

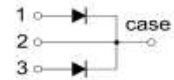
Features

- Schottky Barrier Chip
- Guard Ring Die Construction for Transient Protection
- Low Power Loss, High Efficiency
- High Surge Capability
- High Current Capability and Low Forward Voltage Drop
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Applications



Mechanical Data

- **Case:** ITO-220AB (plastic package).
Lead free; RoHS compliant
- **Molding Compound Flammability Rating:** UL 94 V-0
- **Terminals:** High temperature soldering guaranteed: 260 °C/10 sec. at terminals



Applications

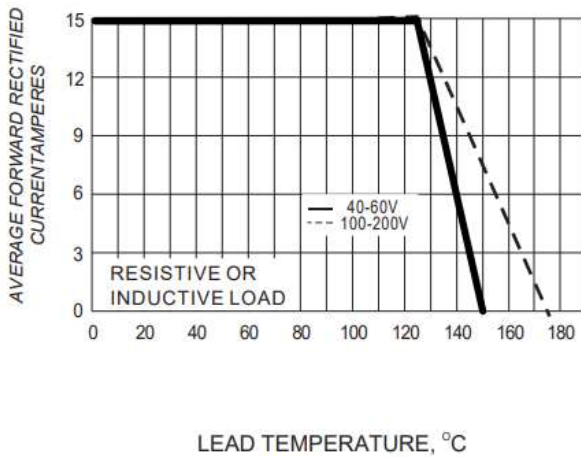
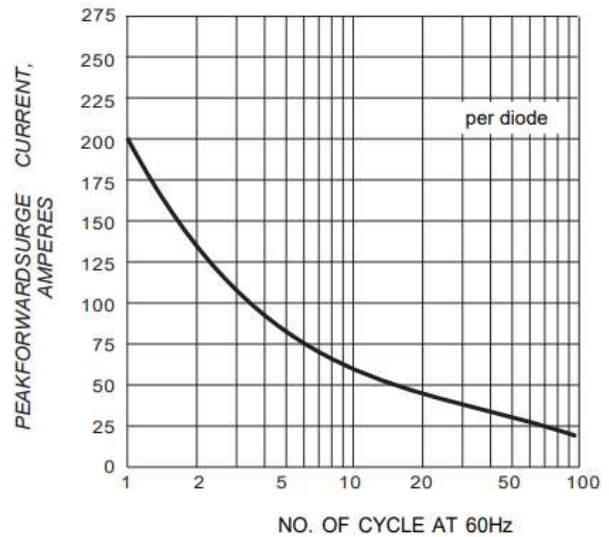
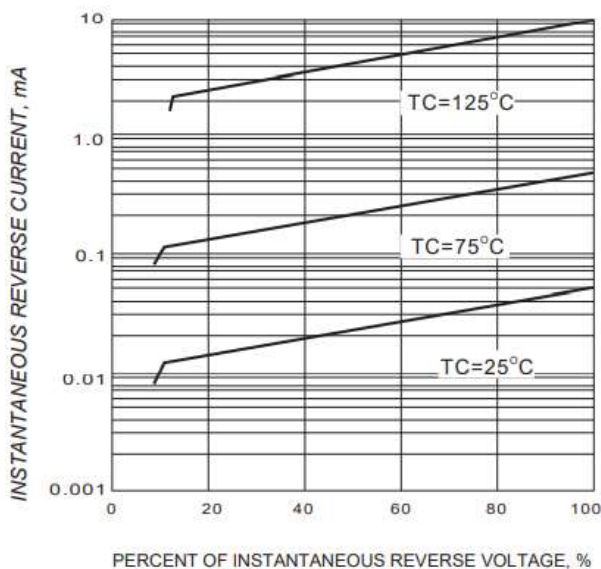
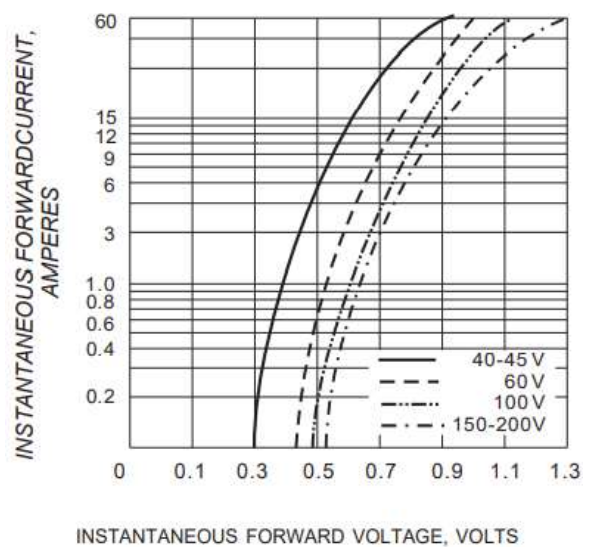
- Power switching application
- Hard switched and high frequency circuits
- Uninterruptible power supply

Maximum Ratings & Electrical Characteristics

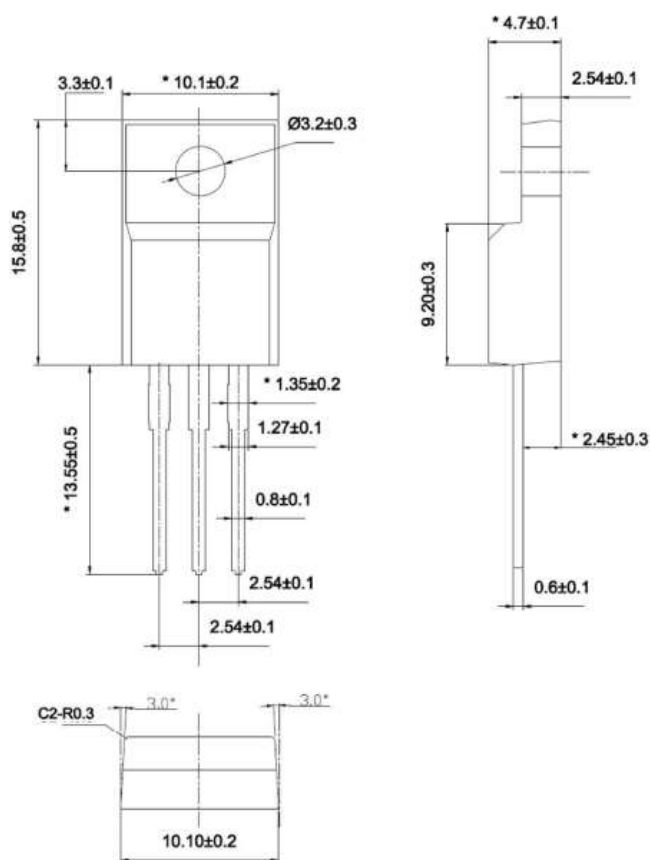
Ratings at 25 °C, ambient temperature unless otherwise specified

Rating	Symbol	MBR 3040FCT	MBR 3045FCT	MBR 3060FCT	MBR 30100FCT	MBR 30150FCT	MBR 30200FCT	Unit
Maximum Repetitive Reverse Voltage	VRRM	40	45	60	100	150	200	V
Maximum RMS Voltage	VRMS	28	31.5	42	70	105	140	V
Maximum AVERAGE Forward Current	IAV	15×2						A
Peak Forward Surge Current,8.3ms single half sine-wave superimposed on rated load(JEDEC method)	IFSM	200						A
Maximum Forward Voltage at 5A per element	VF	0.65		0.75	0.85	0.95		V
Maximum DC Reverse Current at TA=25℃	IR	0.10			0.01			mA
Rated DC Blocking Voltage TA=125℃		20						
Maximum Thermal Resistance(Note 2)	Rθ-JC	6.0						℃/W
Operating Junction and Storage Temperature Range	TJ,TSTG	-55 to +150			-55 to +175			℃

Typical Characteristics ($T_{amb} = 25^{\circ}\text{C}$ unless otherwise specified)

Fig.1- FORWARD CURRENT DERATING CURVE

Fig.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

Fig.3- TYPICAL REVERSE CHARACTERISTIC

Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC


Package Dimensions



Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
MBR30XXFCT	ITO-220AB	TUBE	50pcs	EIA STD RS-481