

CONDUCT



### HIGH VOLTAGE SURFACE MOUNT SWITCHING DIODES

VOLTAGE 120 to 250 Volts POWER

300 mWatts MICRO-MELF

#### FEATURES

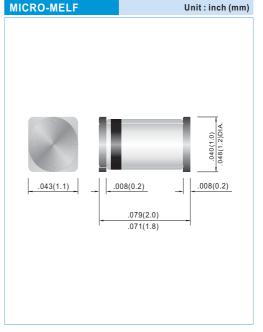
ΡΛΝ

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

#### **MECHANICAL DATA**

- Case: Micro Melf, Glass
- Terminals: Solderable per MIL-STD-202E, Method 208
- Polarity: Cathode Band
- Marking: Cathode Band Only
- Weight: 0.01 grams
- Packing information

T/R - 2.5K per 7" plastic Reel



#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (TJ = 25°C unless otherwise noted)

PARAMETER	SYMBOL	BAV301	BAV302	BAV303	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	3.0			рF
Maximum Reverse Recovery (Note 2)	t <sub>rr</sub>	75			ns
Typical Thermal Resistance	R <sub>eja</sub>	350			°C / W
Operation Junction Storage Temperature Range	T <sub>stg</sub>	-65 to +175			°C

#### NOTE:

1. CJ at VR=0, f=1MHZ

2. From IF=10mA to IR=-1mA, VR=6Volts, RL=100 $\Omega$ 







### **RATING AND CHARACTERISTIC CURVES**

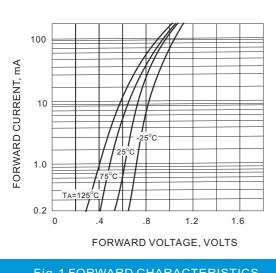
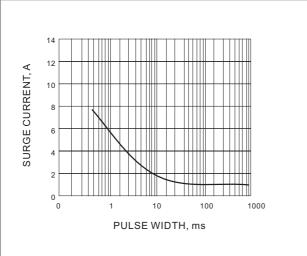


Fig.1 FORWARD CHARACTERISTICS



#### Fig.3 SURGE CURRENT CHARACTERISTIC



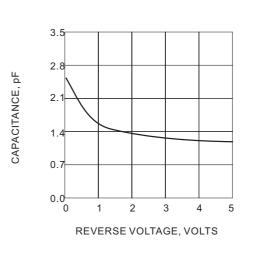
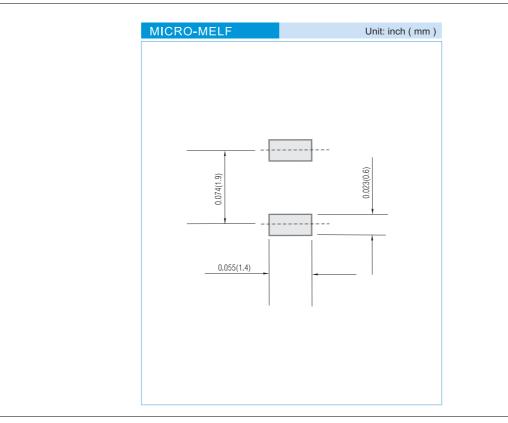


Fig.2 TYPICAL CAPACITANCE vs REVERSE VOLATGE





#### MOUNTING PAD LAYOUT



#### **ORDER INFORMATION**

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





### Part No\_packing code\_Version

BAV301\_R1\_00001 BAV301\_R2\_00001

### 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 XX				Version Code XXXXX			
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)	Α	N/A	0	HF	0	serial number	
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number	
Bulk Packing (B/P)	В	13"	2				
Tube Packing (T/P)	т	26mm	X				
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y				
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U				
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D				





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