

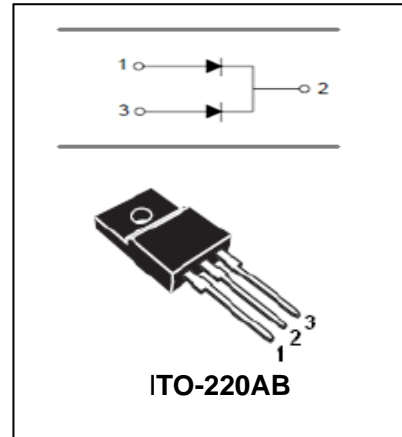
Schottky Barrier Rectifiers MBRF3030CT---MBRF30100CT

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



MAXIMUM RATING operating temperature range applies unless otherwise specified

Symbol	Parameter	MBRF 3030 CT	MBRF 3035 CT	MBRF 3040 CT	MBRF 3045 CT	MBRF 3050 CT	MBRF 3060 CT	MBRF 3080 CT	MBRF 30100 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 @ $T_A=100^{\circ}C$	30								A
I_{FSM}	Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on rated load	200								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.

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ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Test conditions	MBRF3030CT- MBRF3045CT	MBRF3050CT- MBRF3060CT	MBRF3080CT- MBRF30100CT	UNIT
			MAX			
Reverse Current	I_R	$V_R=V_{RRM}, T_A=25^\circ\text{C}$ $V_R=V_{RRM}, T_A=125^\circ\text{C}$	0.1 15	0.1 25	0.1 50	mA
Forward Voltage	V_F (Note1)	$I_F=15\text{A}, T_A=25^\circ\text{C}$ $I_F=15\text{A}, T_A=125^\circ\text{C}$	0.70 0.57	0.8 0.7	0.85 0.65	V

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

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

FIG.1 -- PEAK FORWARD SURGE CURRENT

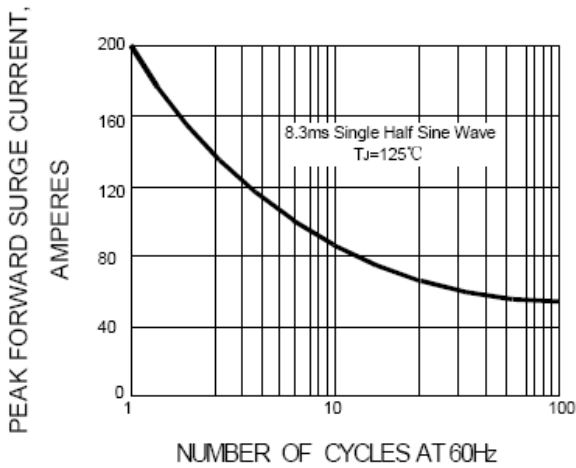


FIG.2 -- FORWARD DERATING CURVE

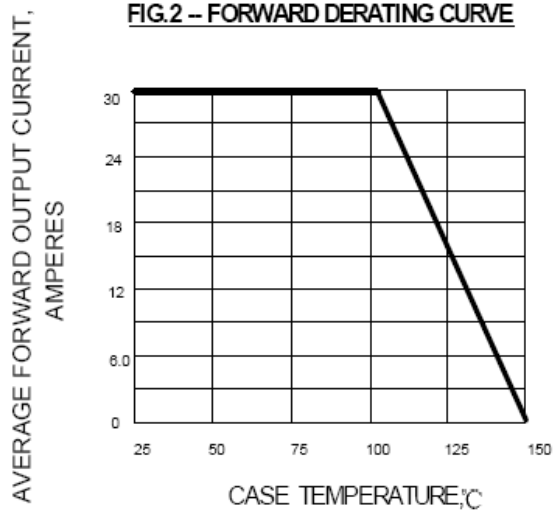


FIG.3 -- TYPICAL FORWARD CHARACTERISTIC

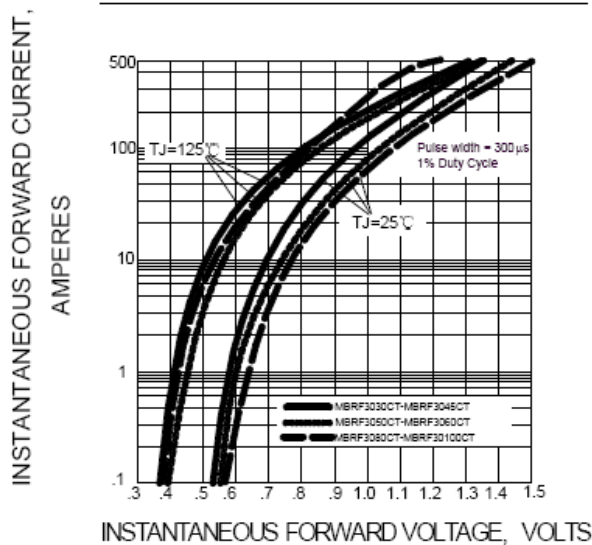
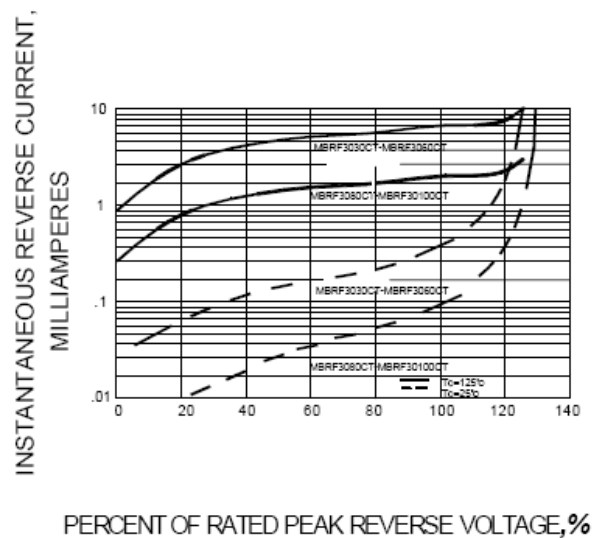


FIG.4 -- TYPICAL REVERSE CHARACTERISTIC



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PACKAGE OUTLINE

Plastic surface mounted package

ITO-220AB

