

MBR1030CT THRU MBR10200CT

SCHOTTKY BARRIER RECTIFIERS

Reverse Voltage - 30 to 200 Volts Forward Current - 10.0 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

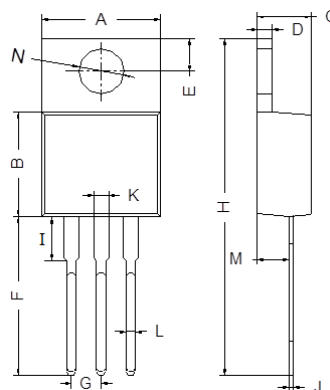
Case: TO-220AB

Molding Compound: UL Flammability Classification

Rating 94V-0

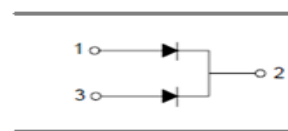
Terminals: Matte tin-plated leads; solderability-per MIL-STD-202, Method 208

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 1030 CT	MBR 1035 CT	MBR 1040 CT	MBR 1045 CT	MBR 1050 CT	MBR 1060 CT	MBR 1080 CT	MBR 10100 CT	MBR 10150 CT	MBR 10200 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°C	10										A
I _R	Reverse Current V _R =V _{RRM} , T _A =25°C	0.1										mA
	V _R =V _{RRM} , T _A =125°C	15				25		50				
I _{FSM}	Forward Surge Current 8.3ms Single Half Sine-wave Superimosed on Rated Load	125										A
V _F (Note1)	Forward I _F =5A	0.70				0.80		0.85		0.90	0.95	V
R _{θJC}	Thermal Resistance(Note1)	3.0										°C/W
T _J , T _{STG}	Operating and Storage Temperature Range	-55 to +150										°C

Note:1. Thermal resistance from junction to case.

TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

FIG.1 – FORWARD CURRENT DERATING CURVE

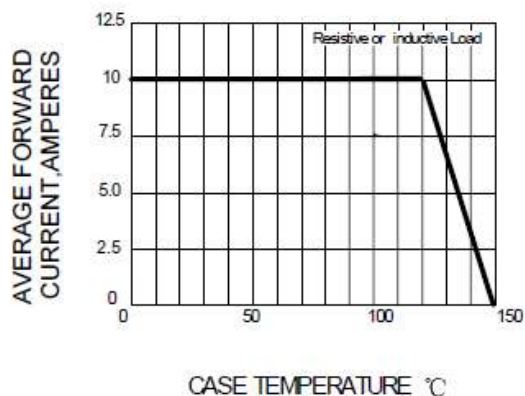


FIG.2 – MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

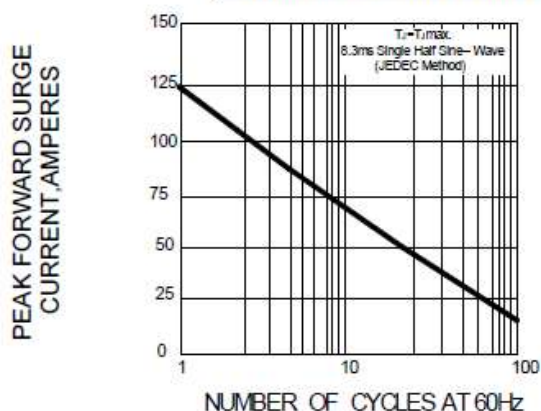


FIG.3 – TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC PERLEG

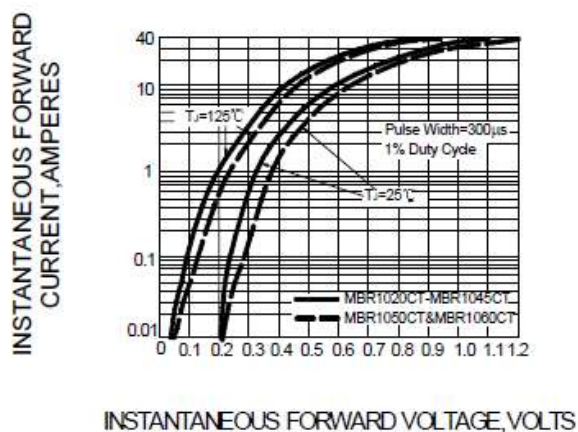


FIG.4 – TYPICAL REVERSE CHARACTERISTICS

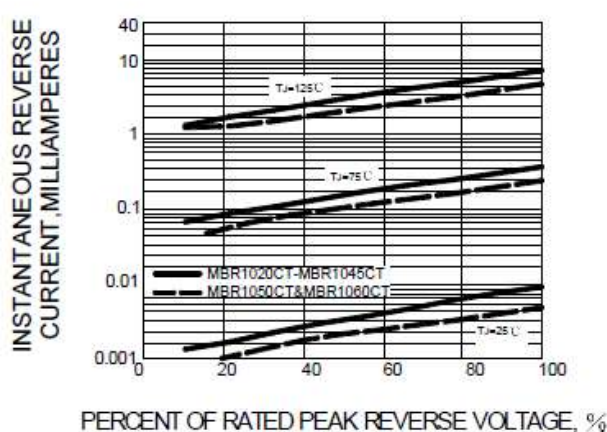


FIG.5-TYPICAL JUNCTION CAPACITANCE PERLEG

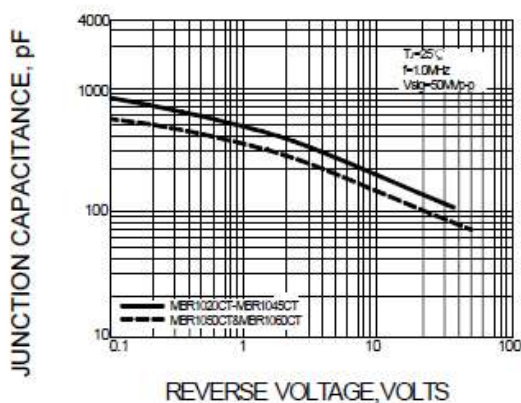


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE PERLEG

