

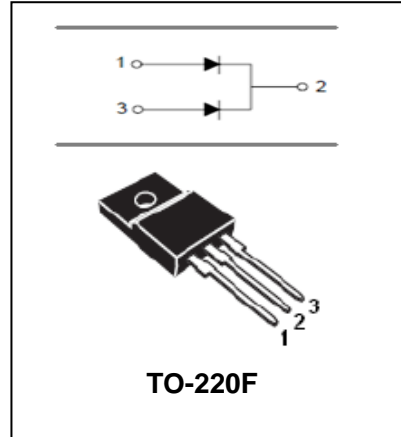
Schottky Barrier Rectifiers MBRF1030CT---MBRF10200CT

FEATURES

- 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 capacity,lowforward voltage drop.
- Guard ring for over voltage protection.



Lead-free



Ordering Information

Part Number	Package	Shipping	Marking Code
MBRF10XXCT□	TO-220F	50/Tube	MBRF10XXCT

□: none is for Lead Free package;

“G” is for Halogen Free package

XX: Voltage, for example 30、200 - 30V、200V

MAXIMUM RATING operating temperature range applies unless otherwise specified

Symbol	Parameter	MBRF 1030 CT	MBRF 1035 CT	MBRF 1040 CT	MBRF 1045 CT	MBRF 1050 CT	MBRF 1060 CT	MBRF 1080 CT	MBRF 10100 CT	MBRF 10150 CT	MBRF 10200 CT	Unit
V_{RRM}	Recurrent Peak Reverse Voltage	30	35	40	45	50	60	80	100	150	200	V
V_{RMS}	RMS 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 @ $T_A=100^{\circ}C$	10										A
I_{FSM}	Peak Forward Surge Current 8.3ms Single Half Sine-wave Suerimposed on Rate Load	125										A
$R_{\theta JC}$	Thermal Resistance(Note1)	6.8						4.4				$^{\circ}C/W$
$T_J T_{stg}$	Operating Junction and Storage Temperature Range	-55 to +150										$^{\circ}C$

Note:1.Thermal resistance from junction to case.

Schottky Barrier Rectifiers **MBRF1030CT---MBRF10200CT**

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

Parameter	Symbol	Test conditions	MBRF 1030CT- MBRF 1045CT	MBRF 1050CT- MBRF 1060CT	MBRF 1080CT- MBRF 10100CT	MBRF 10150CT	MBRF 10200CT	UNIT
			MAX					
Reverse Current	I_R	$V_R=V_{RRM}, T_J=25^\circ\text{C}$ $V_R=V_{RRM}, T_J=125^\circ\text{C}$	0.1 15	0.1 25	0.1 50			mA
Forward Voltage	V_F (Note1)	$I_F=5\text{A}, T_J=25^\circ\text{C}$ $I_F=5\text{A}, T_J=125^\circ\text{C}$	0.70 0.57	0.80 0.70	0.85 -	0.90 -	0.95 -	V

Note: 1. Pulse test: 300 μs width, 1% duty cycle.

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

FIG.1-PEAK FORWARD SURGE CURRENT

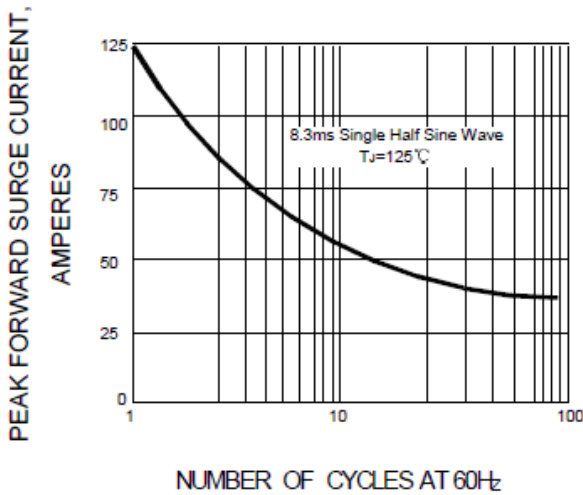


FIG.2-FORWARD DERATING CURVE

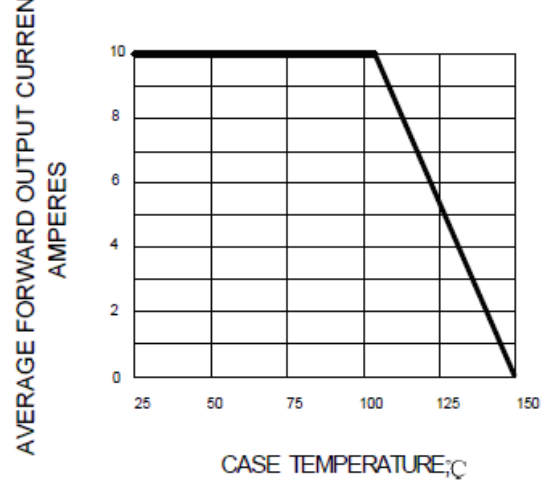


FIG.3- TYPICAL FORWARD CHARACTERISTICS

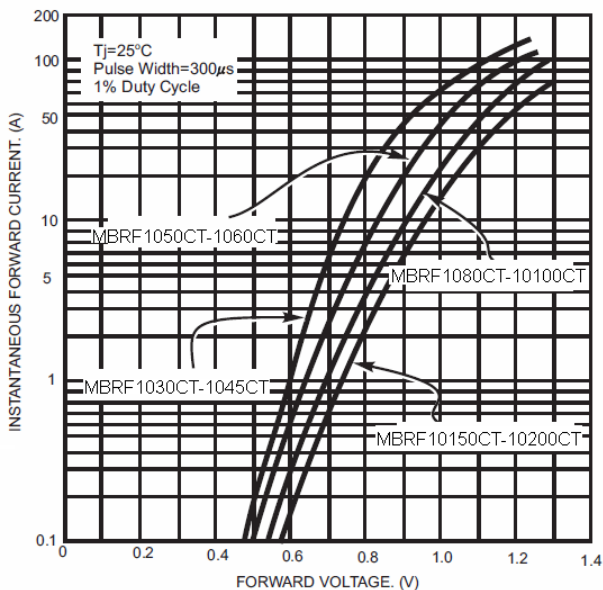
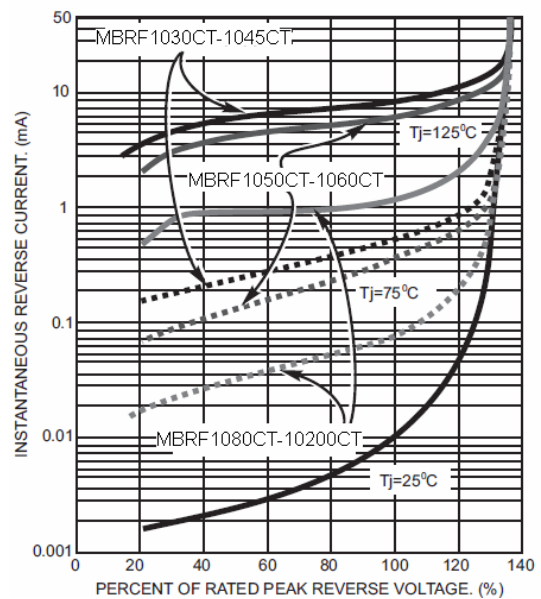


FIG.4- TYPICAL REVERSE CHARACTERISTICS

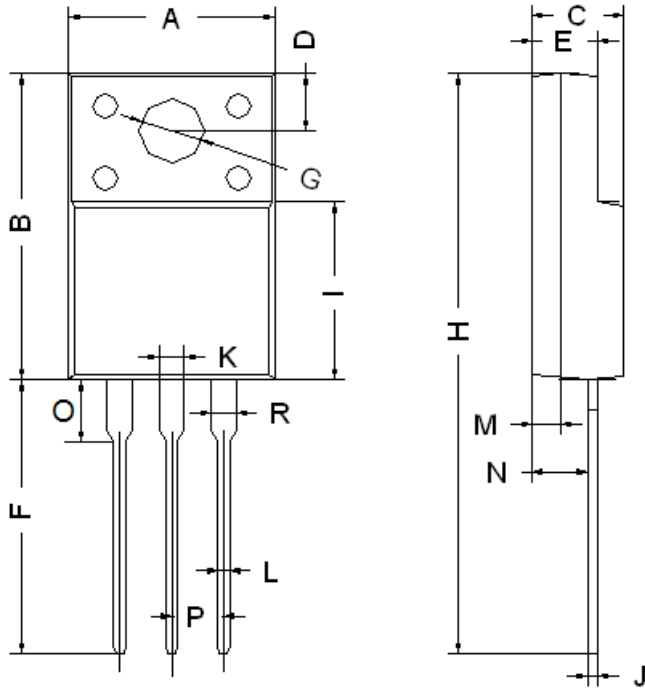


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PACKAGE OUTLINE

Plastic surface mounted package

TO-220F



TO-220F		
Dim	Min	Max
A	9.90	10.30
B	14.80	15.20
C	4.30	4.70
D	2.50	2.90
E	2.80	3.30
F	13.00	13.60
G	3.10	3.30
H	28.00	28.60
I	7.90	8.90
J	0.40	0.60
L	0.70	0.90
M	1.30	1.50
N	2.60	2.80
O	2.60	3.10
P	2.45	2.65
K/R	1.10	1.30
All Dimensions in mm		