

MBRF1030CT THRU MBRF10100CT

Surface Mount Schottky Barrier Recitifiers

Reverse Voltage - 30 to 100 Volts Forward Current - 10.0 Amperes

Features

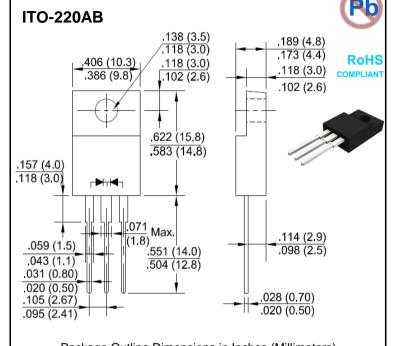
- Low forward voltage drop
- High current capability
- High surge capability
- The plastic material carries UL recognition 94V-0

Mechanical Data

- ●Case: JEDEC ITO-220AB molded plastic
- Polarity: As marked on the body
- Mounting position: Any

Applications

 For use in low vlotage, high frequency inverters, polarity protection applications.



Package Outline Dimensions in Inches (Millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristics	Symbol	MBRF	MBRF	MBRF	MBRF	MBRF	MBRF	Unit	
	Cymbol	1030CT	1040CT	1050CT	1060CT	1080CT	10100CT	Offic	
Maximum Repetitive Peak Reverse Voltage	VRRM	30	40	50	60	80	100	V	
Maximum RMS Voltage	VRMS	21	28	35	42	56	70	V	
Maximum DC Blocking Voltage	VDC	30	40	50	60	80	100	V	
最大正向平均整流电流									
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave,	IFSM	120						А	
Superimposed on Rated Load (JEDEC Method)	IFSM								
Peak Forward Voltage (Note1)		0.	0.70 0		80 0.		85	V	
IF=5A @Tյ=125℃	VF	0.	57	0.		0.75			
IF=10A @TJ=25℃	VF	0.	80	0.	90	0.		V	
IF=10A @Tյ=125℃		0.	70	0.75		0.	85		
Maximum DC Reverse Current @T _J =25°C	l _R	0.1					mA		
at Rated DC Blocking Voltage @T _J =125 $^{\circ}$ C	IK	15							
Typical Junction Capacitance (Note2)	Сл	1	70	2:	20	3	00	pF	
Typical Thermal Resistance Junction to Case	Rejc	3.0 3.0					°C/W		
Junction Temperature Range	TJ	-55 to +150						$^{\circ}$	
Storage Temperature Range	Tstg	-55 to +175						$^{\circ}$	

Notes: 1.300us pulse width,2% duty cycle. 300uS.

- 2.Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.
- 3. The typical data above is for reference only.



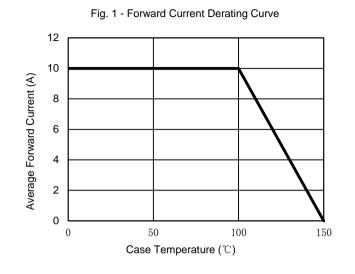
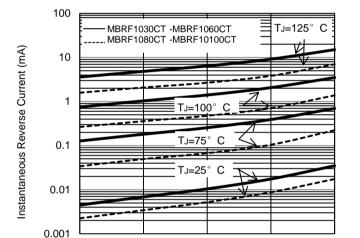


Fig. 3 - Typical Reverse Characteristics

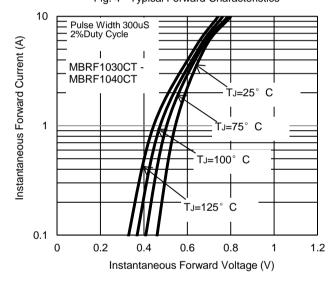
Fig. 2 - Maximum Non-Repetitive Surge Current



40

Fig. 4 - Typical Forward Characteristics

Number of Cycles at 60Hz



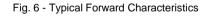


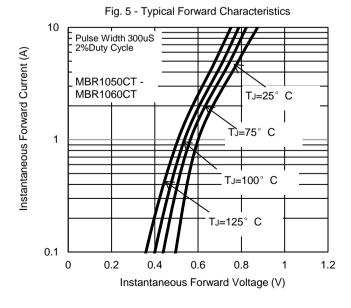
60

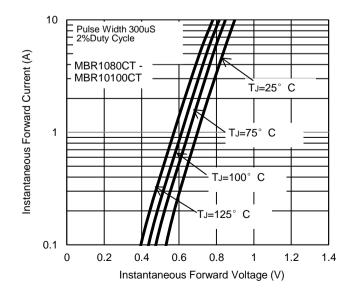
Percent of Rated Peak Reverse Voltage (%)

80

100







The curve above is for reference only.

20

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