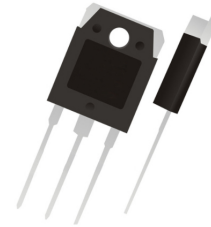


**VOLTAGE RANGE: 40 - 200V**

**CURRENT: 30A**

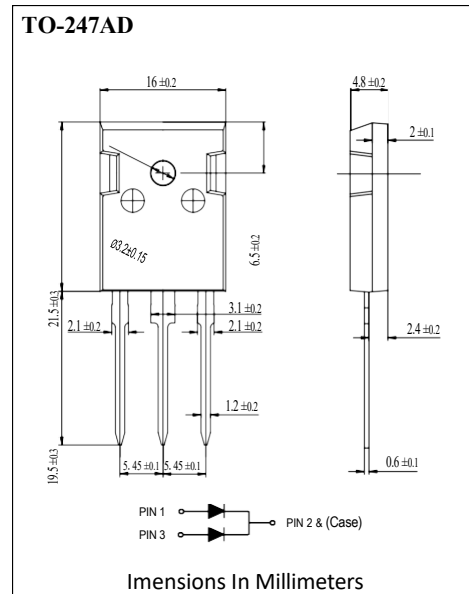


### Features

- High efficiency operation and 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: 5.85 grams



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

RATINGS	SYMBOL	MBR3040PT	MBR3045PT	MBR3060PT	MBR30100PT	MBR30150PT	MBR30200PT	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 per device Forward current per diode	I <sub>AV</sub>				30			A
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>				300			A
Typical thermal resistance (Note 1)	R <sub>θ-JC</sub>				1.5			$^\circ\text{C/W}$
Operating junction temperature range	T <sub>J</sub>	-55 to +150				-55 to +175		$^\circ\text{C}$
Storage temperature range	T <sub>STG</sub>	-55 To +175						$^\circ\text{C}$
Maximum forward voltage at I <sub>F</sub> = 15A per leg	V <sub>F</sub>	0.65		0.75	0.85	0.95		V
Maximum average reverse Current at rated DC blocking Voltage	I <sub>R</sub>	0.10 30		0.05 10		0.01 5		MA

Notes: 1. Thermal resistance from junction to case.

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

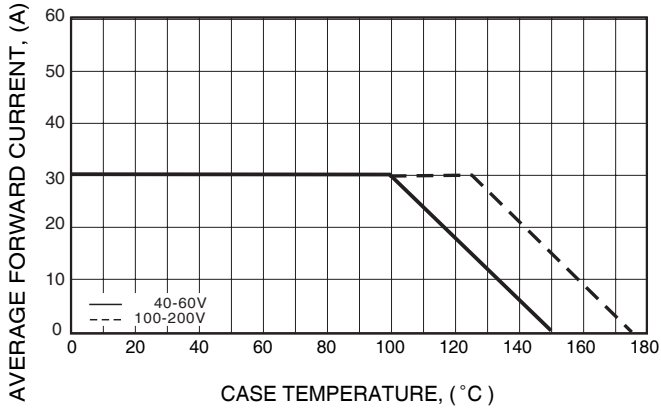


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

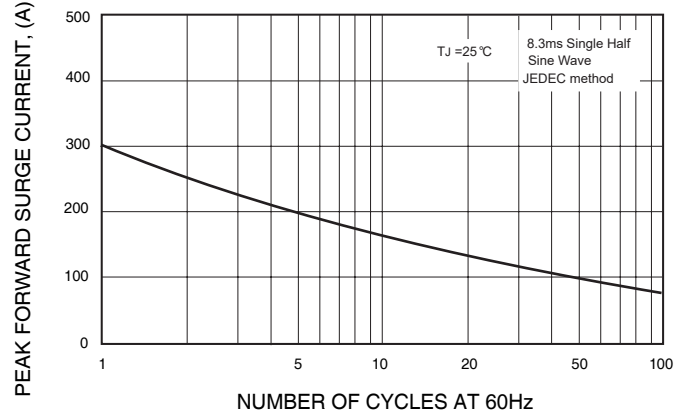


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

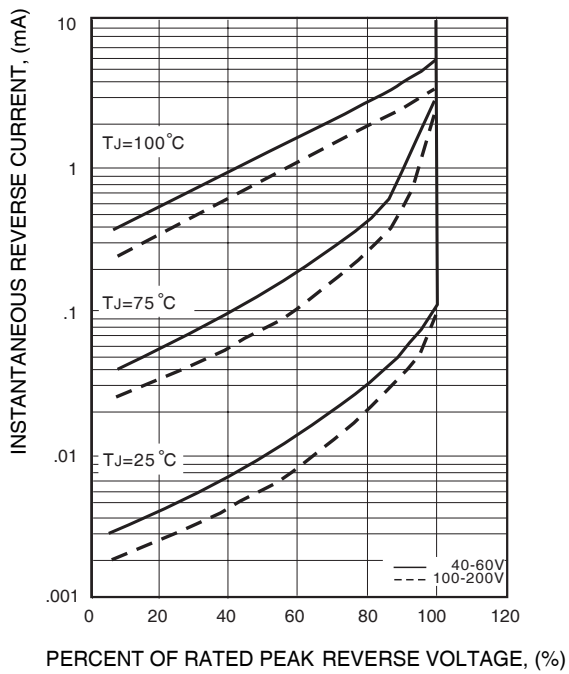


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

