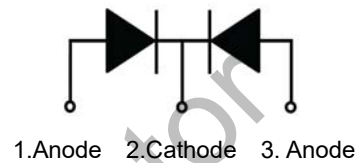
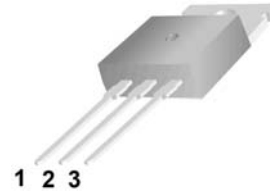


MBR30100SCT

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.

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

Parameter		Symbol	Value	Unit
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	100	V
Maximum RMS Voltage		V_{RMS}	70	V
Maximum DC Blocking Voltage		$V_{R(DC)}$	100	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}	250	A
Maximum Forward Voltage $T_j=25^{\circ}\text{C}$		V_F	0.85	V
Maximum DC Reverse Current	$T_j=25^{\circ}\text{C}$	I_R	0.1	mA
	$T_j=125^{\circ}\text{C}$		20	mA
Maximum Operating Junction Temperature		T_j	150	$^{\circ}\text{C}$
Storage Temperature		T_{stg}	-40~+150	$^{\circ}\text{C}$

Typical Characteristics

RATING AND CHARACTERISTIC CURVES

FIG. 1- FORWARD CURRENT DERATING CURVE

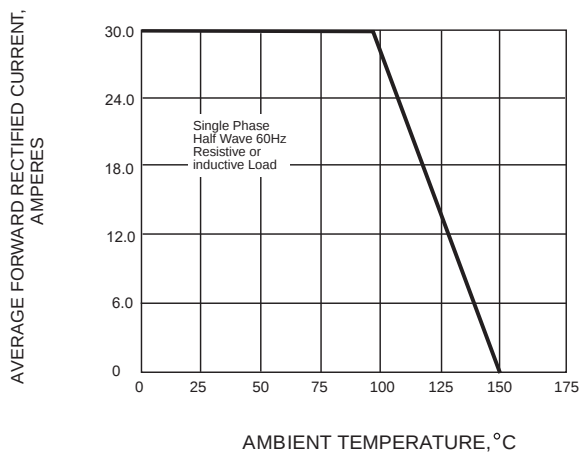


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

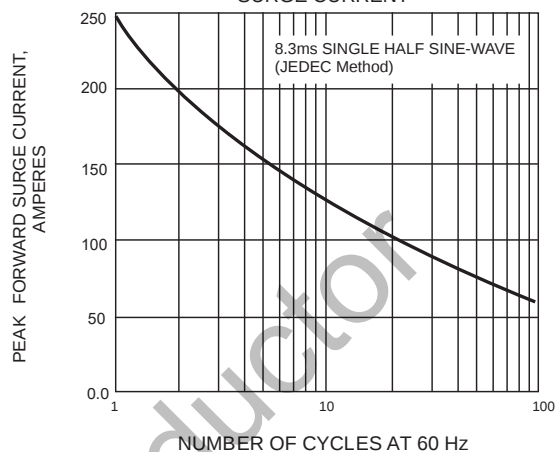


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

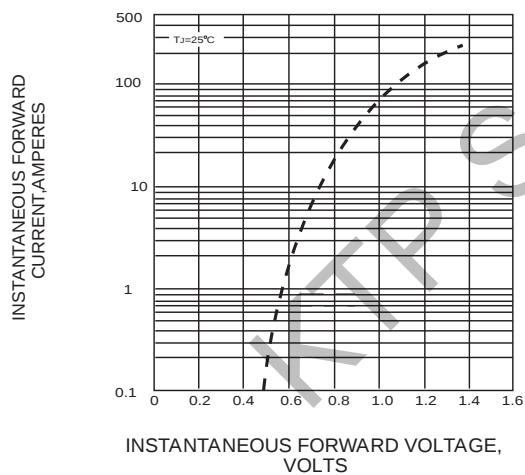
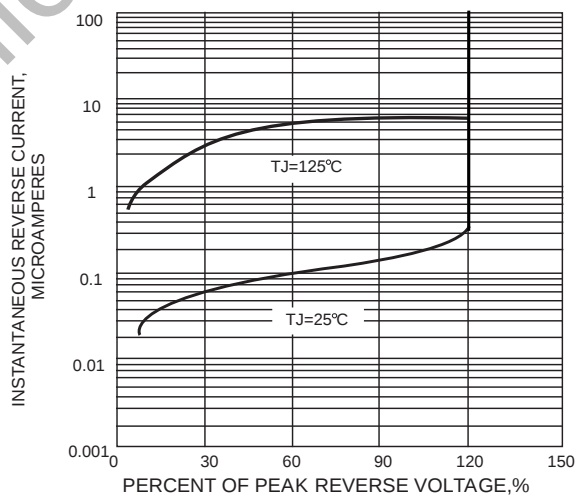


FIG. 4-TYPICAL REVERSE CHARACTERISTICS



Package Dimension

TO-220

Unit: mm

