

Schottky Barrier Rectifiers

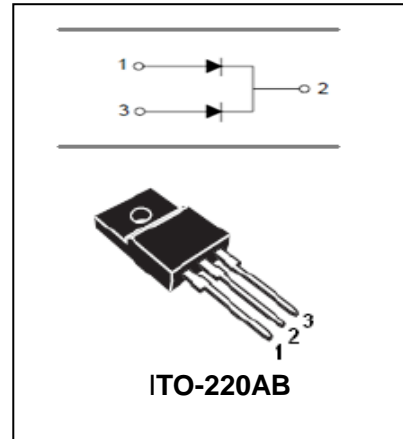
MBRF2530CT---MBRF25100CT

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
MBRF25XXCT□	ITO-220AB	50/Tube	MBRF25XXCT

□: 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 2530 CT	MBRF 2535 CT	MBRF 2540 CT	MBRF 2545 CT	MBRF 2550 CT	MBRF 2560 CT	MBRF 2580 CT	MBRF 25100 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 @ $T_A=100^{\circ}C$	25								A
I_{FSM}	Peak Forward Surge Current 8.3ms Single Half Sine-wave Suerimposed on Rate Load	150								A
$R_{\theta JC}$	Thermal Resistance(Note1)	1.5								$^{\circ}C/W$
T_j T_{stg}	Operating Junction and Storage Temperature Range	-55 to +150								$^{\circ}C$

Note:1.Thermal resistance from junction to case.

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

Parameter	Symbol	Test conditions	MBRF2530CT- MBRF2545CT	MBRF2550CT- MBRF2560CT	MBRF2580CT- MBRF25100CT	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)	$I_F=15\text{A}, T_A=25^\circ\text{C}$	0.70	0.80	0.85	V
		$I_F=15\text{A}, T_A=125^\circ\text{C}$	-	0.65	-	

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

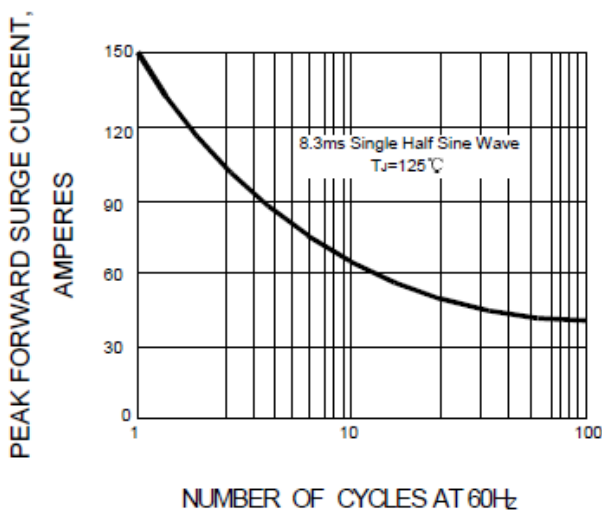


FIG.2 – FORWARD DERATING CURVE

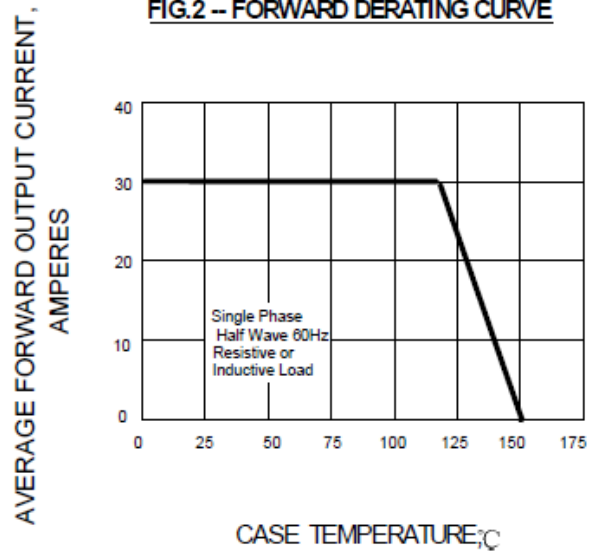


FIG.3 – TYPICAL FORWARD CHARACTERISTIC

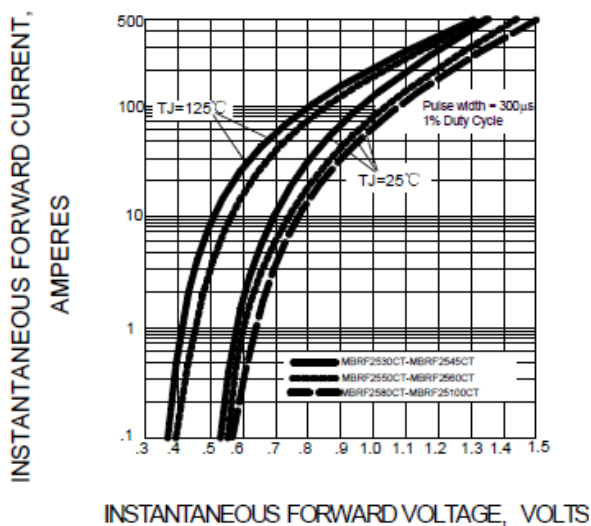
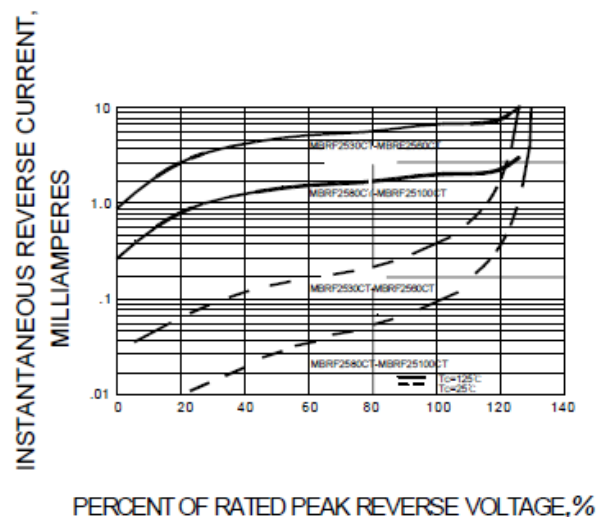


FIG.4 – TYPICAL REVERSE CHARACTERISTIC



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PACKAGE OUTLINE

Plastic surface mounted package

ITO-220AB

