
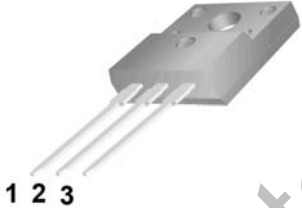

 <p>MBRF30200SCT</p> <p>Features:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Low power loss, high efficiency. High surge capacity <input type="checkbox"/> For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications. <input type="checkbox"/> Metal silicon junction, majority carrier conduction. <input type="checkbox"/> High current Capability, low forward voltage drop. <input type="checkbox"/> Guard ring for over voltage protection. 	<div style="text-align: right;">  </div> <p style="text-align: center;">TO-220F</p>   <p style="text-align: center;">1. Anode 2. Cathode 3. Anode</p>
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Absolute Maximum Ratings (Ta=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	200	V
Maximum RMS Voltage	V_{RMS}	140	V
Maximum DC Blocking Voltage	$V_{R(DC)}$	200	V
Maximum Average Forward Current	$I_{F(AV)}$	30	A
Peak Forward Surge Current: 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	200	A
Maximum Forward Voltage@15A	V_F	0.95	V
Maximum DC Reverse Current	$T_j=25^\circ C$	0.1	mA
	$T_j=125^\circ C$	15	mA
Maximum Operating Junction Temperature	T_j	175	°C
Storage Temperature	T_{stg}	-40~+175	°C

Typical Characteristics

RATING AND CHARACTERISTIC CURVES

FIG. 1- FORWARD CURRENT DERATING CURVE

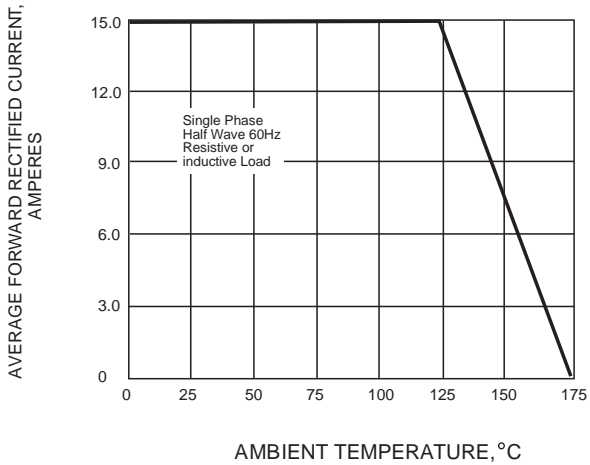


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

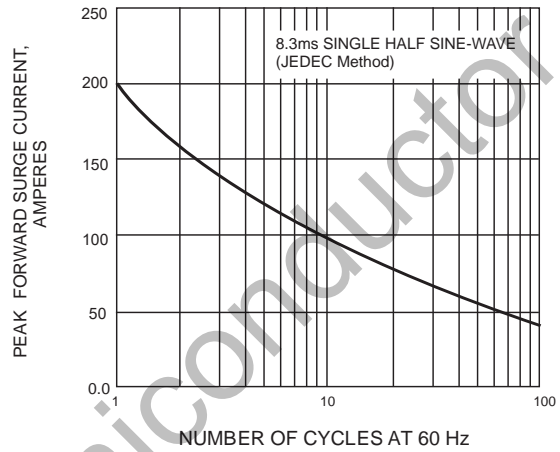


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

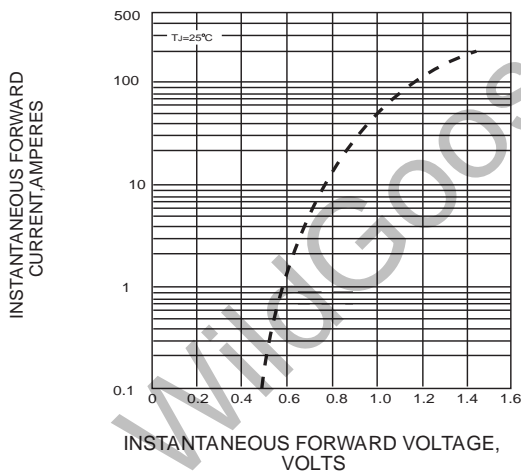
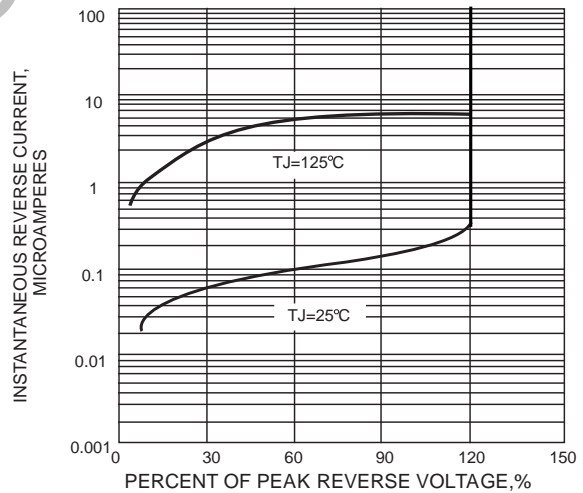


FIG. 4-TYPICAL REVERSE CHARACTERISTICS



Package Dimension

TO-220F

UNIT: mm

SYMBOL	min	nom	max	SYMBOL	min	nom	max
A	9.80		10.60	D		2.54	
A1		7.00		D1	1.15		1.55
A2	2.90		3.40	D2	0.60		1.00
A3	9.10		9.90	D3	0.20		0.50
B1	15.40		16.40	E	2.24		2.84
B2	4.35		4.95	E1		0.70	
B3	6.00		7.40	E2		1.0×45°	
C	3.00		3.70	E3	0.35		0.65
C1	15.00		17.00	E4	2.30		3.30
C2	8.80		10.80	α (度)		30°	

