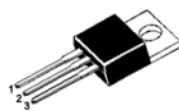


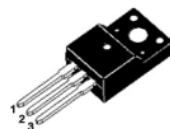


Features

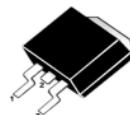
- Construction utilizes void-free molded plastic technique
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed
250 °C/10 seconds at terminals
- Component in accordance to
RoHS 2011/65/EU



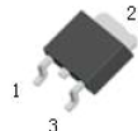
TO-220AB/CT



TO-220F/FCT



TO-263/DC



TO-252/CS



Mechanical Data

- **Case:** TO-220AB/F
Molding compound meets
UL 94 V-0 flammability rating
- **Terminals:** Solder plated, solderable per
MIL-STD-750, Method 2026
- **Polarity :** Polarity symbol marking on body
- **Mounting Position:** Any

Maximum Ratings & Thermal Characteristics (T_A = 25 °C unless otherwise specified)

Parameter	Symbol	MBR 2040	MBR 2045	MBR 2060	MBR 20100	MBR 20150	MBR 20200	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	40	45	60	100	150	200	V
Maximum RMS voltage	V _{RMS}	28	31.5	42	70	105	140	V
Maximum DC blocking voltage	V _{DC}	40	45	60	100	150	200	V
Maximum average forward rectified current at T _C =125°C	I _{F(AV)}	20						A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	150						A
Thermal resistance from junction to case	R _{θJC}	1.3						°C/W
Junction temperature	T _J	-55 to +150						°C
Storage temperature range	T _{STG}	-55 to +150						°C

Electrical Characteristics (T_A = 25 °C unless otherwise noted)

Parameter		Symbol	MBR 2040CT	MBR 2045CT	MBR 2060CT	MBR 20100CT	MBR 20150CT	MBR 20200CT	Unit
Maximum instantaneous forward voltage per diode at 10.0A		V _F	0.55		0.70	0.85	0.95		V
Maximum DC reverse current at rated DC blocking voltage	T _A =25℃	I _R	0.5			0.05			mA
	T _A =125℃		50			10			



Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

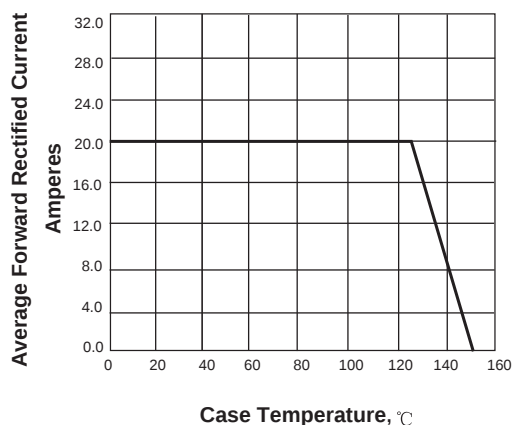


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

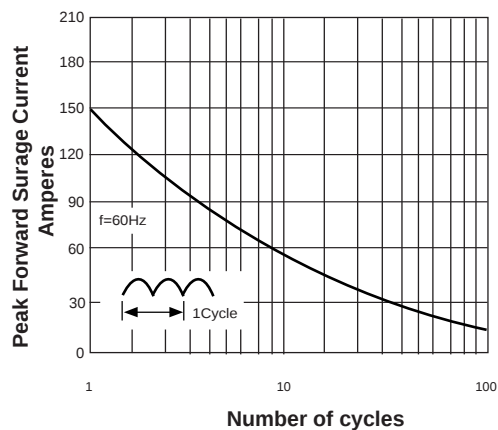


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

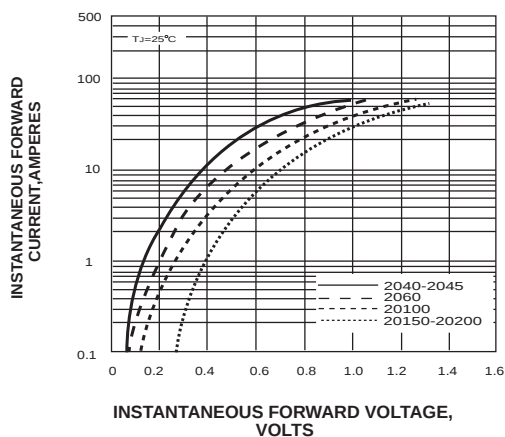
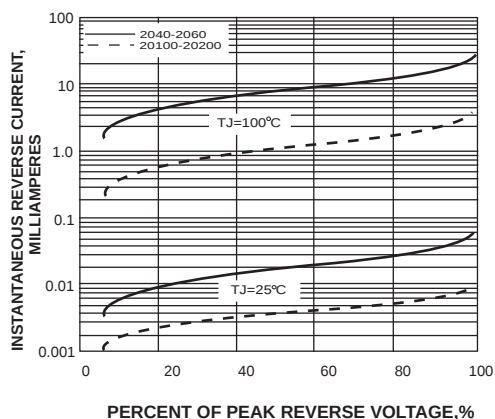


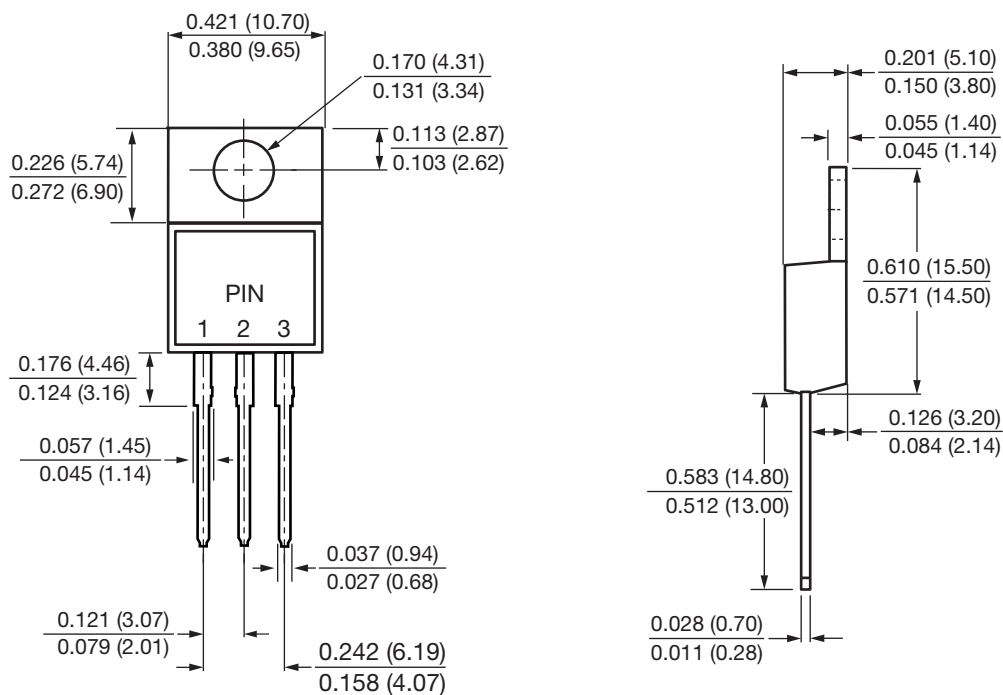
FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS





Package Outline

TO-220AB/F



Dimensions in inches and (millimeters)

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- 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.