

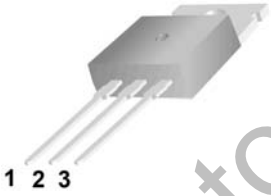
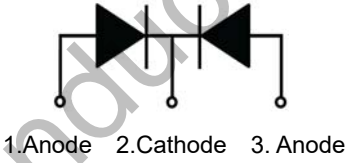


30A SCHOTTKY BARRIER RECTIFIER

 <p>MBR3045SCT</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. 	<p style="text-align: center;">TO-220 </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}	45	V
Maximum RMS Voltage	V_{RMS}	31.5	V
Maximum DC Blocking Voltage	$V_{R(DC)}$	45	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}	240	A
Maximum Forward Voltage @IF=15A Tj=25°C	V_F	0.70	V
Maximum DC Reverse Current	Tj=25°C	0.2	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

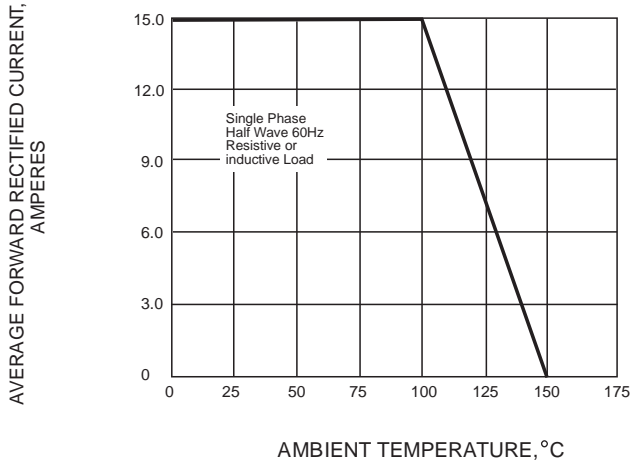


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

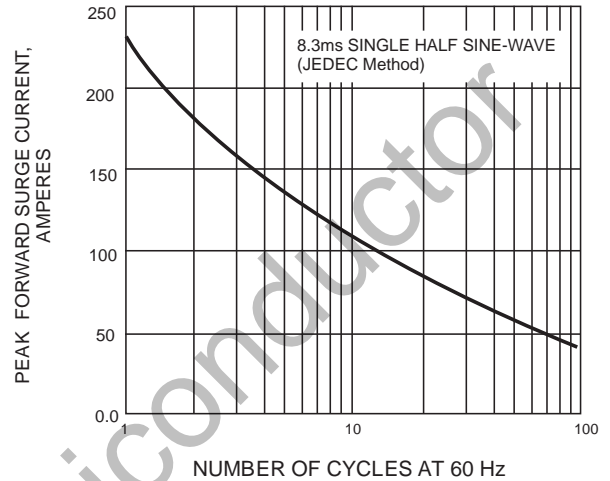


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

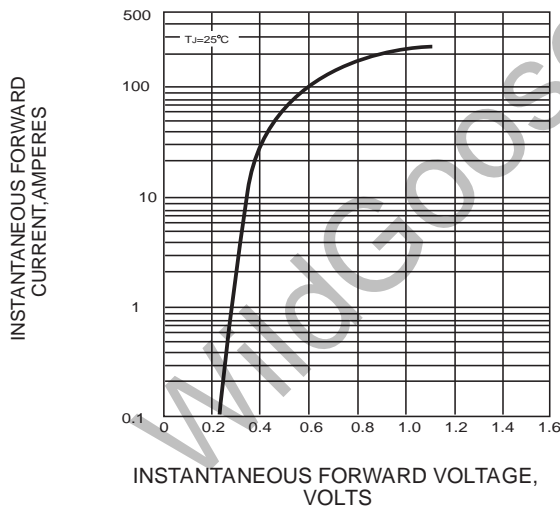
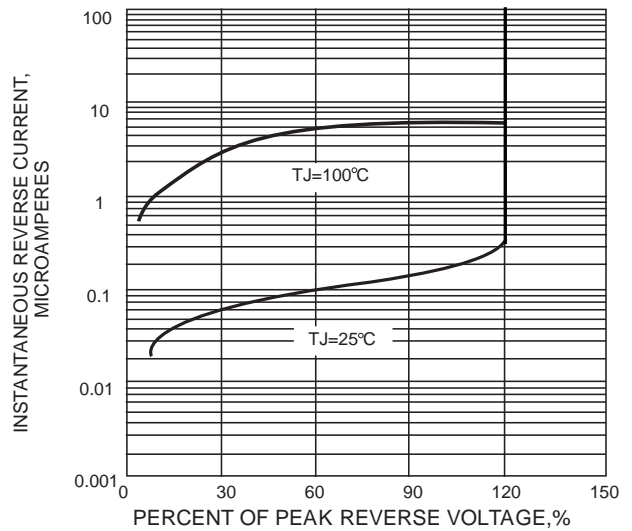
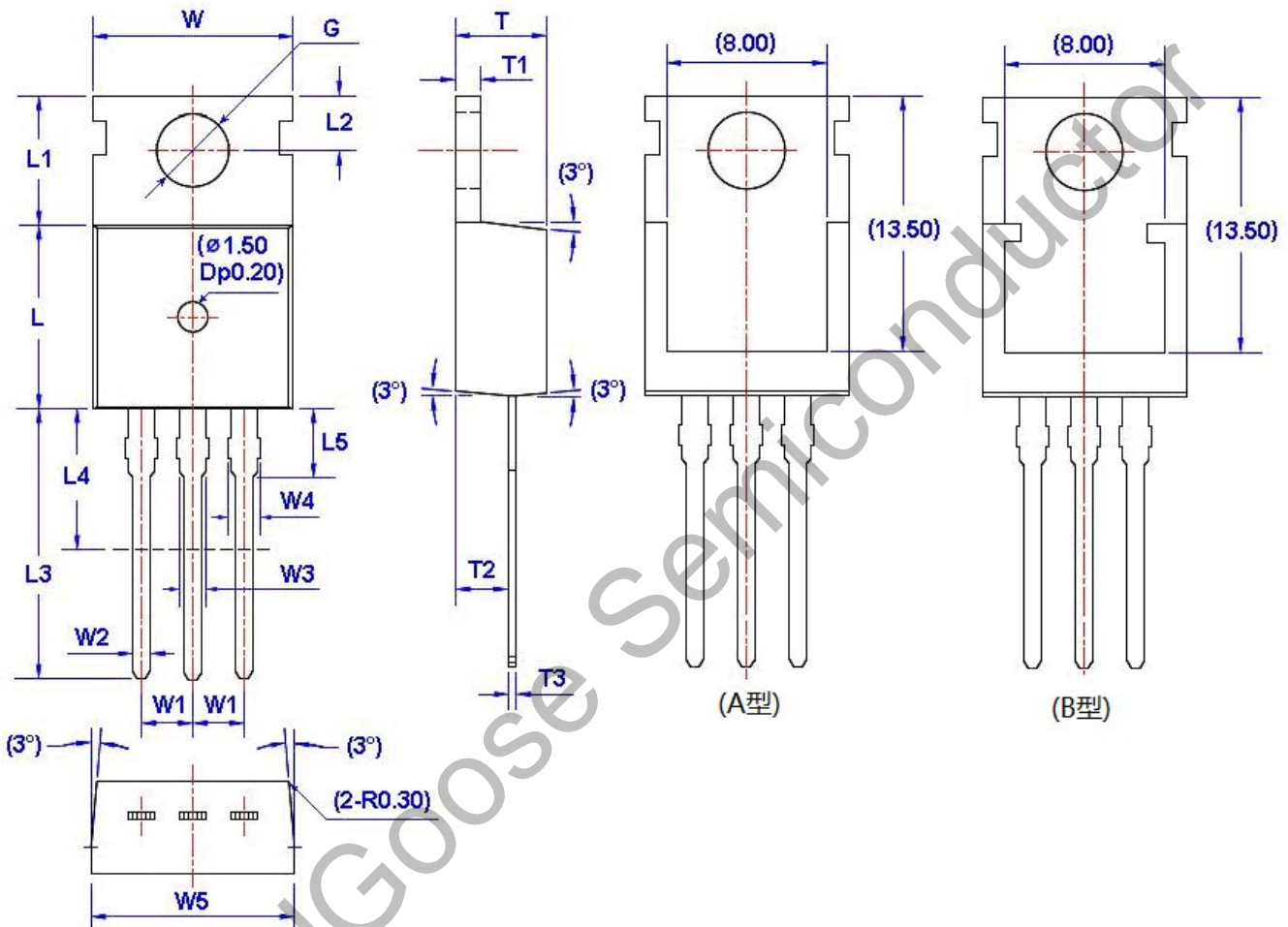


FIG. 4-TYPICAL REVERSE CHARACTERISTICS



Package Dimension

TO-220



Symbol	Size		Symbol	Size		Symbol	Size		Symbol	Size	
	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			