
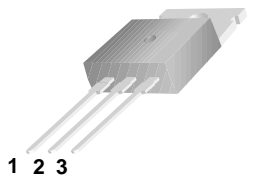
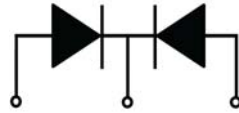


<h2 style="margin: 0;">MBR2040CT-MBR20200CT</h2> <p><b>Features:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Low power loss,high efficiency. High surge capacity</li> <li><input type="checkbox"/> For use in low voltage,high frequency inverters, free wheeling,and polarity protection applications.</li> <li><input type="checkbox"/> Metal silicon junction,majority carrier conduction.</li> <li><input type="checkbox"/> High current Capability,low forward voltage drop.</li> <li><input type="checkbox"/> Guard ring for over voltage protection.</li> </ul>	<div style="display: flex; justify-content: space-between; align-items: center;"> <span>TO-220</span>  </div>   <p>1.Anode 2.Cathode 3. Anode</p>
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**Absolute Maximum Ratings** (Ta=25°C unless otherwise noted)

PARAMETER	Symbol	MBR 2040 CT	MBR 2045 CT	MBR 2050 CT	MBR 2060 CT	MBR 2080 CT	MBR 2090 CT	MBR 20100 CT	MBR 20150 CT	MBR 20200 CT	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>	20									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 15A 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**

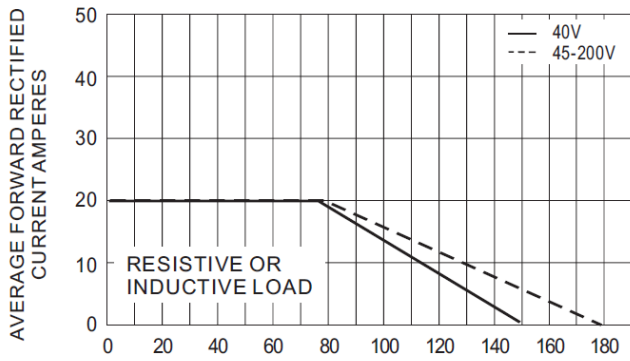


Fig.1 FORWARD CURRENT ERATING CURVE

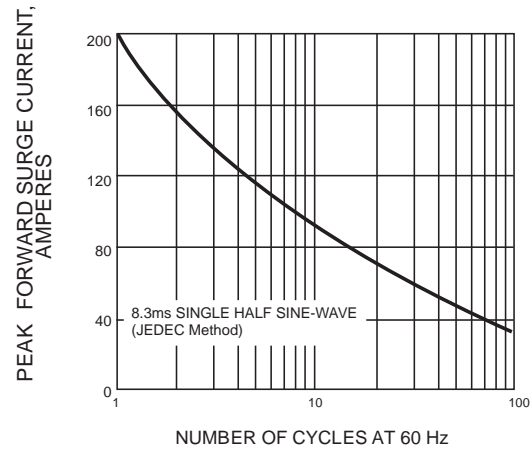


Fig.2 MAXIMUM NON-REPETITIVE SURGE CURRENT

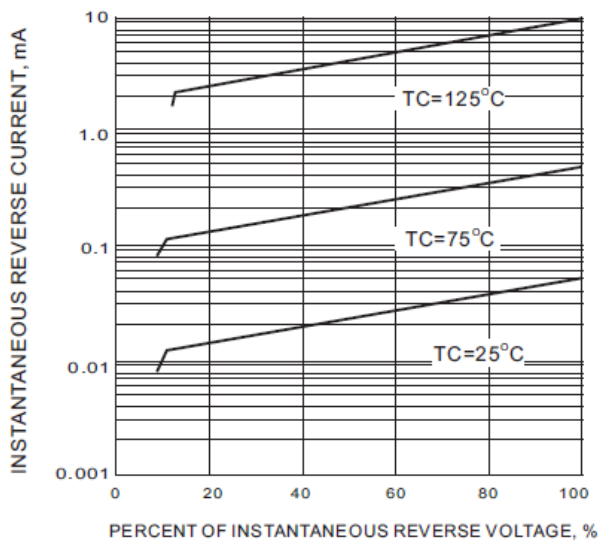


Fig.3 TYPICAL REVERSE CHARACTERISTIC

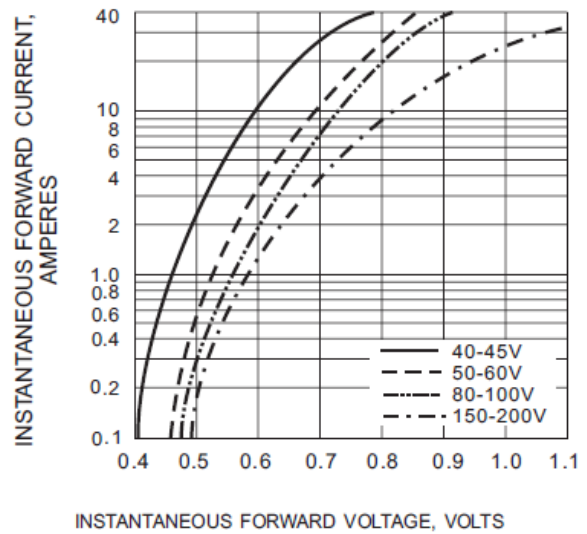


Fig.4 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

**Package Dimension**

TO-220

Units: mm

