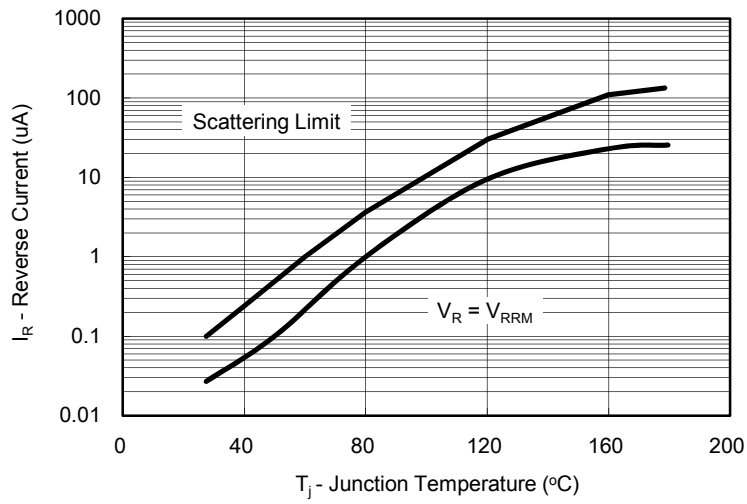


Fig. 2 Forward Current VS. Forward Voltage

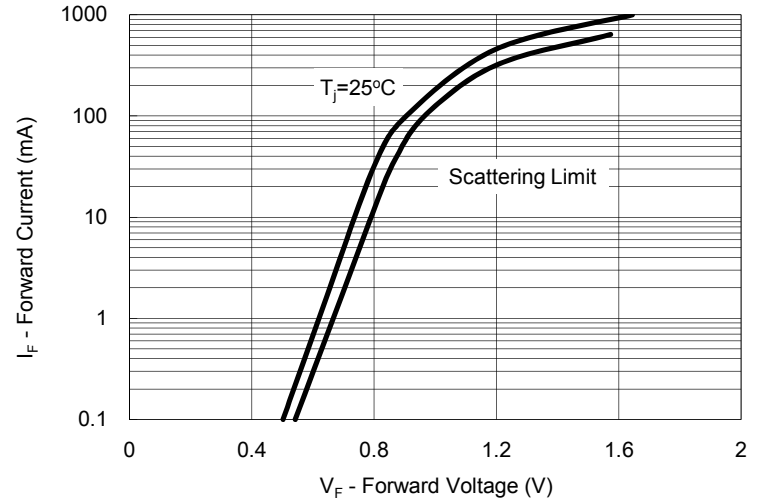
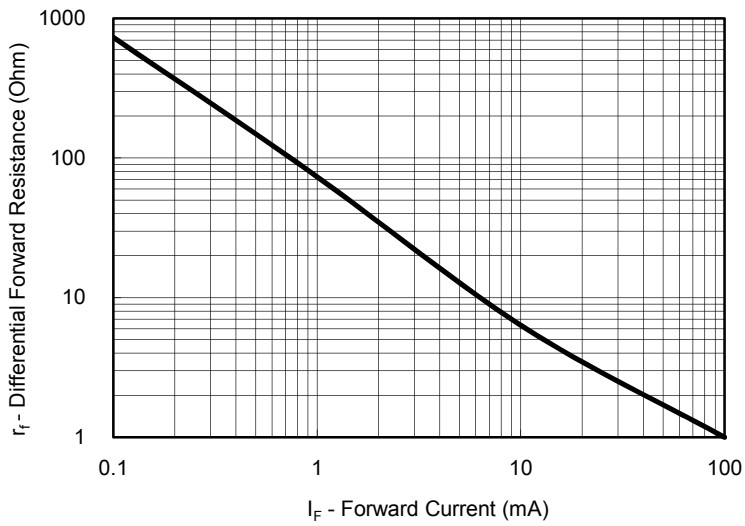


Fig. 3 Differential Forward Resistance VS. Forward Current



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ORDERING INFORMATION				
PART NO.	PACKING CODE	PACKING CODE SUFFIX (*)	PACKAGE	PACKING
BAV10x (Note 1)	L0	G	MINI MELF	10K / 13" Reel
	L1			2.5K / 7" Reel

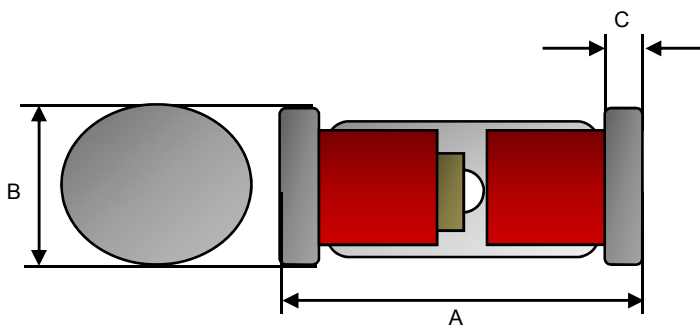
Note 1: "x" is device code from "0" - "3", detail could follow the previous page

*: Whole series with "G", packing code with suffix "G" means halogen free

EXAMPLE				
EXAMPLE P/N	PART NO.	PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION
BAV100 L0G	BAV100	L0	G	Green compound

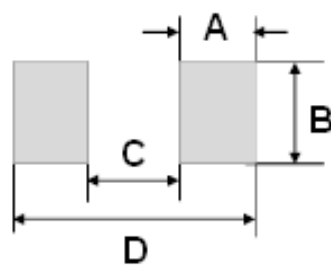
DIMENSIONS

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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