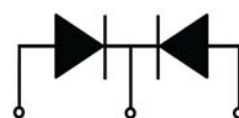
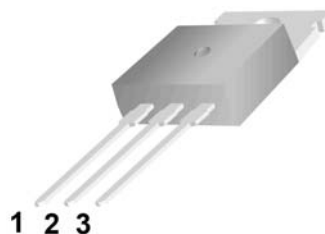


MBR10100SCT

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-220



1. Anode 2. Cathode 3. Anode

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		$I_{F(AV)}$	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	0.85	V
Maximum DC Reverse Current	Tj=25°C	I_R	0.1	mA
	Tj=125°C		20	mA
Maximum Operating Junction Temperature		T_j	150	°C
Storage Temperature		T_{stg}	-40~+150	°C

Typical Characteristics

RATING AND CHARACTERISTIC CURVES

FIG. 1- FORWARD CURRENT DERATING CURVE

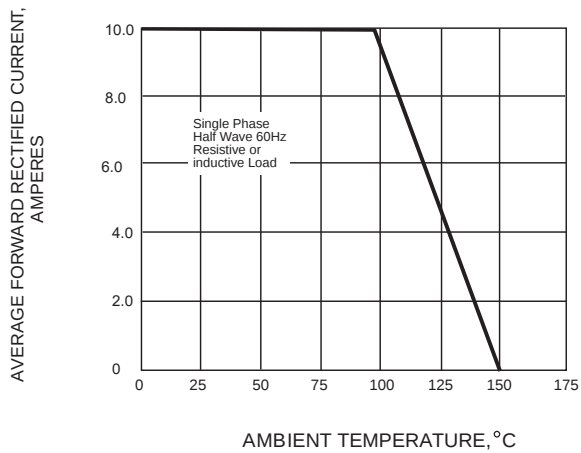


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

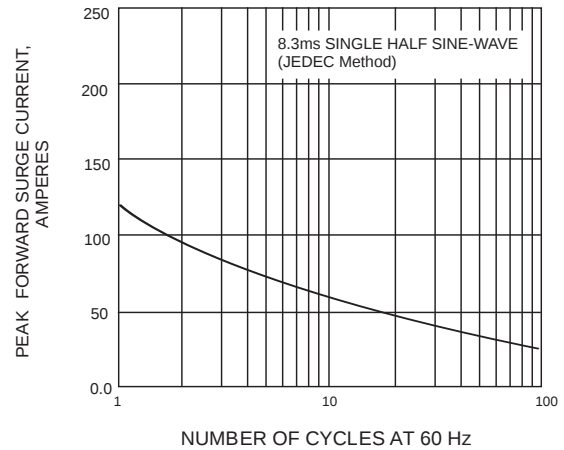


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

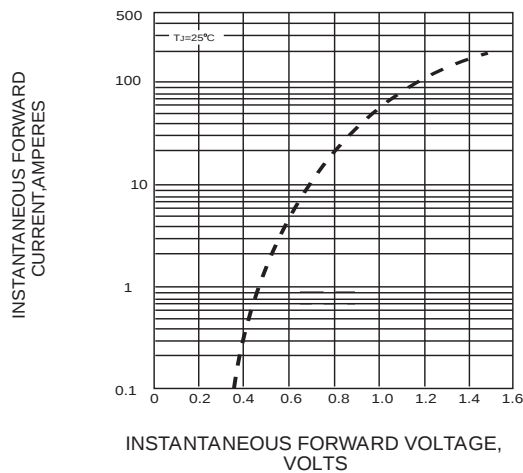
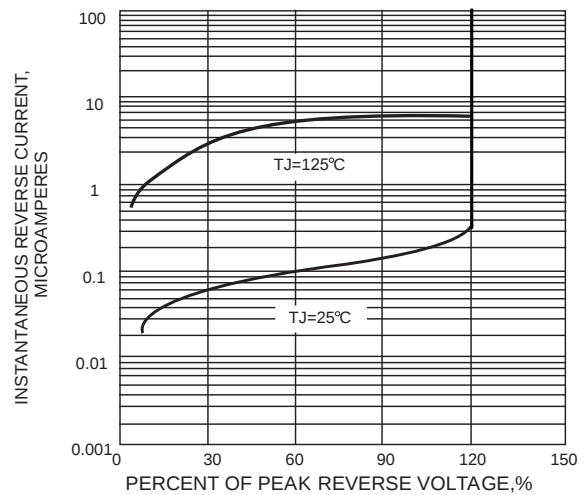
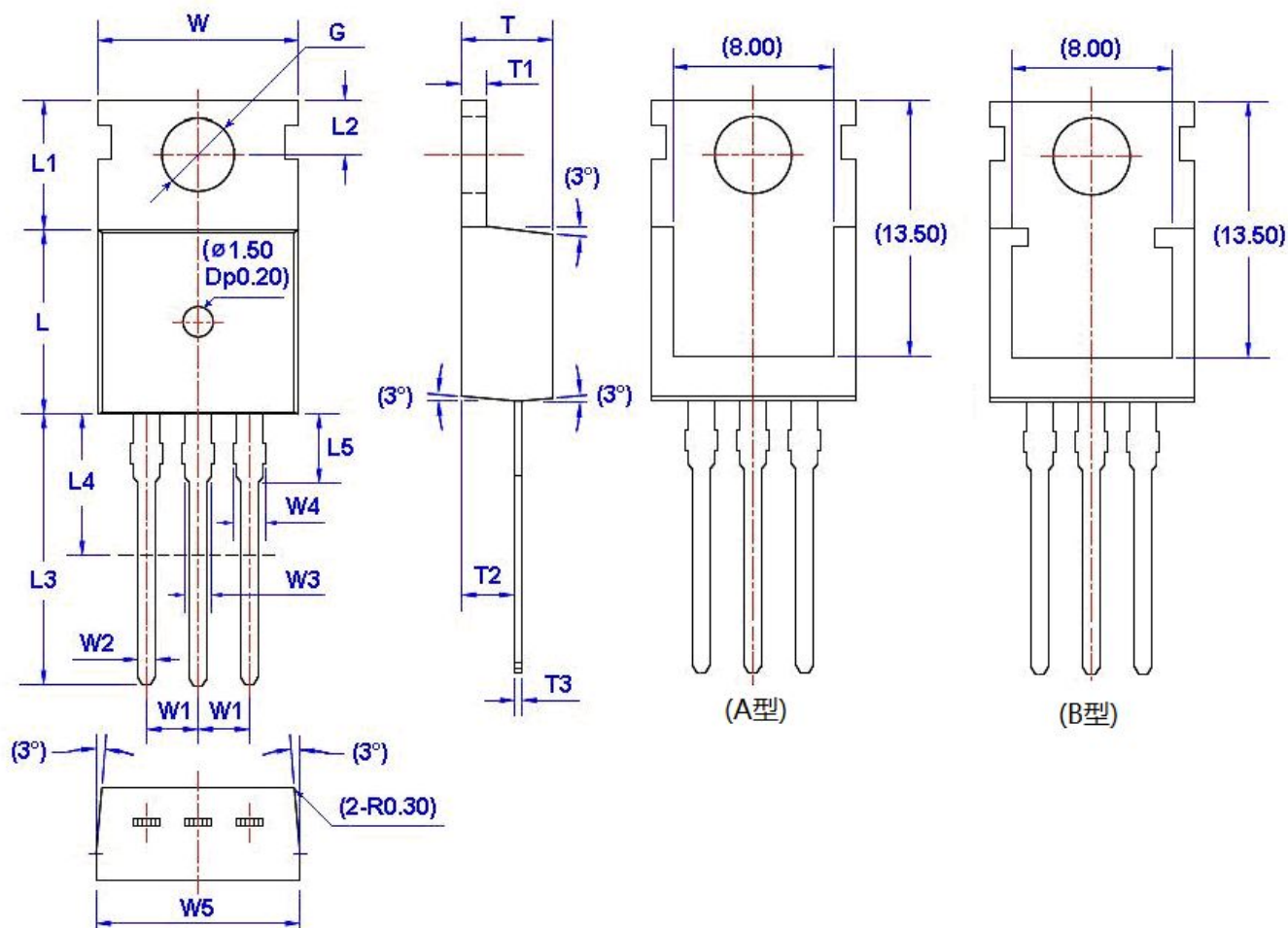


FIG. 4-TYPICAL REVERSE CHARACTERISTICS



Package Dimension



符号	尺寸		符号	尺寸		符号	尺寸		符号	尺寸	
	Min	Max		Min	Max		Min	Max		Min	Max
W	9.66	10.28	W5	9.80	10.20	L4**	6.20	6.60	T3	0.45	0.60
W1	2.54 (TYP)		L	9.00	9.40	L5	2.79	3.30	G(Φ)	3.50	3.70
W2	0.70	0.95	L1	6.40	6.80	T	4.30	4.70			
W3	1.17	1.37	L2	2.70	2.90	T1	1.15	1.40			
W4*	1.32	1.72	L3	12.70	14.27	T2	2.20	2.60			