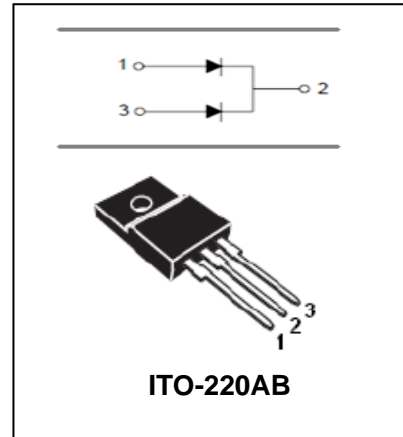


## Schottky Barrier Rectifiers

## MBRF1530CT---MBRF15100CT

### 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.



### Ordering Information

Part Number	Package	Shipping	Marking Code
MBRF15XXCT□	ITO-220AB	50/Tube	MBRF15XXCT

□: none is for Lead Free package;

“G” is for Halogen Free package

XX: Voltage,30、35、40、45、50、60、80、100 – 30V、35V、40V、45V、50V、60V、80V、100V

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

Symbol	Parameter	MBRF 1530 CT	MBRF 1535 CT	MBRF 1540 CT	MBRF 1545 CT	MBRF 1550 CT	MBRF 1560 CT	MBRF 1580 CT	MBRF 15100 CT	Unit
$V_{RRM}$	Recurrent Peak Reverse Voltage	30	35	40	45	50	60	80	100	V
$V_{RMS}$	RMS Voltage	21	25	28	32	35	42	56	70	V
$V_{DC}$	DC Blocking Voltage	30	35	40	45	50	60	80	100	V
$I_{F(AV)}$	Average Forward Total Device Rectified Current @ $T_A=100^{\circ}C$	15								A
$I_{FSM}$	Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rate Load	150								A
$R_{\theta JC}$	Thermal Resistance(Note1)	3.0								$^{\circ}C/W$
$T_j T_{stg}$	Operating Junction and Storage Tem- perature Range	-55 to +150								$^{\circ}C$

Note:1.Thermal resistance from junction to case.

## Schottky Barrier Rectifiers MBRF1530CT---MBRF15100CT

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

Parameter	Symbol	Test conditions	MBRF1530CT- MBRF1545CT	MBRF1550CT- MBRF1560CT	MBRF1580CT- MBRF15100CT	UNIT
			MAX			
Reverse Current	$I_R$	$V_R=V_{RRM}, T_A=25^\circ\text{C}$	0.1	0.1	0.1	mA
		$V_R=V_{RRM}, T_A=125^\circ\text{C}$	15	25	50	
Forward Voltage	$V_F$ (Note1)	$I_F=7.5\text{A}, T_A=25^\circ\text{C}$	0.70	0.80	0.85	V
		$I_F=7.5\text{A}, T_A=125^\circ\text{C}$	0.57	0.65	-	

Note:1.Pulse test:300 $\mu\text{s}$  width,1% duty cycle.

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

FIG.1 – PEAK FORWARD SURGE CURRENT

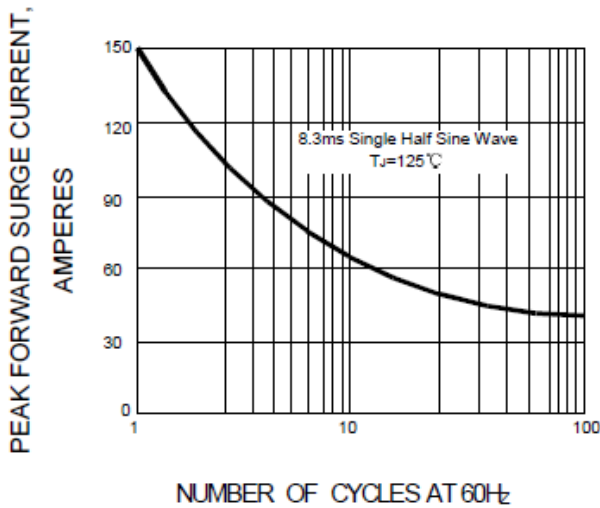


FIG.2 – FORWARD DERATING CURVE

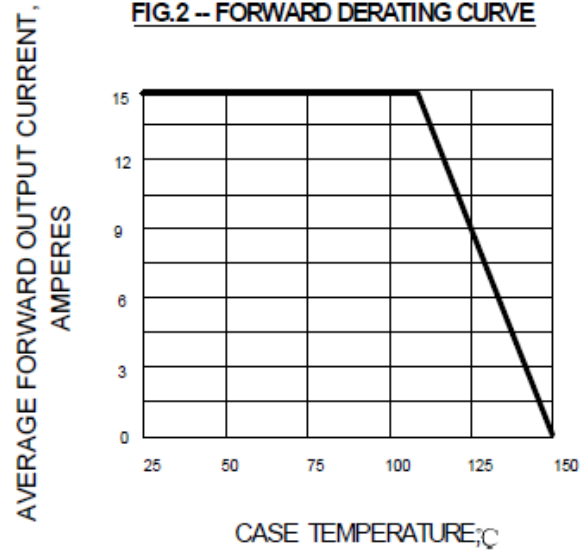


FIG.3 – TYPICAL FORWARD CHARACTERISTIC

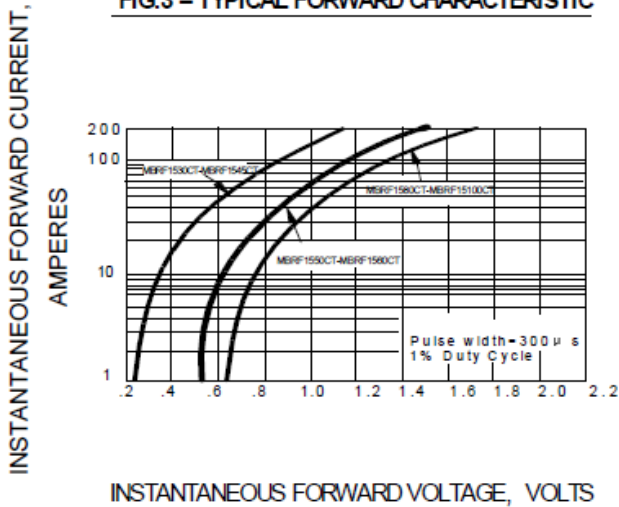
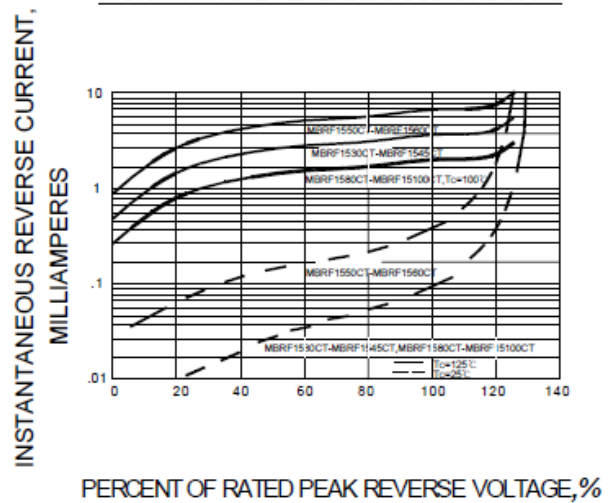


FIG.4 – TYPICAL REVERSE CHARACTERISTIC



**Schottky Barrier Rectifiers**

**MBRF1530CT---MBRF15100CT**

**PACKAGE OUTLINE**

Plastic surface mounted package

ITO-220AB

