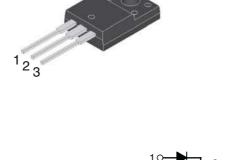


RoHS



10 Amp. Schottky Barrier Rectifier

ITO-220AB



Voltage	Current	
45 to 200 V	10 A	

FEATURES

- Ideal for automated placement
- Low power losses, high efficiency
- High surge current capability
- Guarding for overvoltage protection
- Low forward voltage drop
- Solder dip 260°C, 10s / 0.25" (6.35 mm) from case
- AEC-Q101 qualified
- Component in accordance to RoHS 2011/65/EU and WEEE 2002/96/EC
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260° C

MECHANICAL DATA

- Case: ITO-220AB. Epoxy meets UL 94V-0 flammability rating.
- Polarity: As marked on the body.
- Mounting Torque: 5 in-lbs maximum.
- **Terminals:** Matte tin plated leads, solderable per MIL-STD-750 Method 2026, J-STD-002 and JESD22-B102. Consumer grade, meets JESD 201 class 1A whisker test.



Used in low voltage high frequency inverters, freewheeling, dc-to-dc converters, and polarity protection applications.

Maximun Ratings and Electrical Characteristics at 25°C

Common Cathode

Suffix "C"

		MBRF1045CT	MBRF1060CT	MBRF10100CT	MBRF10200CT
	Marking Code		MBRF1060CT	MBRF10100CT	MBRF10200CT
V_{RRM}	Peak recurrent reverse voltage (V)	45	60	100	200
V_{RMS}	Maximum RMS voltage (V)	31	42	70	140
V_{DC}	Maximum DC blocking voltage (V)	45	60	100	200
I _{F (AV)}	Maximum average Forward Rectified Current	10 A			
I _{FSM}	8.3 ms. peak forward surge current (Jedec Method)	120 A			
I _{RRM}	Peak repetitive reverse surge current	0.5 A			
T _j	Operating temperature range	− 55 to + 150 °C			
T _{stg}	Storage temperature range		- 55 to +	150 °C	

Electrical Characteristics at Tamb = 25 °C

	Max. forward voltage drop	Tc = 25 °C	0.70 V	0.80 V	0.85 V	0.92 V
,,	at $I_F = 5 \text{ A}$ (Note 1)	Tc = 125 °C	0.57 V	0.65 V	0.75 V	0.78 V
V _F	Max. forward voltage drop	Tc = 25 °C	0.80 V	0.90 V	0.95 V	0.98 V
	at $I_F = 10 \text{ A}$	Tc = 125 °C	0.67 V	0.75 V	0.85 V	0.88 V
I _R Max. Instantaneous reverse (Note		ote 3) Tc = 25 °C	0.10 mA			
I _R	current at $V_R = V_{RRMax}$ Tc = 125 °C	15 mA	10 mA	5 mA		
R _{thj-C}	Typical Thermal Resistance (Note 2)		4 °C/W			

Notes: 1. Pulse Test: 300µ Pulse Width, 1% Duty Cycle

2. Thermal Resistance from Junction to Case per diode

3. Pulse test: Pulse width ≤ 40ms

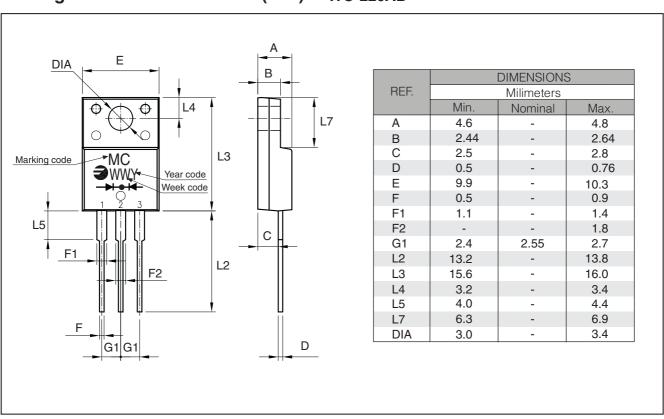


10 Amp. Schottky Barrier Rectifier

Ordering information

PREFERRED P/N	PACKAGE CODE	DELIVERY MODE	BASE QUANTITY	UNIT WEIGHT (g)
MBRF1060CTC 00TUC	TU	TUBE	1,000	2.02

Package Outline Dimensions: (mm) ITO-220AB







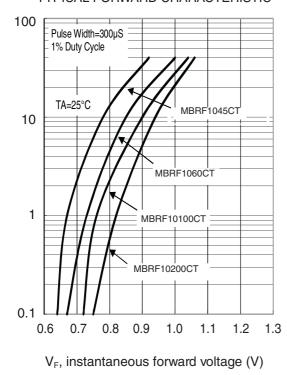
Ir, instantaneous forward current (A)

10 Amp. Schottky Barrier Rectifier

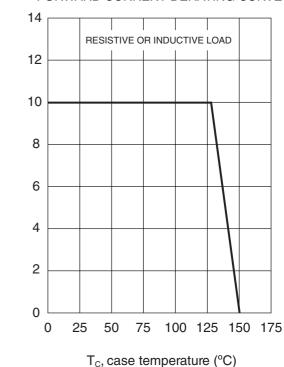
Ratings and Characteristics (Ta 25 °C unless otherwise noted)

I_{F(AV)}, average forward rectified current (A)

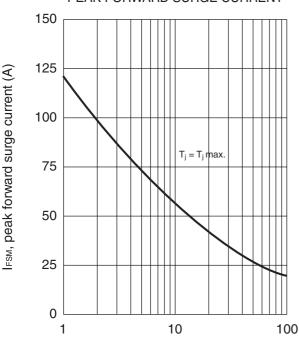




FORWARD CURRENT DERATING CURVE

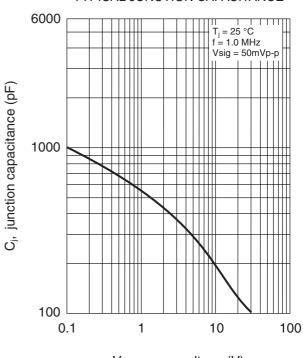


MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



Number of cycles at 60 Hz.

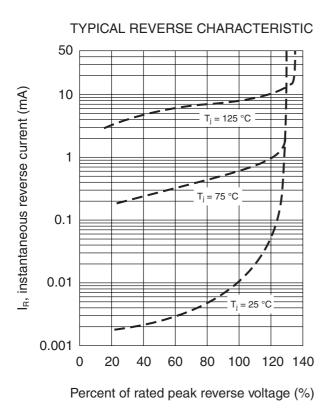
TYPICAL JUNCTION CAPACITANCE

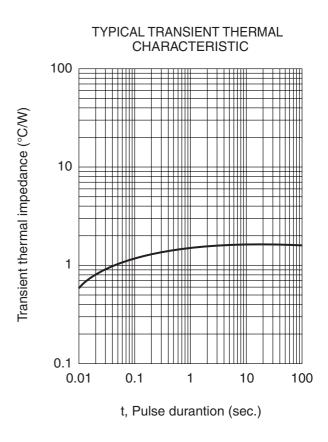




10 Amp. Schottky Barrier Rectifier

Ratings and Characteristics (Ta 25 °C unless otherwise noted)







10 Amp. Schottky Barrier Rectifier

Revision History

Date	Revision	Description of Changes
14-Apr-2007	0	Original Data Sheet
04-Jun-2013	1	200V included
21-Jun-2013	2	Change values of: $T_j / T_{stg} / V_F / R_{th(j-c)} / Base Quantity$

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