

# DATA SHEET

## BAV301~BAV303

### HIGH VOLTAGE SURFACE MOUNT SWITCHING DIODES

**VOLTAGE** 100 to 200 Volts **POWER** 300 mWatts **MICRO-MELF** Unit : inch (mm)

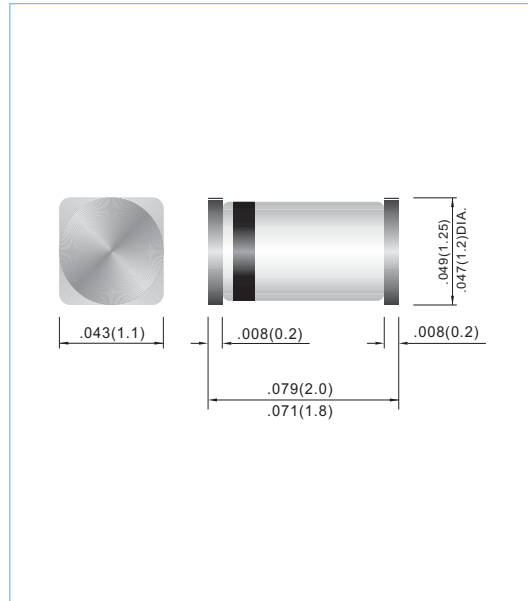
#### FEATURES

- Fast switching Speed.
- Surface Mount Package Ideally Suited For Automatic Insertion.
- Silicon Epitaxial Planar Construction.

#### 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



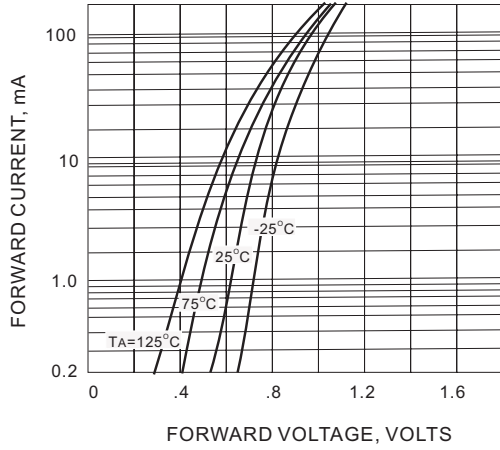
### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T<sub>J</sub>=25°C unless otherwise noted)

PARAMETER	SYMBOL	BAV301	BAV302	BAV303	UNITS
Reverse Voltage	V <sub>R</sub>	100	150	200	V
Peak Reverse Voltage	V <sub>RM</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=1.0s	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			uA
Typical Junction Capacitance( Note 1)	C <sub>J</sub>	0.95			pF
Maximum Reverse Recovery (Note 2)	T <sub>RR</sub>	75			ns
Maximum Thermal Resistance	R <sub>θJA</sub>	350			°C / W
Operation Junction Storage Temperature Range	T <sub>STG</sub>	-65 TO +175			°C

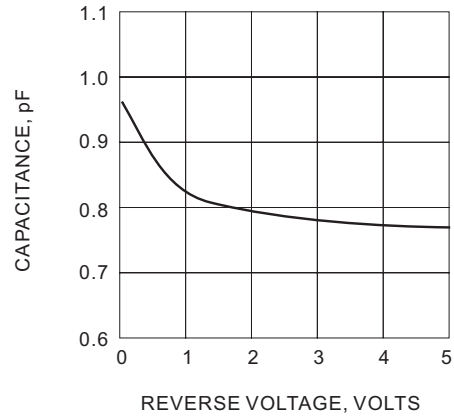
#### NOTE:

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

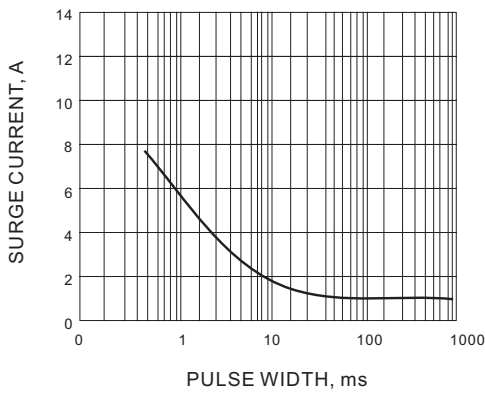
**RATING AND CHARACTERISTIC CURVES**



**Fig.1 FORWARD CHARACTERISTICS**



**Fig.2 TYPICAL CAPACITANCE vs REVERSE VOLTAGE**



**Fig.3 SURGE CURRENT CHARACTERISTIC**