

# BAV101~BAV103

## HIGH VOLTAGE SURFACE MOUNT SWITCHING DIODES

**VOLTAGE** 120 to 250 Volts **POWER** 300 mWatts

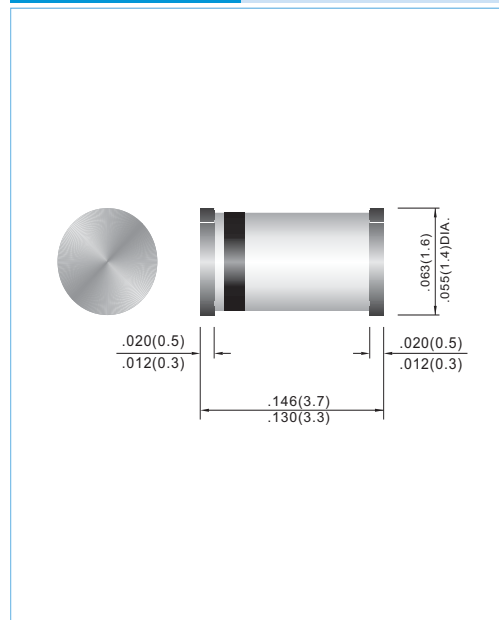
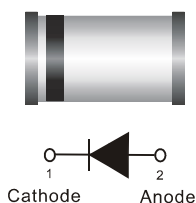
**MINI-MELF/LL-34** Unit : inch (mm)

### FEATURES

- Fast switching Speed.
- Surface Mount Package Ideally Suited For Automatic Insertion.
- Silicon Epitaxial Planar Construction.
- Lead free in compliance with EU RoHS 2011/65/EU directive

### MECHANICAL DATA

- Case: Mini Melf, Glass
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band
- Marking: Cathode Band Only



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)

PARAMETER	SYMBOL	BAV101	BAV102	BAV103	UNITS
Reverse Voltage	V <sub>R</sub>	100	150	200	V
Peak Reverse Voltage	V <sub>RRM</sub>	120	200	250	V
Rectified Current (Average), Half Wave Rectification with Resistive Load and f >=50 Hz	I <sub>O</sub>	200			mA
Peak Forward Surge Current, t=1000ms	I <sub>FSM</sub>	1.0			A
Power Dissipation Derate Above at 25°C	P <sub>D</sub>	300			mW
Maximum Forward Voltage, I <sub>F</sub> = 100mA	V <sub>F</sub>	1.0			V
Maximum DC Reverse Current at Rated DC Blocking Voltage T <sub>J</sub> = 25°C	I <sub>R</sub>	0.1			μA
Typical Junction Capacitance( Note 1)	C <sub>J</sub>	3.0			pF
Maximum Reverse Recovery (Note 2)	t <sub>rr</sub>	75			ns
Typical Thermal Resistance	R <sub>θJA</sub>	350			°C / W
Operation Junction Storage Temperature Range	T <sub>STG</sub>	-65 to +175			°C

#### NOTE:

1. C<sub>J</sub> at V<sub>R</sub>=0, f=1MHZ
2. From I<sub>F</sub>=10mA to I<sub>R</sub>=-1mA, V<sub>R</sub>=6Volts, R<sub>L</sub>=100Ω

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## RATING AND CHARACTERISTIC CURVES

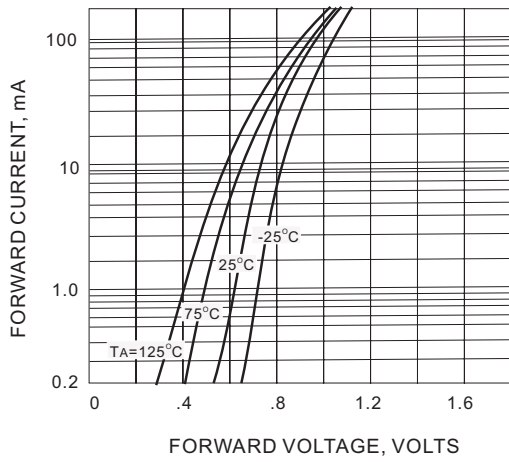


Fig. 1 FORWARD CHARACTERISTICS

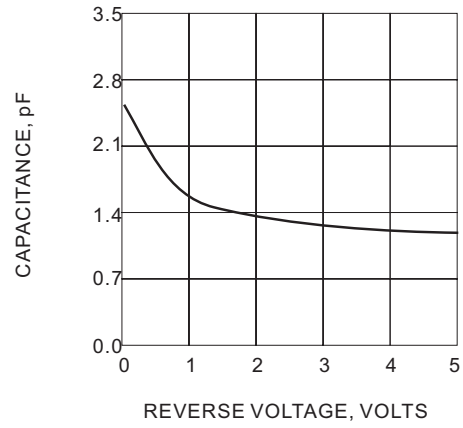


Fig. 2 TYPICAL CAPACITANCE vs REVERSE VOLTAGE

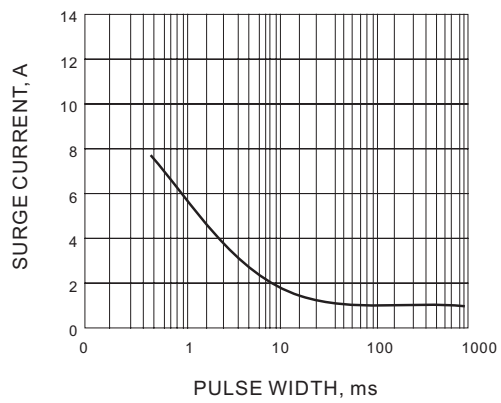


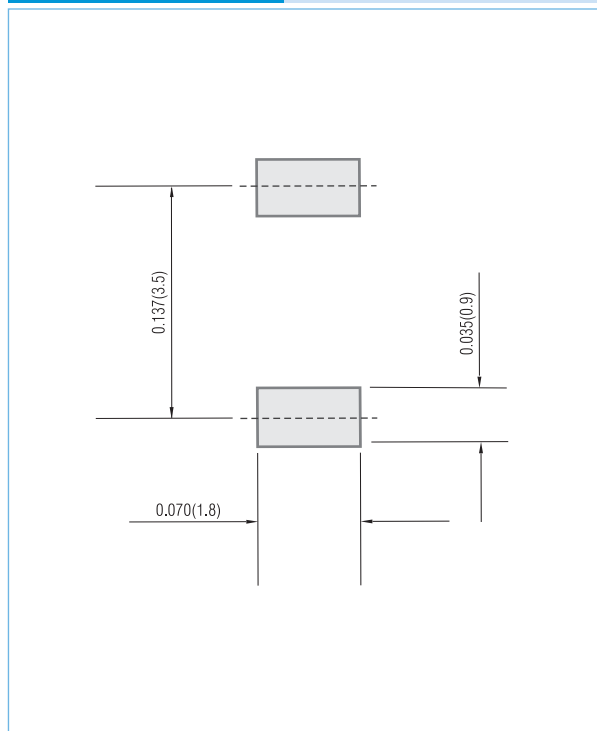
Fig. 3 SURGE CURRENT CHARACTERISTIC

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## MOUNTING PAD LAYOUT

MINI-MELF

Unit: inch ( mm )



## ORDER INFORMATION

- Packing information
  - T/R - 10K per 13" plastic Reel
  - T/R - 2.5K per 7" plastic Reel

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## Part No\_packing code\_Version

BAV101\_R1\_10001

BAV101\_R2\_10001

For example :

**RB500V-40** **R2** **00001**

Part No.

Serial number

Version code means HF

Packing size code means 13"

Packing type means T/R

Packing Code <b>XX</b>				Version Code <b>XXXXX</b>		
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code
Tape and Ammunition Box (T/B)	<b>A</b>	N/A	<b>0</b>	<b>HF</b>	<b>0</b>	serial number
Tape and Reel (T/R)	<b>R</b>	7"	<b>1</b>	<b>RoHS</b>	<b>1</b>	serial number
Bulk Packing (B/P)	<b>B</b>	13"	<b>2</b>			
Tube Packing (T/P)	<b>T</b>	26mm	<b>X</b>			
Tape and Reel (Right Oriented) (TRR)	<b>S</b>	52mm	<b>Y</b>			
Tape and Reel (Left Oriented) (TRL)	<b>L</b>	PANASERT T/B CATHODE UP (PBCU)	<b>U</b>			
FORMING	<b>F</b>	PANASERT T/B CATHODE DOWN (PBCD)	<b>D</b>			

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