

# MBR3030CT THRU MBR30200CT

## SCHOTTKY BARRIER RECTIFIERS

Reverse Voltage - 30 to 200 Volts Forward Current - 30.0 Amperes

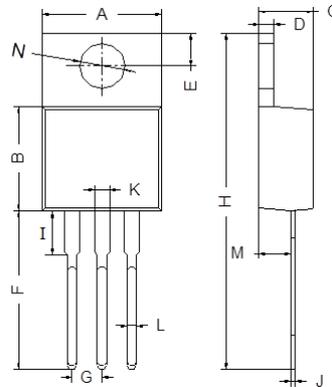
### FEATURES

- Low cost.
- Low leakage.
- Low forward voltage drop.
- High current capability.
- Easily cleaned with Alcohol, Isopropanol and Similar solvents.
- The plastic material carries U/L recognition 94V-0

### MECHANICAL DATA

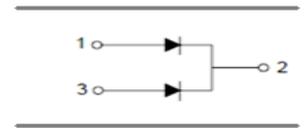
- Case: TO-220AB
- Molding Compound: UL Flammability Classification Rating 94V-0
- Terminals: Matte tin-plated leads; solderability-per MIL-STD-202, Method 208

### TO-220AB



TO-220AB		
Dim	Min	Max
A	9.80	10.30
B	8.30	8.90
C	4.37	4.77
D	1.10	1.45
E	2.62	2.87
F	13.46	14.22
G	2.41	2.67
H	28.40	29.16
I	3.55	4.05
J	0.35	0.58
K	1.20	1.32
L	0.68	0.94
M	2.40	2.60
N	3.71	3.91

All Dimensions in mm



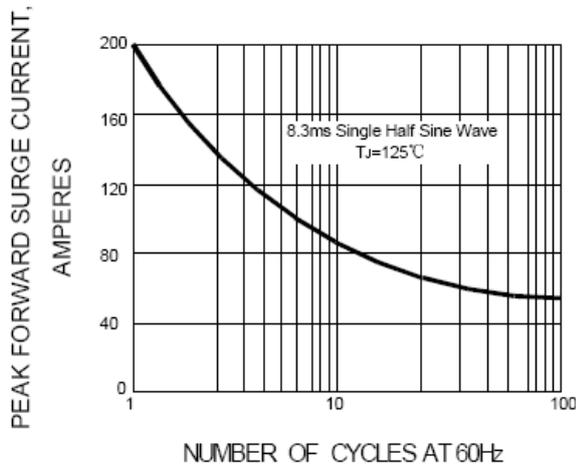
### MAXIMUM RATING operating temperature range applies unless otherwise specified

Symbol	Parameter	MBR 3030 CT	MBR 3035 CT	MBR 3040 CT	MBR 3045 CT	MBR 3050 CT	MBR 3060 CT	MBR 3080 CT	MBR 30100 CT	MBR 30150 CT	MBR 30200 CT	UNIT
$V_{RRM}$	Recurrent Peak Reverse Voltage	30	35	40	45	50	60	80	100	150	200	V
$V_{RMS}$	RMS Reverse Voltage	21	25	28	32	35	42	56	70	105	140	V
$V_{DC}$	DC Blocking Voltage	30	35	40	45	50	60	80	100	150	200	V
$I_{F(AV)}$	Average Forward Total Device Rectified Current @ $T_A=100^{\circ}C$	30										A
$I_R$	Reverse Current $V_R=V_{RRM}, T_A=25^{\circ}C$ $V_R=V_{RRM}, T_A=125^{\circ}C$	0.1					0.1		0.1			mA
		15			25		50					
$I_{FSM}$	Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rated Load	200										A
$V_F$ (Note1)	Forward $I_F=15A$	0.70			0.80		0.85		0.90		0.95	V
$R_{\theta JC}$	Thermal Resistance(Note1)	1.5										$^{\circ}C/W$
$T_J, T_{STG}$	Operating and Storage Temperature Range	-55 to +150										$^{\circ}C$

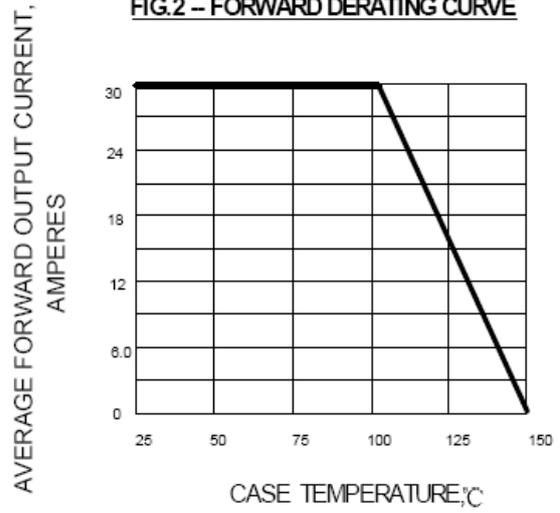
Note:1. Thermal resistance from junction to case.

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

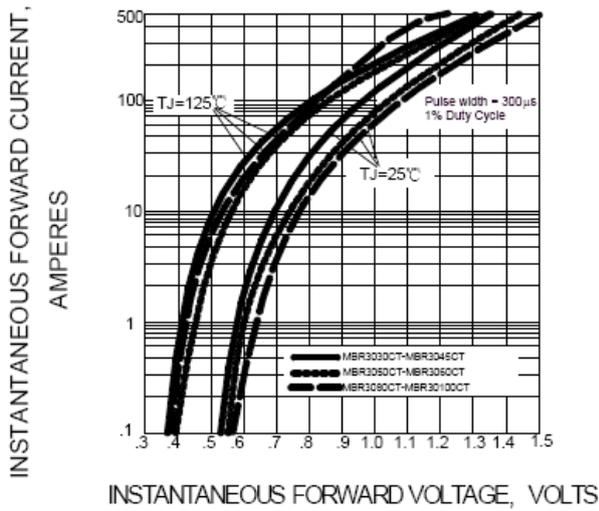
**FIG.1 – PEAK FORWARD SURGE CURRENT**



**FIG.2 – FORWARD DERATING CURVE**



**FIG.3 – TYPICAL FORWARD CHARACTERISTIC**



**FIG.4 – TYPICAL REVERSE CHARACTERISTIC**

