



### **SWITCHING DIODES**

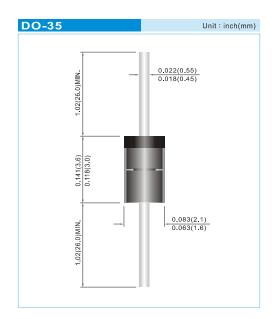
VOLTAGE 120~250 Volt POWER 500 mWatt

#### **FEATURES**

- · Fast switching Speed
- · Electrically Identical to Standerd JEDEC
- · High Conductance
- · Axial lead Package Ideally Suited for Automatic Insertion
- · Lead free in compliance with EU RoHS 2.0

#### **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 15" plastic Reel
  - T/B 5K per horiz. tape & Ammo box



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (TJ = 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 andf>=50Hz	I <sub>F(AV)</sub>		mA		
Peak Forward Surge Current,1s	I <sub>FSM</sub>		А		
Power Dissipation Derate Above 25°C	P <sub>tot</sub>		mW		
Maximum Forward Voltage at 0.1A	V <sub>F</sub>		V		
Maximum DC Reverse Current at Rated DC Blocking Voltage T <sub>J</sub> =25°C	I <sub>R</sub>	0.1			μА
Typical Junction Capacitance (Notes1)	C	3		pF	
Maximum Reverse Recovery (Notes2)	t <sub>rr</sub>	50			ns
Typical Thermal Resistance	$R_{_{\theta JA}}$	350			°C / W
Operating Junction and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150			°C

#### NOTE:

- 1. CJ at VR=0, f=1MHZ
- 2. From IF=30mA to IR=-3mA, VR=6Volts, RL=100 $\Omega$

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### RATING AND CHARACTERISTIC CURVES

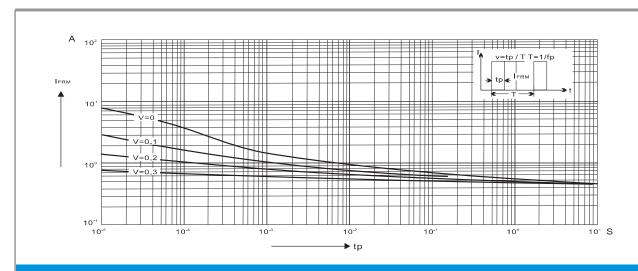


Fig.1 ADMISSIBLE REPETITIVE PEAK FORWARD CURRENT VERSUS PULSE DURATION

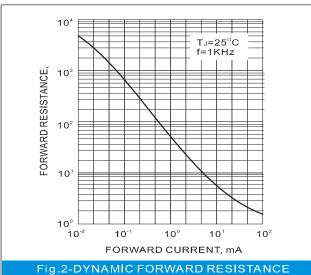


Fig.2-DYNAMIC FORWARD RESISTANCE VERSUS FORWARD CURRENT

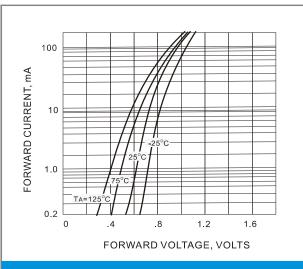


Fig.2 FORWARD CHARACTERISTICS

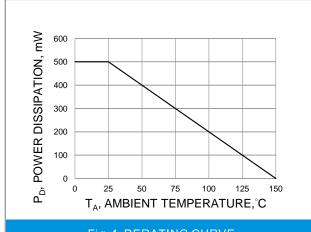


Fig.4 DERATING CURVE

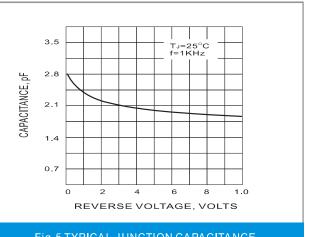


Fig.5 TYPICAL JUNCTION CAPACITANCE

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## Part No\_packing code\_Version

BAV19\_AX\_10001 BAV19\_AY\_10001 BAV19\_R2\_10001 BAV19\_B0\_10001

### For example:



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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