

**VOLTAGE RANGE: 40 - 200V**

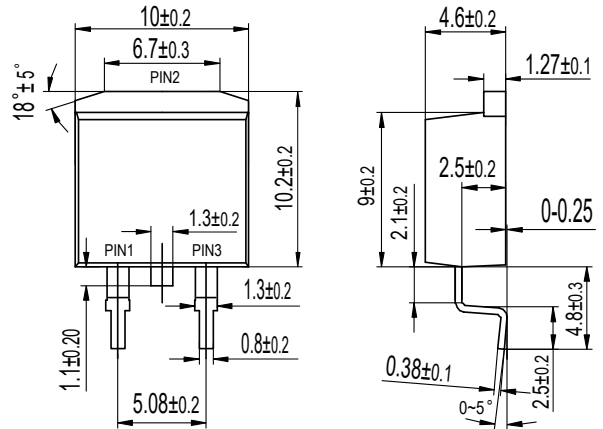
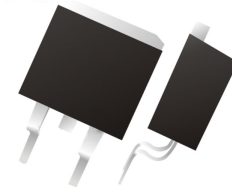
**CURRENT: 16 A**

### Features

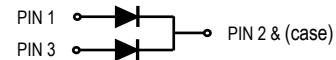
- High efficiency operation
- Low power loss
- Low stored charge majority carrier conduction
- High forward surge capability
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std (Halogen Free)

### Mechanical Data

- Circuit figure: Single positive
- Leads: Solderable per mil-std-202, Method 208
- Polarity: as marked
- Mounting torque: 5 in-lbs maximum
- Terminals: Puretin plated
- Weight: TO-263(D<sup>2</sup>PAK) 1.35 grams



TO-263(D<sup>2</sup>PAK)



### Maximum Ratings and Electrical Characteristics T<sub>A</sub> = 25°C unless otherwise specified

RATINGS	SYMBOL	MBRB 1640CT	MBRB 1645CT	MBRB 1660CT	MBRB 16100CT	MBRB 16150CT	MBRB 16200CT	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>	16							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	180							A
Typical thermal resistance (Note 1)	R <sub>θ-JC</sub>	2.5							°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> =8A	V <sub>F</sub>	0.65		0.75	0.85	0.92		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			0.01			5	mA

Notes: 1. Thermal resistance from junction to case.



FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

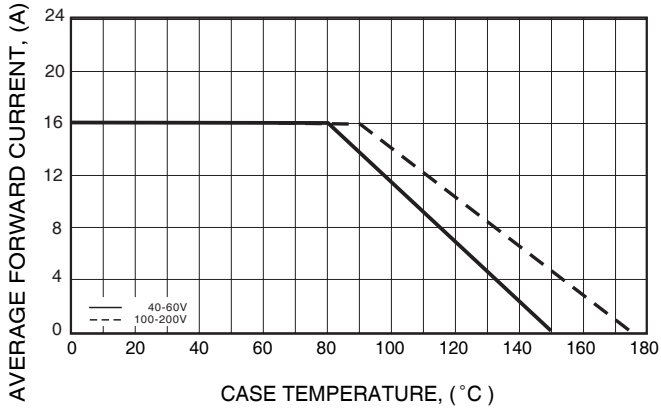


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

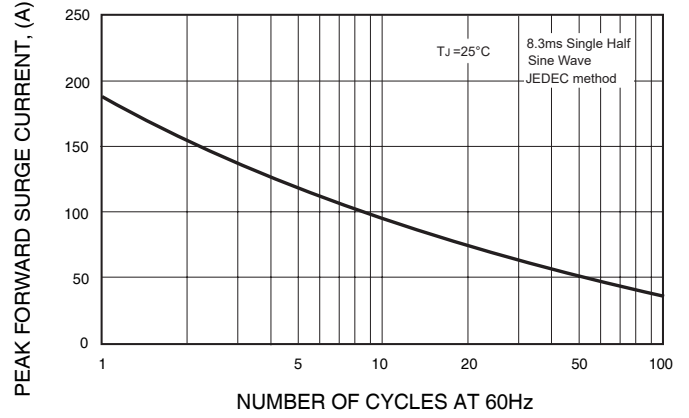


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

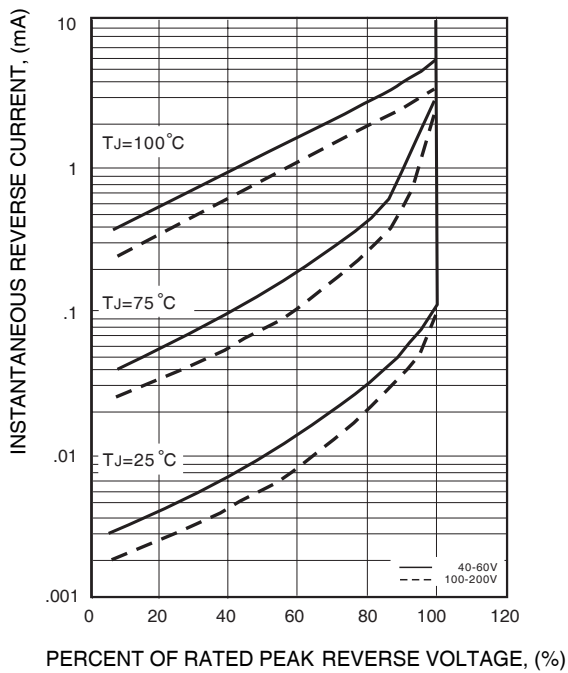


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

