

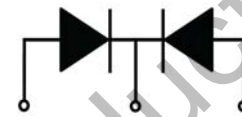
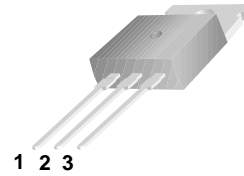


**MBR3040SCT-MBR30200SCT**

**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-220



1.Anode 2.Cathode 3. Anode

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

PARAMETER	Symbol	MBR 3040 SCT	MBR 3045 SCT	MBR 3050 SCT	MBR 3060 SCT	MBR 3080 SCT	MBR 3090 SCT	MBR 30100 SCT	MBR 30150 SCT	MBR 30200 SCT	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	V	
Maximum DC Blocking Voltage	V <sub>R(DC)</sub>	40	45	50	60	80	90	100	150	200	V	
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>	200									A	
Maximum Forward Voltage at 10A per leg	V <sub>F</sub>	0.65		0.72		0.82		0.92			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									mA	
Maximum Operating Junction Temperature	T <sub>j</sub>	150	175								°C	
Storage Temperature	T <sub>stg</sub>	-55~+150		-65~+175								°C
Typical Thermal Resistance	R <sub>θJC</sub>	1.4									°C/W	

Typical Characteristics

RATING AND CHARACTERISTIC CURVES

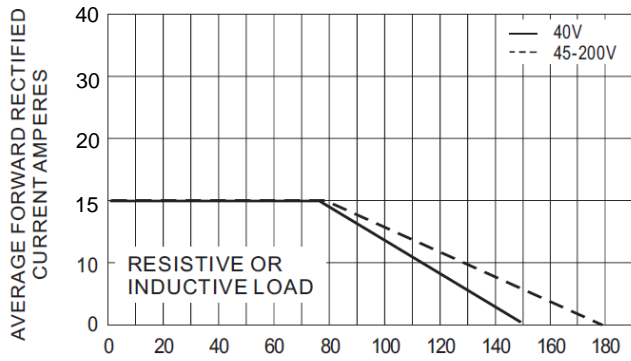


Fig.1 FORWARD CURRENT ERATING CURVE

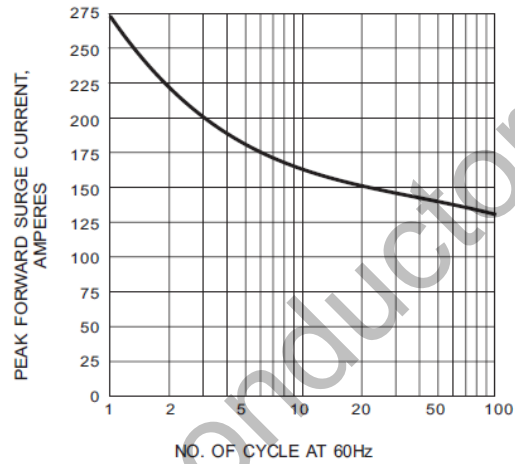


Fig.2 MAXIMUM NON-REPETITIVE SURGE CURRENT

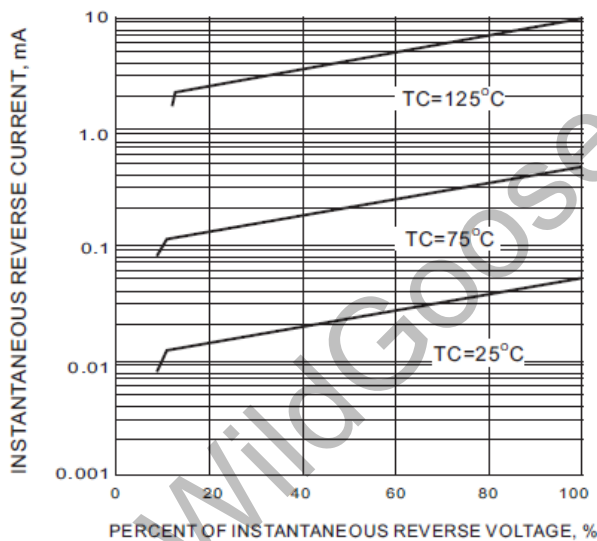


Fig.3 TYPICAL REVERSE CHARACTERISTIC

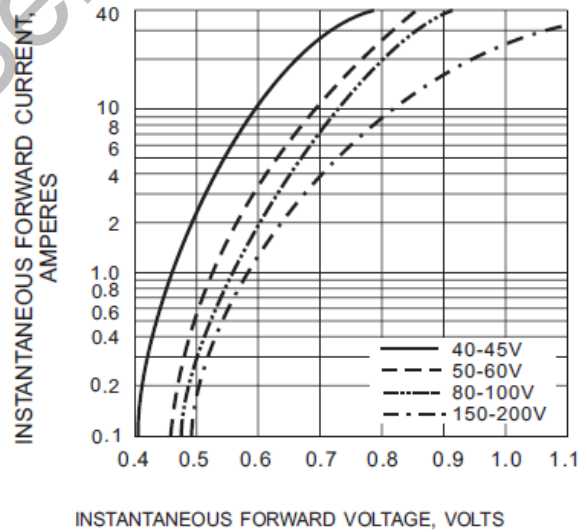


Fig.4 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

**Package Dimension**

TO-220

Units: mm

