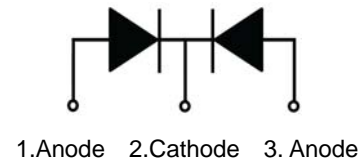
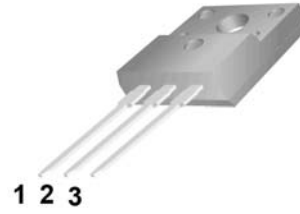


MBR10300FCT
Features:

- 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-220F

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

Parameter	Symbol	Value	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	300	V
Maximum RMS Voltage	V_{RMS}	210	V
Maximum DC Blocking Voltage	$V_{R(DC)}$	300	V
Maximum Average Forward Current	$I_{F(AV)}$	10	A
Peak Forward Surge Current:8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	120	A
Maximum Forward Voltage@5A	V_F	0.92	V
Maximum DC Reverse Current	$T_j=25^\circ\text{C}$	0.1	mA
	$T_j=125^\circ\text{C}$	20	mA
Maximum Operating Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55~+150	°C

Typical Characteristics
RATING AND CHARACTERISTIC CURVES

FIG. 1 – FORWARD CURRENT DERATING CURVE

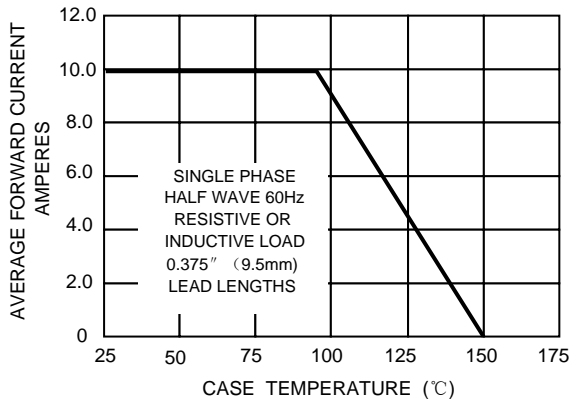


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

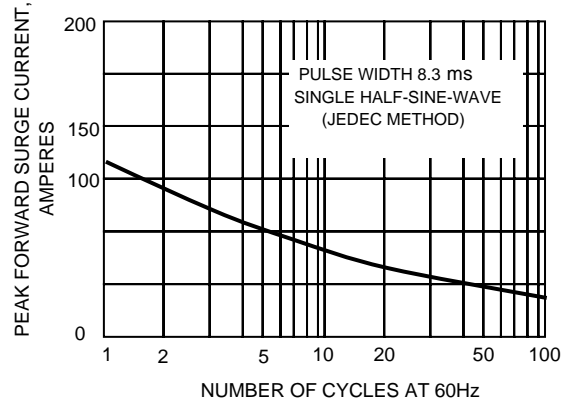


FIG.3-TYPICAL REVERSE CHARACTERISTICS

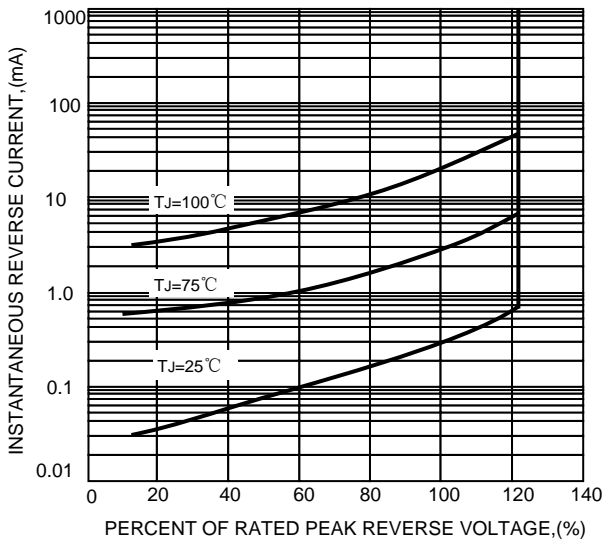


FIG.4-TYPICAL FORWARD CHARACTERISTICS

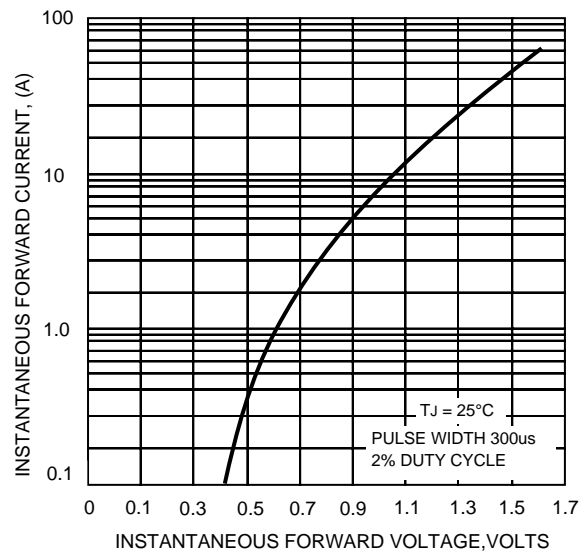


FIG.5 – TYPICAL JUNCTION CAPACITANCE

