

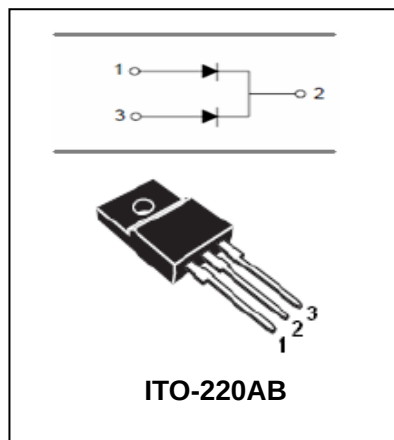
Schottky Barrier Rectifiers MBRF1030CT---MBRF10100CT

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 1030 CT	MBRF 1035 CT	MBRF 1040 CT	MBRF 1045 CT	MBRF 1050 CT	MBRF 1060 CT	MBRF 1080 CT	MBRF 10100 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°C	10								A
I _{FSM}	Peak Forward Surge Current 8.3ms Single Half Sine-wave Suerimposed on Rate Load	125								A
R _{θ JC}	Thermal Resistance(Note1)	6.8						4.4		°C/W
T _j T _{stg}	Operating Junction and StorageTem-perature Range	-55 to +150								°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	MBRF1030CT- MBRF1045CT	MBRF1050CT- MBRF1060CT	MBRF1080CT- MBRF10100CT	UNIT
			MAX			
Reverse Current	I _R	V _R =V _{RRM} , T _A =25℃ V _R =V _{RRM} , T _A =125℃	0.1 15	0.1 25	0.1 50	mA
Forward Voltage	V _F (Note1)	I _F =5A, T _A =25℃ I _F =5A, T _A =125℃	0.70 0.57	0.80 0.70	0.85 -	V

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

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

FIG.1 – PEAK FORWARD SURGE CURRENT

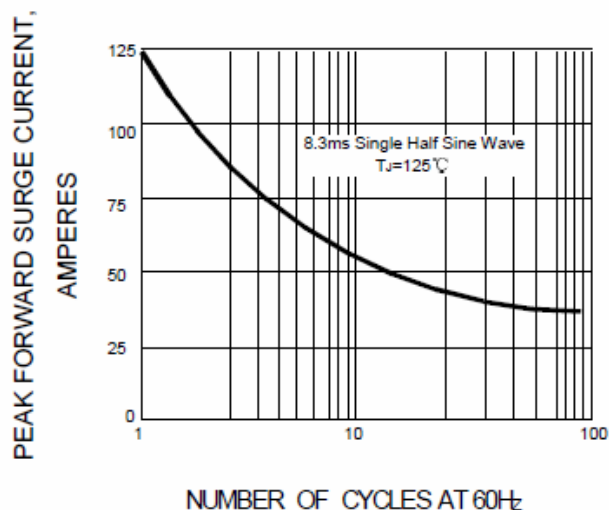


FIG.2 – FORWARD DERATING CURVE

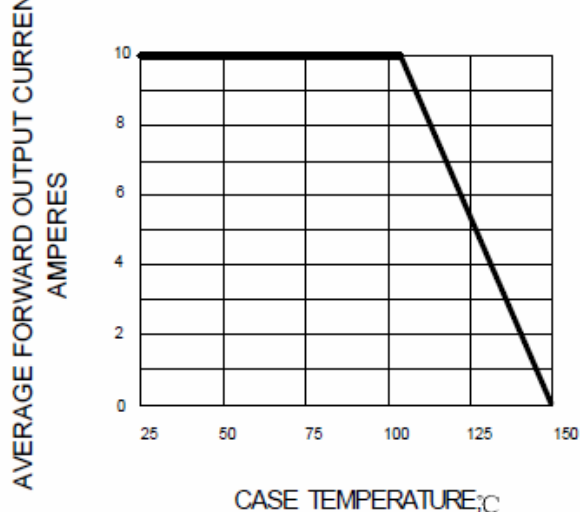


FIG.3 – TYPICAL FORWARD CHARACTERISTIC

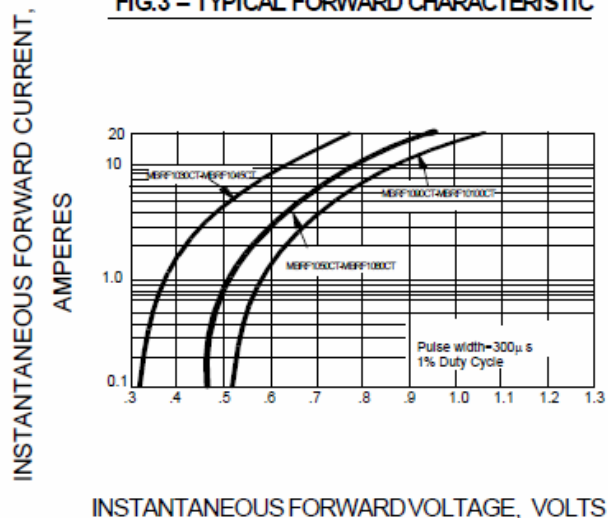
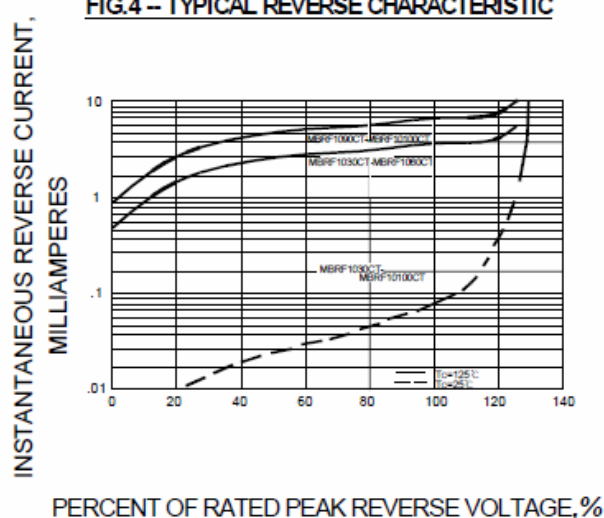


FIG.4 – TYPICAL REVERSE CHARACTERISTIC



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PACKAGE OUTLINE

Plastic surface mounted package

ITO-220AB

