

Schottky Barrier Rectifier

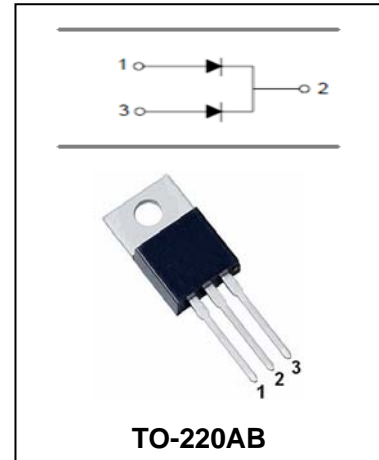
MBR2530CT...MBR25100CT

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, Low Forward Voltage Drop.
- Guard Ring for Over Voltage Protection.



Lead-free



MAXIMUM RATING operating temperature range applies unless otherwise specified

Symbol	Parameter	MBR 2530 CT	MBR 2535 CT	MBR 2540 CT	MBR 2545 CT	MBR 2550 CT	MBR 2560 CT	MBR 2580 CT	MBR 25100 CT	Unit
V_{RRM}	Repetitive 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 Rectified Current @ $T_A=100^{\circ}C$	25								A
I_{FSM}	Peak Forward Surge Current 8.3ms Single Half Sine-wave superimposed on rated 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 @ Ta=25°C unless otherwise specified

Parameter	Symbol	Test conditions	MBR2530CT- MBR2545CT	MBR2550CT- MBR2560CT	MBR2580CT- MBR25100CT	UNIT
			MAX			
Reverse Current	I_R	$V_{RM}=V_{RRM}, T_A=25^\circ C$ $V_{RM}=V_{RRM}, T_A=125^\circ C$	0.1 15	0.1 25	0.1 50	mA
Forward Voltage	V_F (Note1)	$I_F=15A, T_A=25^\circ C$ $I_F=15A, T_A=125^\circ C$	0.70 -	0.80 0.65	0.85 -	V

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

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

FIG.3 -- TYPICAL FORWARD CHARACTERISTIC

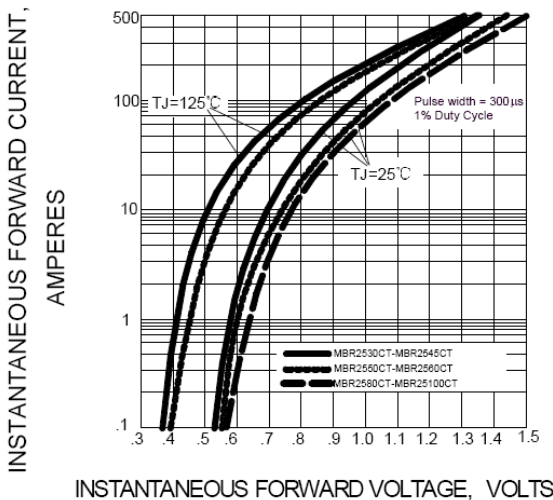


FIG.4 -- TYPICAL REVERSE CHARACTERISTIC

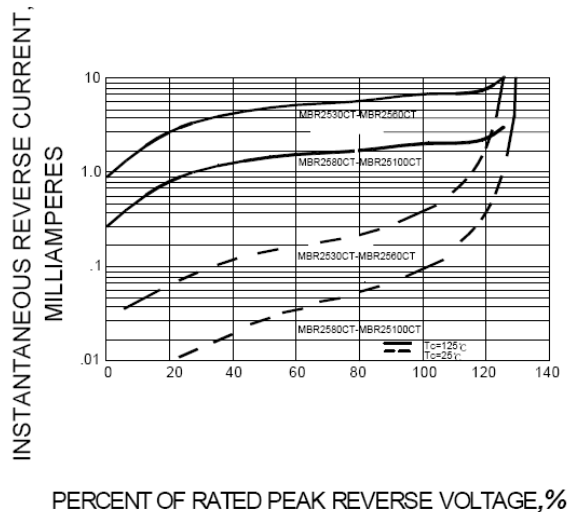


FIG.1 -- PEAK FORWARD SURGE CURRENT

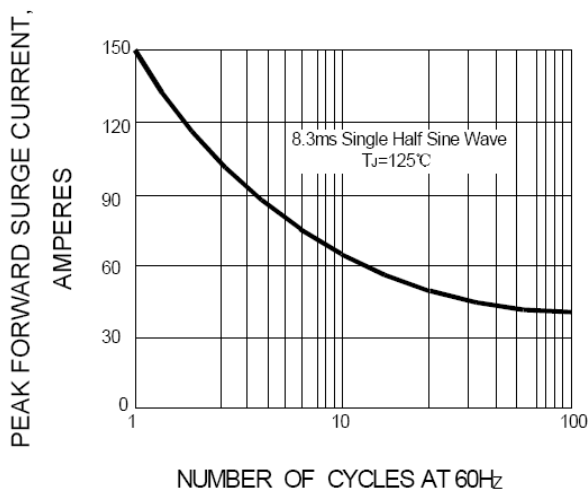
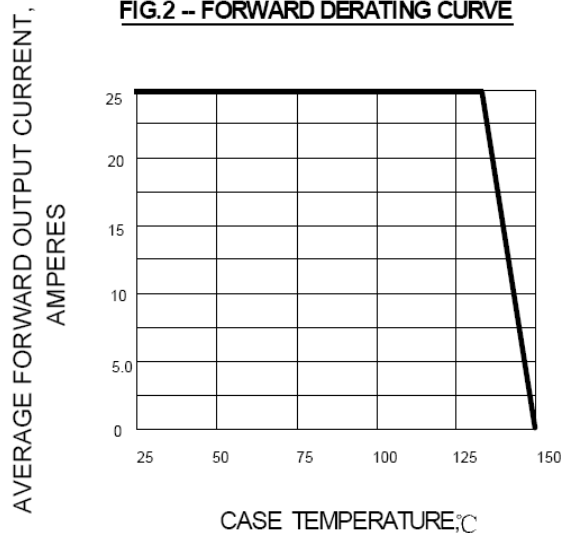


FIG.2 -- FORWARD DERATING CURVE



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PACKAGE OUTLINE

Plastic surface mounted package

TO-220AB

