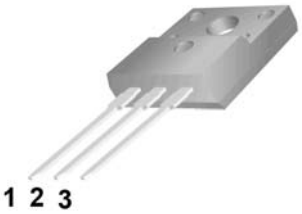
MBRF30150SCT

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.

RoHS COMPLIANT

TO-220F



1.Anode 2.Cathode 3. Anode

Absolute Maximum Ratings (Ta=25℃ unless otherwise noted)

Parameter		Symbol	Value	Unit
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	150	V
Maximum RMS Voltage		V_{RMS}	105	V
Maximum DC Blocking Voltage		$V_{R(DC)}$	150	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	0.90	V
Maximum DC Reverse Current	Tj=25℃	I_R	0.1	mA
	Tj=125℃		15	mA
Maximum Operating Junction Temperature		T_j	175	℃
Storage Temperature		T_{stg}	-40~+175	℃

Typical Characteristics

RATING AND CHARACTERISTIC CURVES

FIG. 1- FORWARD CURRENT DERATING CURVE

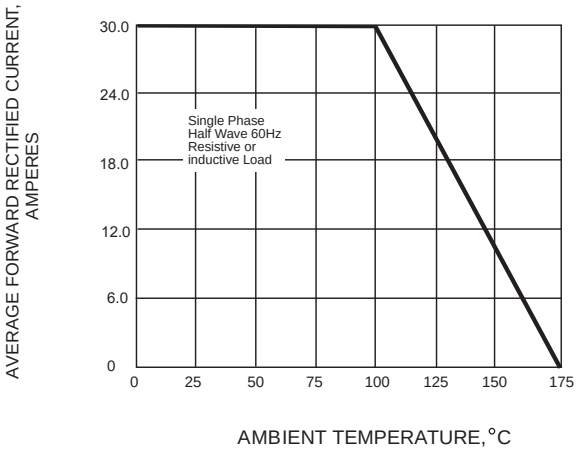


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

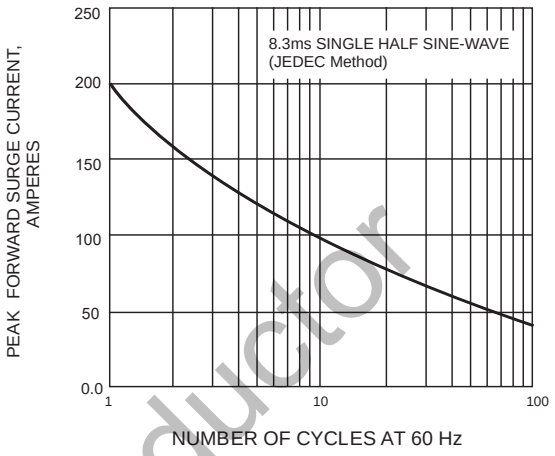


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

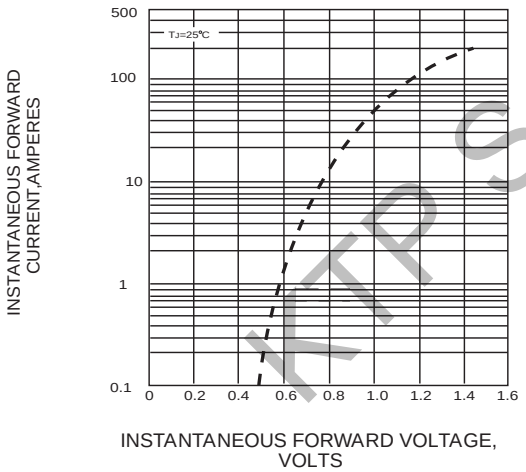
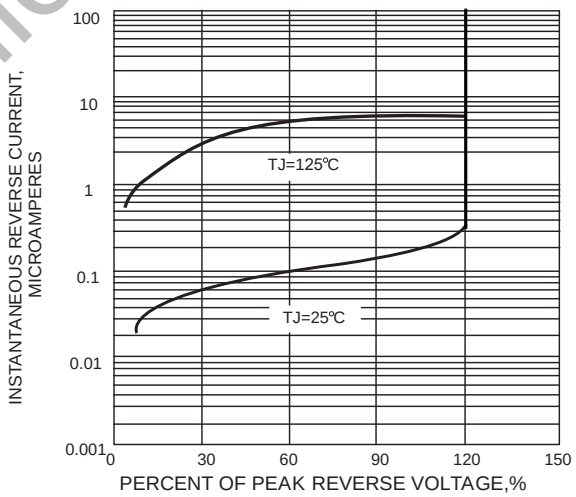


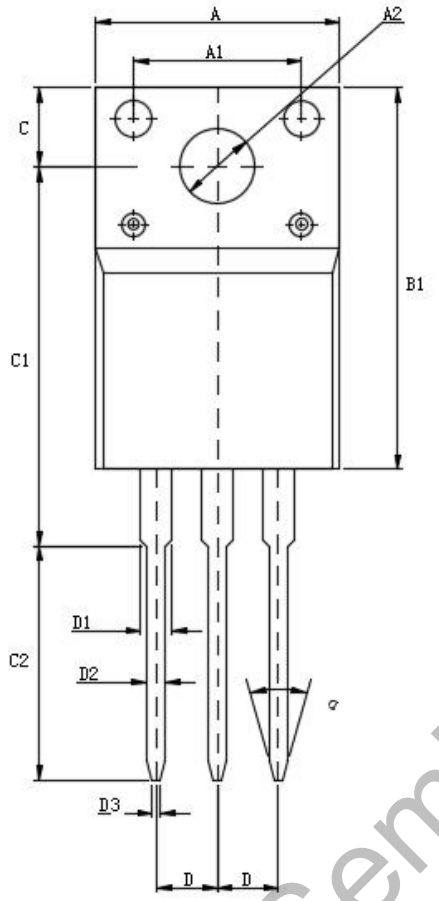
FIG. 4-TYPICAL REVERSE CHARACTERISTICS

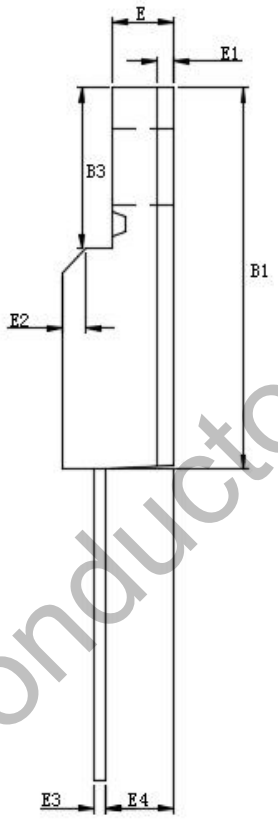


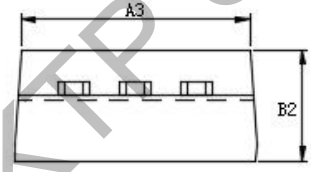
Package Dimension

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°	