

**VOLTAGE RANGE: 40 - 200V**

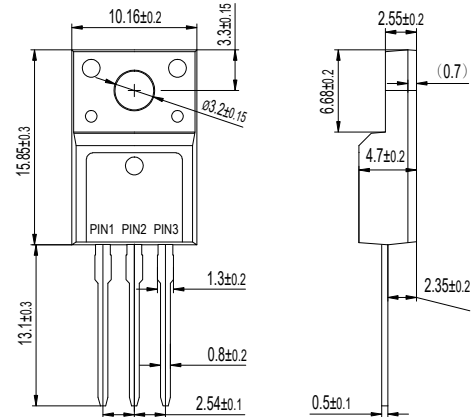
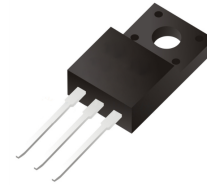
**CURRENT: 40A**

### Features

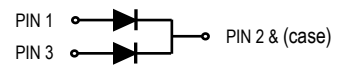
- High efficiency operation
- Low power loss
- Low stored charge majority carrier conduction
- High forward surge capability
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std (Halogen Free)

### Mechanical Data

- Circuit figure: Common cathode
- Leads: Solderable per mil-std-202, Method 208
- Polarity: as marked
- Mounting torque: 5 in-lbs maximum
- Terminals: Puretin plated
- Weight: Weight: ITO-220AB 1.70 grams



ITO-220AB



### Maximum Ratings and Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise specified

RATINGS	SYMBOL	MBRF 4040CT	MBRF 4045CT	MBRF 4060CT	MBRF 40100CT	MBRF 40150CT	MBRF 40200CT	UNIT
Maximum repetitive reverse voltage	VRRM	40	45	60	100	150	200	V
Maximum RMS voltage	VRMS	28	32	42	70	105	140	V
Maximum DC blocking voltage	VDC	40	45	60	100	150	200	V
Maximum average forward current per device per diode	I <sub>AV</sub>	40				20		A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	380						A
Typical thermal resistance (Note 1)	R <sub>θ-JC</sub>	4.5						°C/W
Operating junction temperature range	T <sub>J</sub>	-55 to +150				-55 to +175		°C
Storage temperature range	T <sub>STG</sub>	-55 to +175						°C
Maximum forward voltage per leg at I <sub>F</sub> =20A	V <sub>F</sub>	0.65	0.75	0.85	0.95			V
Maximum average reverse current at rated DC blocking voltage T <sub>J</sub> =25°C T <sub>J</sub> =125°C	I <sub>R</sub>	0.10 20				0.01 8		mA

Notes: 1. Thermal resistance from junction to case.

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

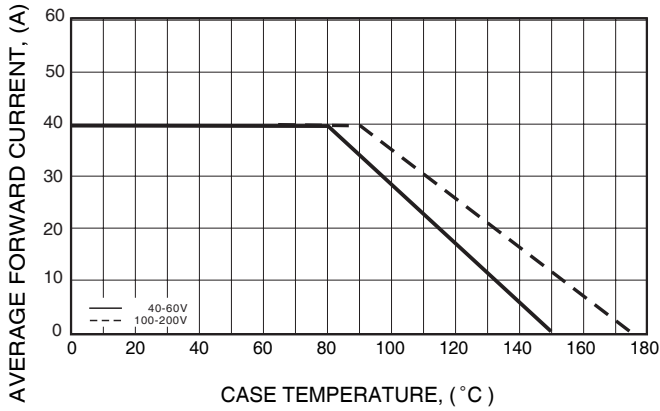


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

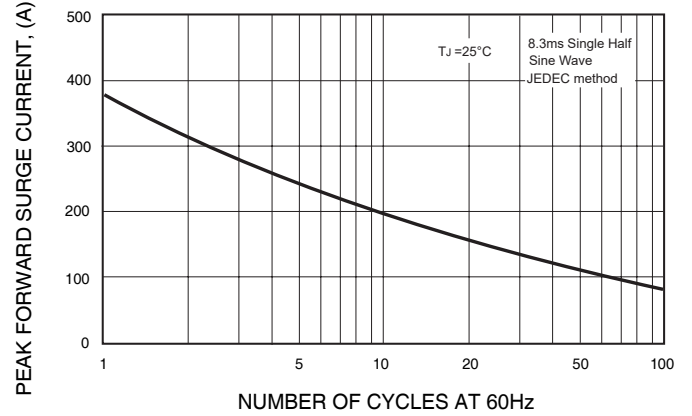


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

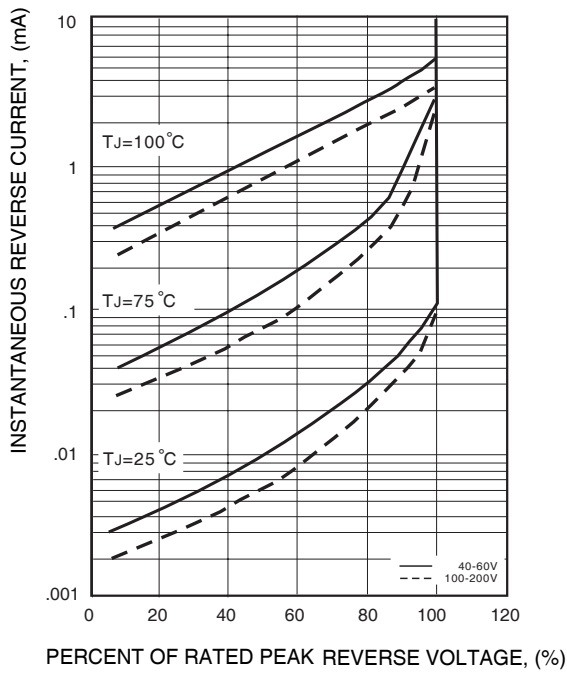


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

