

# BAV19~BAV21

## SWITCHING DIODES

<b>VOLTAGE</b>	<b>120~250 Volt</b>	<b>POWER</b>	<b>500 mWatt</b>
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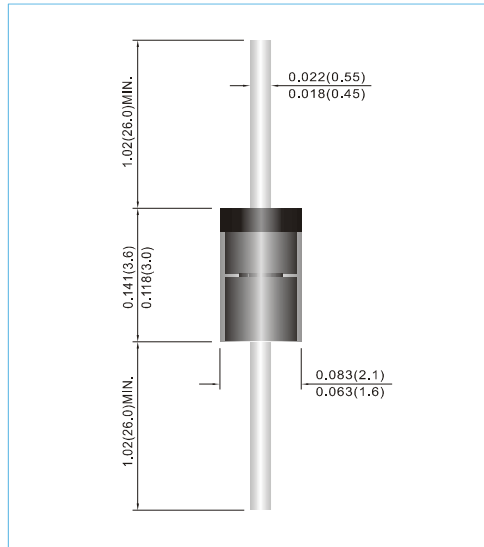
### FEATURES

- Fast switching Speed
- Electrically Identical to Standard JEDEC
- High Conductance
- Axial lead Package Ideally Suited for Automatic Insertion
- Lead free in compliance with EU RoHS 2011/65/EU directive

### MECHANICAL DATA

- Case: Molded Glass DO-35
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.0047 ounces, 0.132 grams
- Ordering information : Suffix : " -35 " to order DO-35 Package
- Packing information
  - B - 2K per Bulk box
  - T/R - 10K per 13" plastic Reel
  - T/B - 5K per horiz. tape & Ammo box

**DO-35** Unit : inch(mm)



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

PARAMETER	SYMBOL	BAV19	BAV20	BAV21	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 <sub>z</sub> ≥50Hz	I <sub>F(AV)</sub>	200			mA
Peak Forward Surge Current, 1s	I <sub>FSM</sub>	1.0			A
Power Dissipation Derate Above 25°C	P <sub>tot</sub>	500			mW
Maximum Forward Voltage at 0.1A	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 (Notes1)	C <sub>J</sub>	3			pF
Maximum Reverse Recovery (Notes2)	t <sub>rr</sub>	50			ns
Typical Thermal Resistance	R <sub>θJA</sub>	350			°C / W
Operating Junction and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150			°C

### NOTE:

1. C<sub>J</sub> at V<sub>R</sub>=0, f=1MHZ
2. From I<sub>F</sub>=30mA to I<sub>R</sub>=-3mA, V<sub>R</sub>=6Volts, R<sub>L</sub>=100Ω

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## RATING AND CHARACTERISTIC CURVES

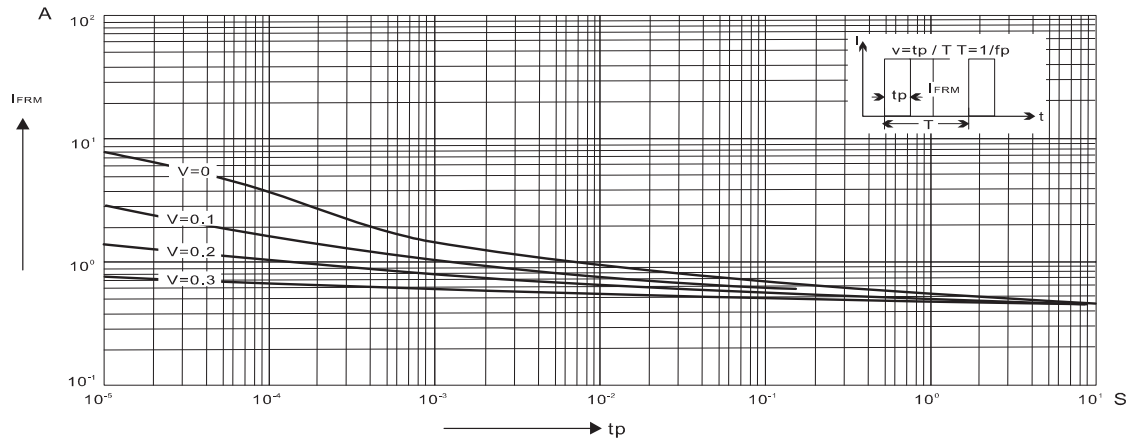


Fig.1 ADMISSIBLE REPETITIVE PEAK FORWARD CURRENT VERSUS PULSE DURATION

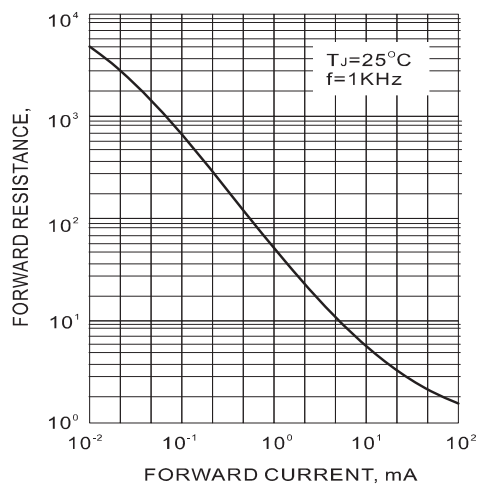


Fig.2-DYNAMIC FORWARD RESISTANCE VERSUS FORWARD CURRENT

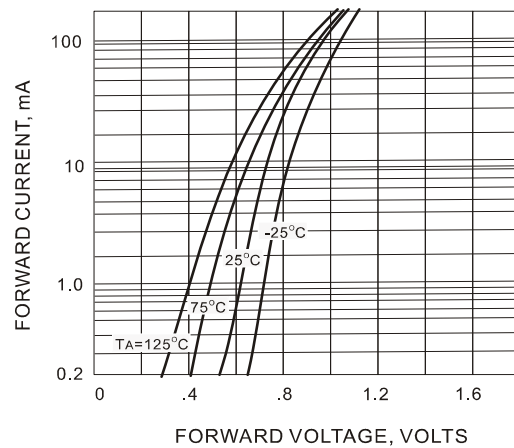


Fig.2 FORWARD CHARACTERISTICS

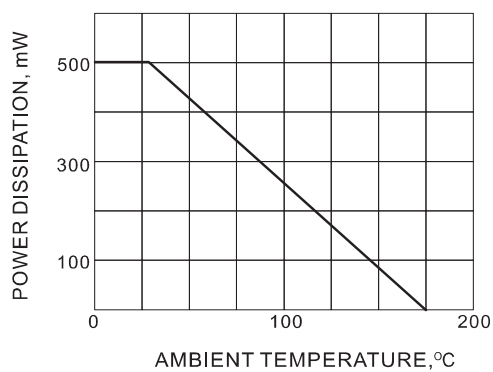


Fig.4 DERATING CURVE

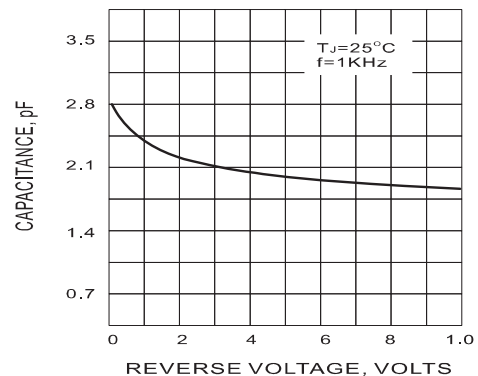


Fig.5 TYPICAL JUNCTION CAPACITANCE

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### Part No\_packing code\_Version

BAV19\_AX\_100A1

BAV19\_AY\_100A1

BAV19\_R2\_100A1

BAV19\_B0\_100A1

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>XXXXXX</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>	HF	<b>0</b>	serial number
Tape and Reel (T/R)	<b>R</b>	7"	<b>1</b>	RoHS	<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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