

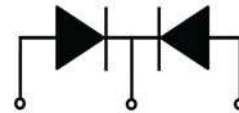
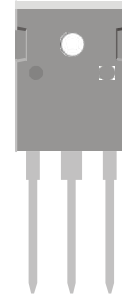


MBR3040PT-MBR30200PT

Features:

- Low power loss, high efficiency.  
High surge capacity
- For use in low voltage, high frequency inverters,  
free wheeling, and polarity protection applications.
- Metal silicon junction, majority carrier conduction.
- High current Capability, low forward voltage drop.
- Guard ring for over voltage protection.

TO-247



1. Anode 2. Cathode 3. Anode

**Absolute Maximum Ratings** (Ta=25°C unless otherwise noted)

Parameter	Symbol	MBR 3040 PT	MBR 3045 PT	MBR 3050 PT	MBR 3060 PT	MBR 3080 PT	MBR 3090 PT	MBR 30100 PT	MBR 30150 PT	MBR 30200 PT	Unit
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	40	45	50	60	80	90	100	150	200	V
Maximum RMS Voltage	V <sub>RMS</sub>	28	31.5	35	42	56	63	70	105	140	
Maximum DC Blocking Voltage	V <sub>R(DC)</sub>	40	45	50	60	80	90	100	150	200	
Maximum Average Forward Current	I <sub>F(AV)</sub>	30									A
Peak Forward Surge Current: 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	275									
Maximum Forward Voltage at 15A per leg	V <sub>F</sub>	0.68	0.72		0.85			0.95		V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	T <sub>J</sub> =25°C	0.1									mA
	T <sub>J</sub> =125°C	20									
Maximum Operating Junction Temperature	T <sub>J</sub>	150				175					°C
Storage Temperature	T <sub>stg</sub>	-55~+150				-65~+175					
Typical Thermal Resistance	R <sub>θJC</sub>	1.4									°C/W

Typical Characteristics

RATING AND CHARACTERISTIC CURVES

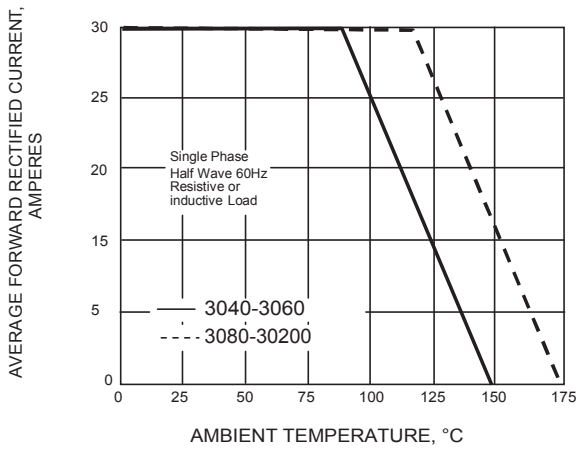


Fig.1 FORWARD CURRENT ERATING CURVE

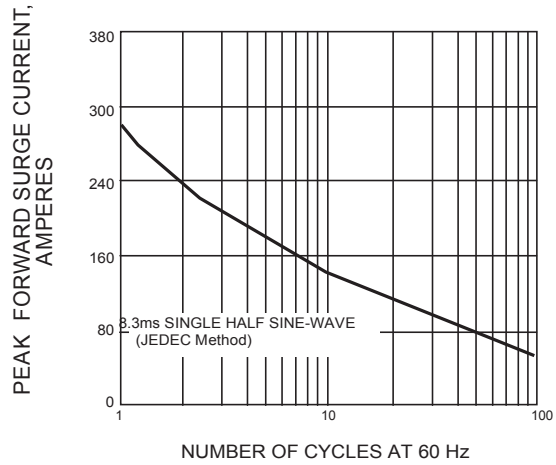


Fig.2 MAXIMUM NON-REPETITIVE SURGE CURRENT

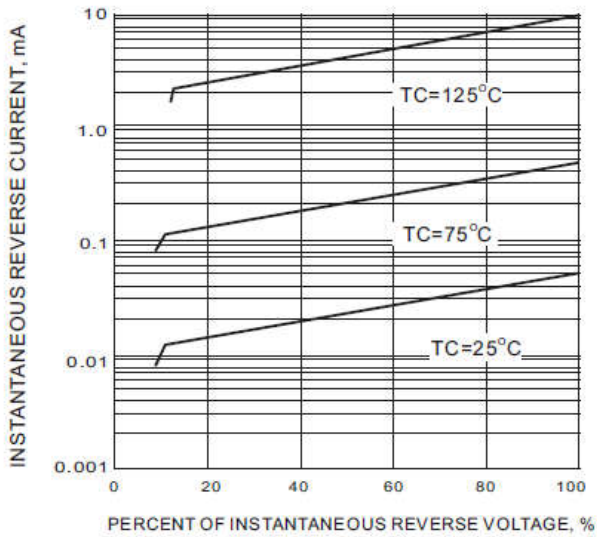


Fig.3 TYPICAL REVERSE CHARACTERISTIC

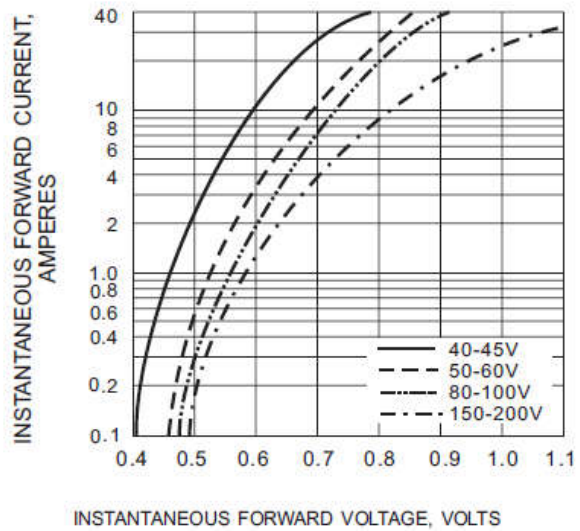


Fig.4 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

**Package Dimension**

TO-247

Units: mm

