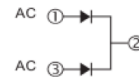
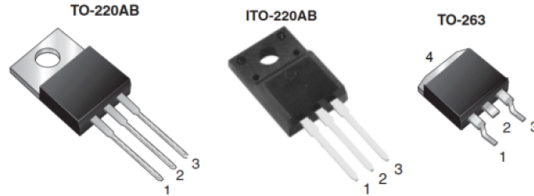




Features

- Schottky Barrier Chip
- Ideally Suited for Automatic Assembly
- Low Power Loss, High Efficiency
- Surge Overload Rating to 1.5 0A Peak
- For Use in Low Voltage Application
- Guard Ring Die Construction
- Plastic Case Material has UL Flammability Classification Rating 94V-O



- 1-Cathode 1
- 2-Anode
- 3-Cathode 2
- 4-Tab Anode



RoHS
COMPLIANT

Mechanical Data

- Case: TO-220AC, Molded Plastic
- Terminals: Plated Leads Solderable per STD-202, Method 208
- Polarity: See Diagram
- Weight: 2.24 grams (approx.)
- Mounting Position: Any
- Mounting Torque: 11.5 cm-kg (10 in-lbs) Max.
- **Lead Free: For RoHS / Lead Free Version**

Maximum Ratings and Electrical Characteristics @_{T_A}=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	MBR 1035CTF	MBR 1045CTF	MBR 1050CTF	MBR 1060CTF	MBR 1090CTF	MBR 10100CTF	MBR 10200CTF	Units	
Peak Repetitive Reverse Voltage	V _{RRM}									
Working Peak Reverse Voltage	V _{RWM}	35	45	50	60	90	100	200	V	
DC Blocking Voltage	V _R									
RMS Reverse Voltage	V _{R(RMS)}	24	31	35	42	63	70	140	V	
Average Rectified Output Current @ _{T_L} = 100°C (Note 1)	I _O	10.0							A	
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	150							A	
Forward Voltage @ _{I_F} = 10A	V _{FM}	0.70		0.80		0.85		1.05	V	
Peak Reverse Current @ _{T_A} = 25°C At Rated DC Blocking Voltage @ _{T_A} = 100°C	I _{RM}	0.5 50							mA	
Typical Junction Capacitance (Note 2)	C _j	350		280		200			pF	
Typical Thermal Resistance (Note 1)	R _{θJA}	3.5					2.0			°C/W
Operating and Storage Temperature Range	T _j , T _{STG}	-65 to +150							°C	

Note: 1. Valid provided that leads are kept at ambient temperature at a distance of 9.5mm from the case.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.



FIG.1- FORWARD CURRENT DERATING CURVE

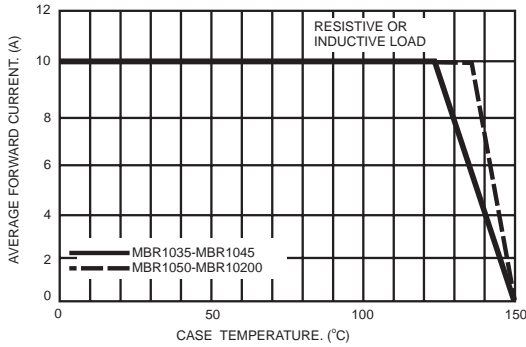


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

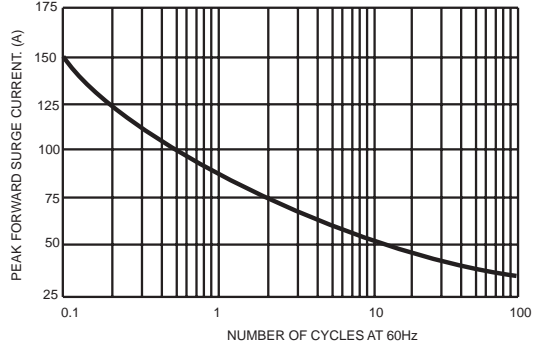


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

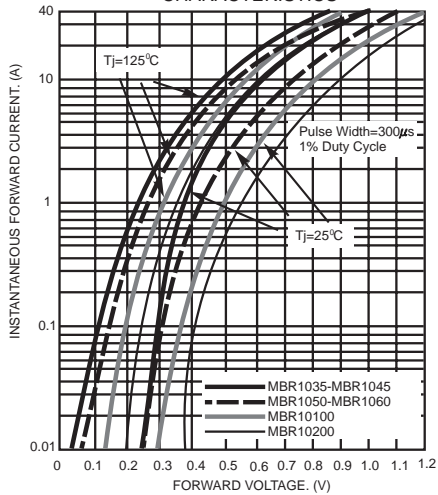


FIG.4- TYPICAL REVERSE CHARACTERISTICS

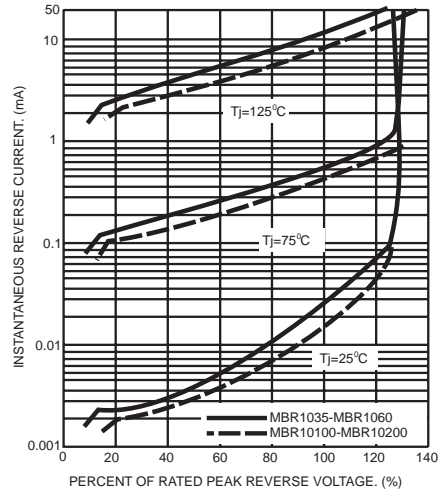


FIG.5- TYPICAL JUNCTION CAPACITANCE

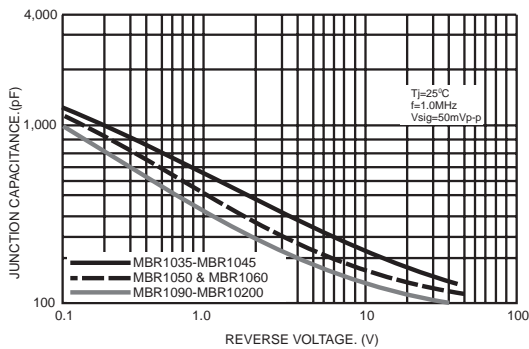
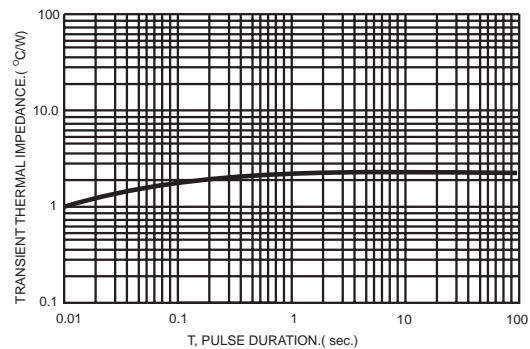


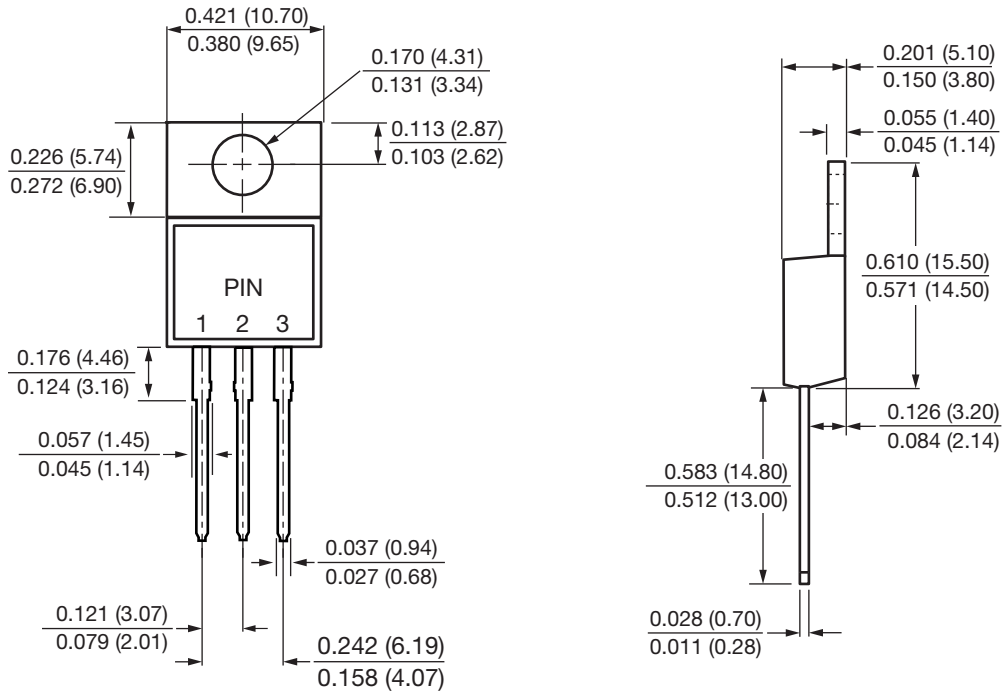
FIG.6- TYPICAL TRANSIENT THERMAL CHARACTERISTIC





Package Outline

TO-220AB



Dimensions in inches and (millimeters)

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- Zhejiang TRR Microelectronics Inc does not assure any liability arising out of the applications or use of any product described in this specification.
- Zhejiang TRR Microelectronics Inc advises customers to obtain the latest version of the device information before placing orders to verify that the required information is current.