

**VOLTAGE RANGE: 40 - 200V**

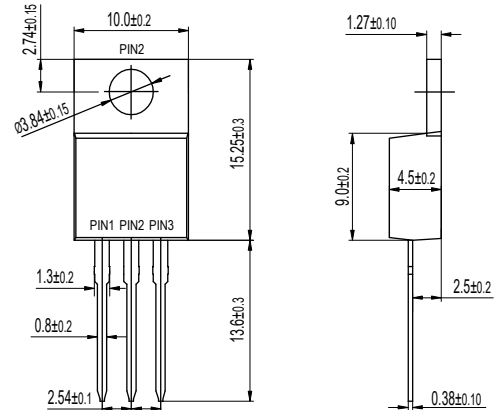
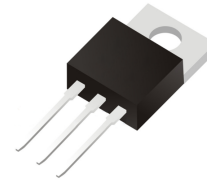
**CURRENT: 20A**

### Features

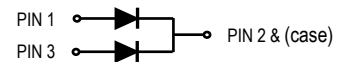
- High efficiency operation
- Low power loss
- Low stored charge majority carrier conduction
- High forward surge capability
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std (Halogen Free)

### 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: TO-220AB 1.85 grams



TO-220AB



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

RATINGS	SYMBOL	MBR 2040CT	MBR 2045CT	MBR 2060CT	MBR 20100CT	MBR 20150CT	MBR 20200CT	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	IAV	20				10		A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	IFSM	220						A
Typical thermal resistance (Note 1)	R $\theta$ -JC	2.0						$^\circ\text{C}/\text{W}$
Operating junction temperature range	TJ	-55 to +150				-55 to +175		$^\circ\text{C}$
Storage temperature range	TSTG	-55 to +175						$^\circ\text{C}$
Maximum forward voltage per leg at IF=10A	VF	0.65	0.75	0.85	0.92		V	
Maximum average reverse current at rated DC blocking voltage TJ=25 $^\circ\text{C}$ TJ=125 $^\circ\text{C}$	IR	0.10			0.01		5	mA

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

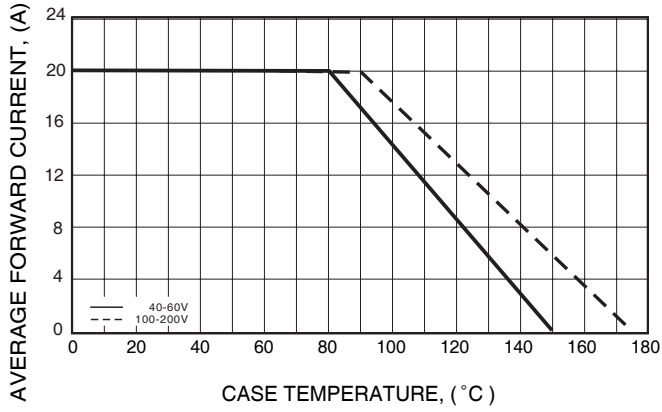


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

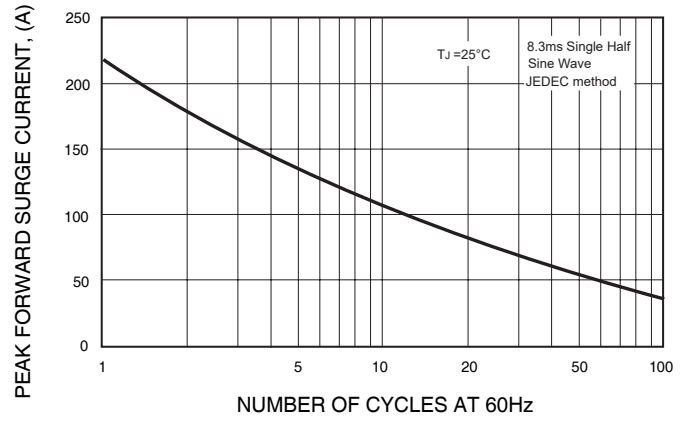


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

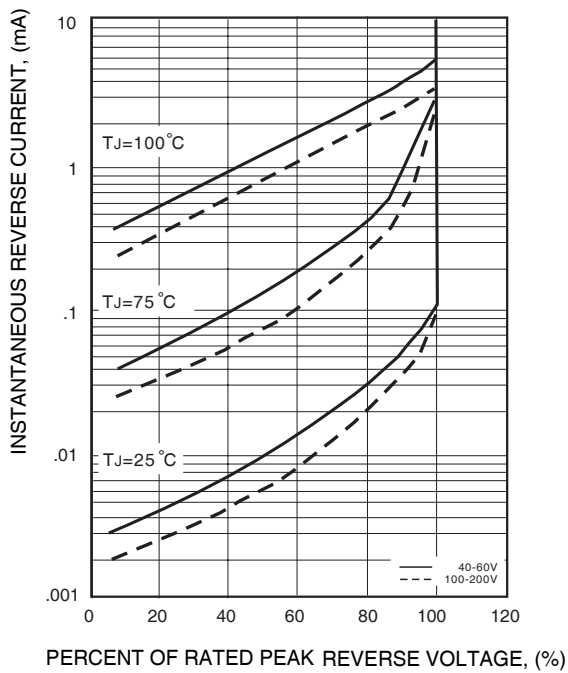


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

