
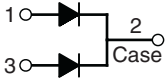




**10 Amp. Schottky Barrier Rectifier**

<p style="text-align: center; font-weight: bold; font-size: 1.2em;">ITO-220AB</p> <div style="text-align: center;">  </div> <div style="text-align: center; margin-top: 20px;">  <p>Common Cathode Suffix "C"</p> </div>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center; border-bottom: 1px solid black;"><b>Voltage</b></td> <td style="text-align: center; border-bottom: 1px solid black;"><b>Current</b></td> </tr> <tr> <td style="text-align: center;">45 to 200 V</td> <td style="text-align: center;">10 A</td> </tr> </table> <p><b>FEATURES</b></p> <ul style="list-style-type: none"> <li>Ideal for automated placement</li> <li>Low power losses, high efficiency</li> <li>High surge current capability</li> <li>Guarding for overvoltage protection</li> <li>Low forward voltage drop</li> <li>Solder dip 260°C, 10s / 0.25" (6.35 mm) from case</li> <li>AEC-Q101 qualified</li> <li>Component in accordance to RoHS 2011/65/EU and WEEE 2002/96/EC</li> <li>Meets MSL level 1, per J-STD-020, LF maximum peak of 260° C</li> </ul> <div style="text-align: right; margin-top: 10px;">   <p><b>RoHS</b> COMPLIANT</p> </div> <p><b>MECHANICAL DATA</b></p> <ul style="list-style-type: none"> <li><b>Case:</b> ITO-220AB. Epoxy meets UL 94V-0 flammability rating.</li> <li><b>Polarity:</b> As marked on the body.</li> <li><b>Mounting Torque:</b> 5 in-lbs maximum.</li> <li><b>Terminals:</b> 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.</li> </ul> <p><b>TYPICAL APPLICATIONS</b></p> <p>Used in low voltage high frequency inverters, freewheeling, dc-to-dc converters, and polarity protection applications.</p>	<b>Voltage</b>	<b>Current</b>	45 to 200 V	10 A
<b>Voltage</b>	<b>Current</b>				
45 to 200 V	10 A				

**Maximum Ratings and Electrical Characteristics at 25°C**

Marking Code		MBRF1045CT	MBRF1060CT	MBRF10100CT	MBRF10200CT
		MBRF1045CT	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**

$V_F$	Max. forward voltage drop at $I_F = 5$ A (Note 1)	$T_c = 25$ °C	0.70 V	0.80 V	0.85 V	0.92 V
		$T_c = 125$ °C	0.57 V	0.65 V	0.75 V	0.78 V
	Max. forward voltage drop at $I_F = 10$ A	$T_c = 25$ °C	0.80 V	0.90 V	0.95 V	0.98 V
		$T_c = 125$ °C	0.67 V	0.75 V	0.85 V	0.88 V
$I_R$	Max. Instantaneous reverse current at $V_R = V_{RRMax}$ (Note 3)	$T_c = 25$ °C	0.10 mA			
		$T_c = 125$ °C	15 mA	10 mA	5 mA	
$R_{thj-C}$	Typical Thermal Resistance (Note 2)	4 °C/W				

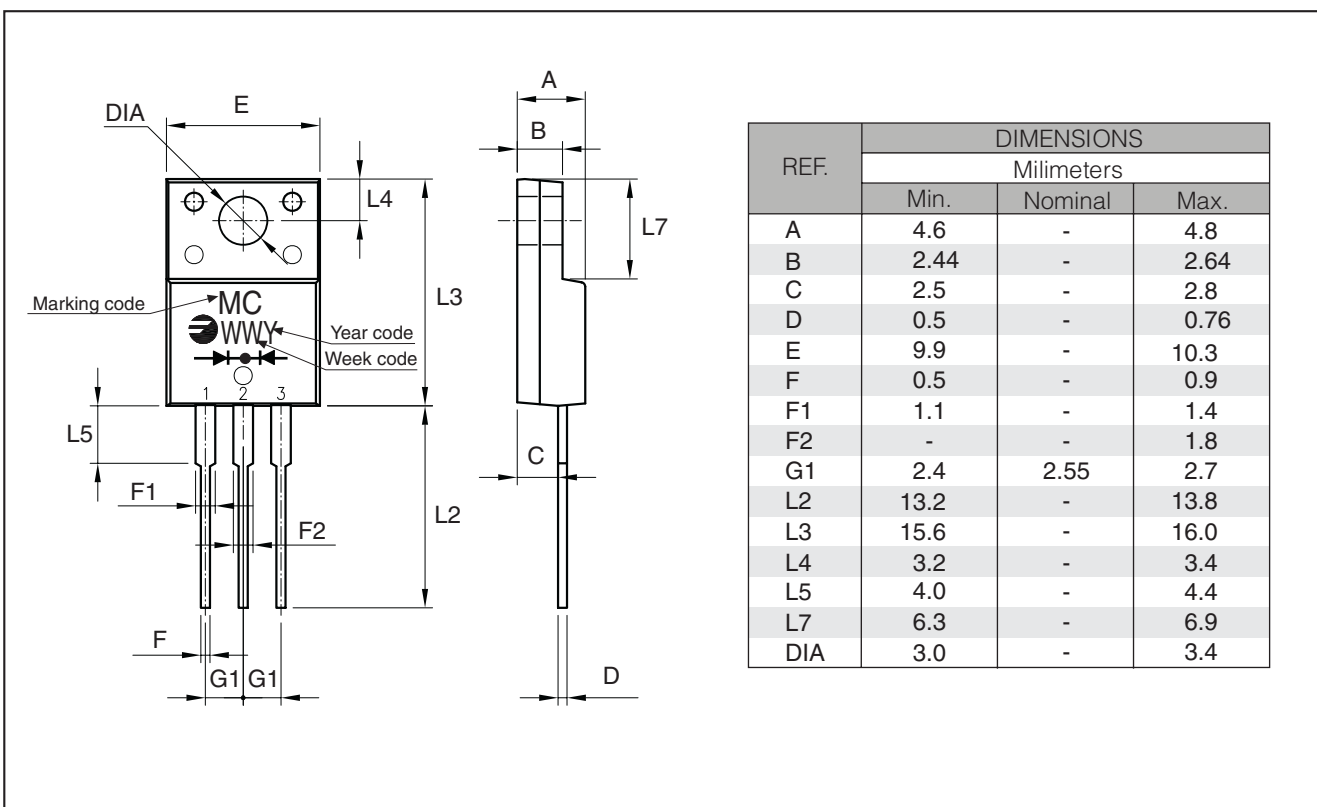
Notes: 1. Pulse Test: 300µ Pulse Width, 1% Duty Cycle  
 2. Thermal Resistance from Junction to Case per diode  
 3. Pulse test: Pulse width ≤ 40ms

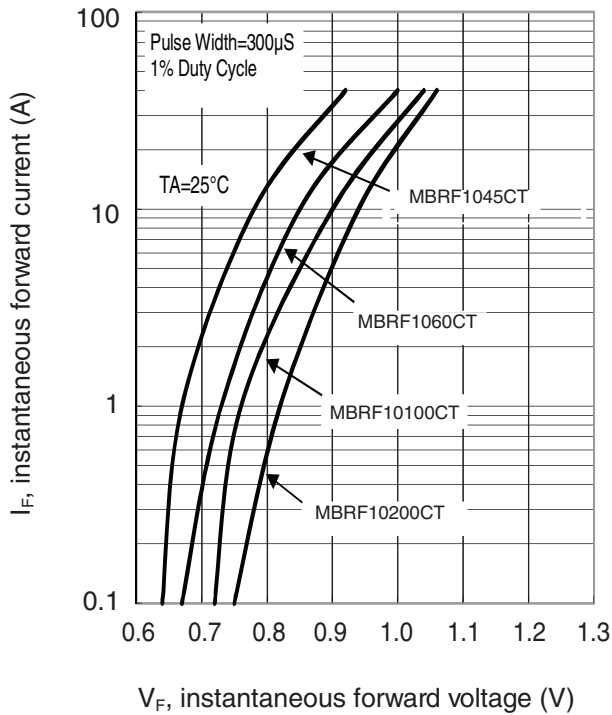
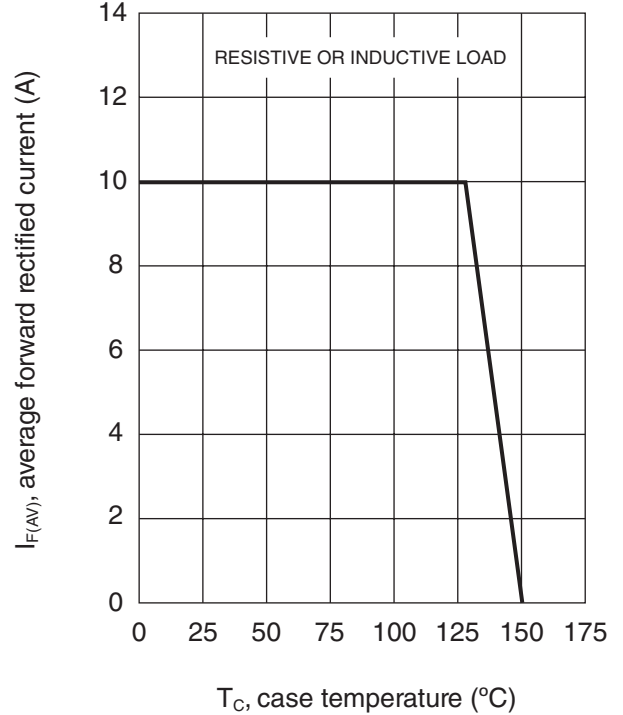
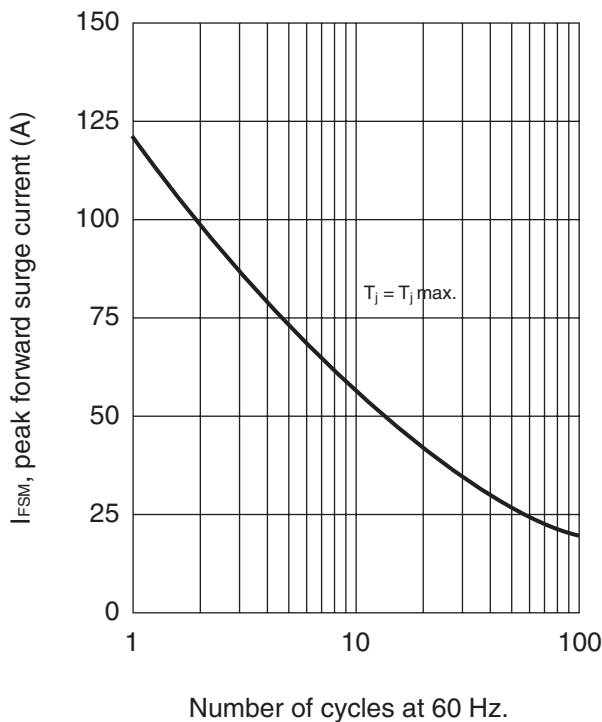
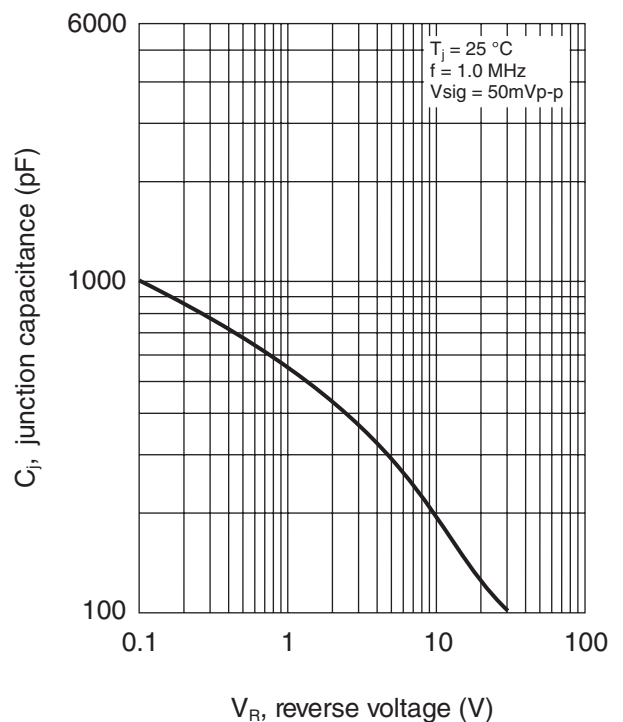
## 10 Amp. Schottky Barrier Rectifier

### Ordering information

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

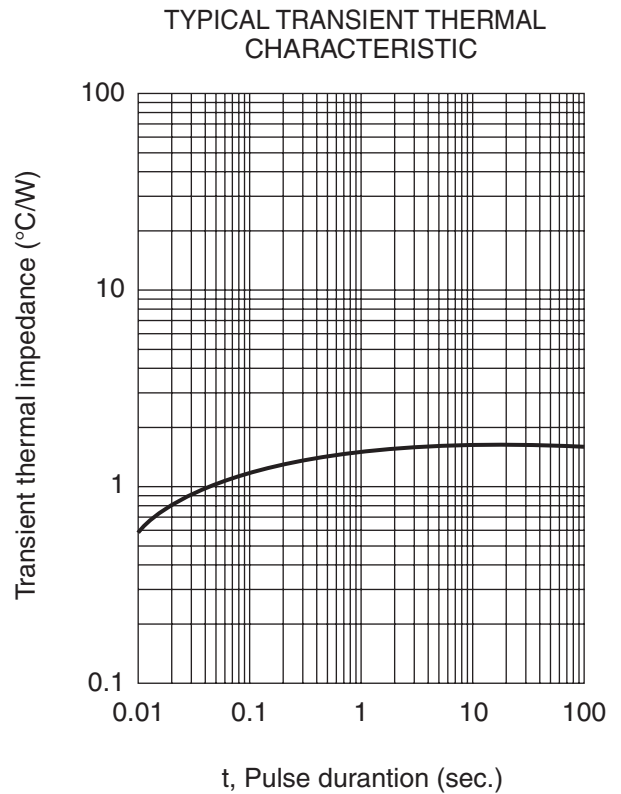
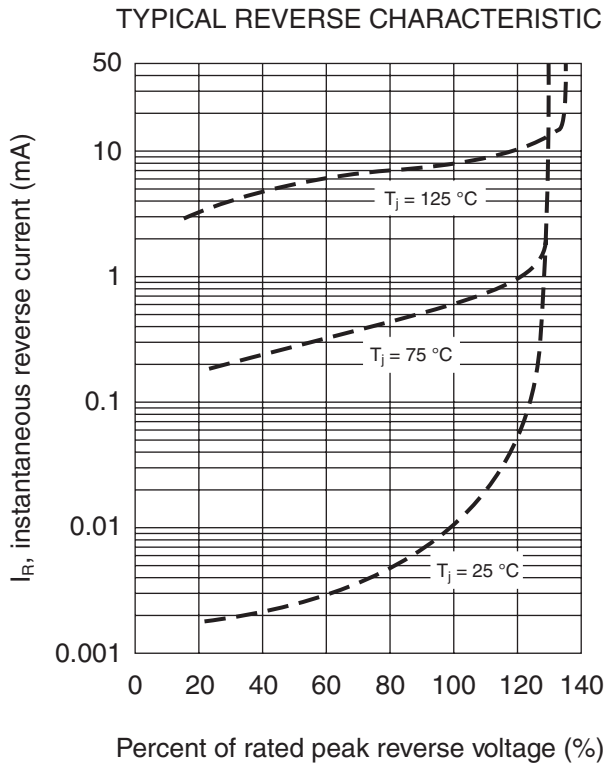
### Package Outline Dimensions: (mm) ITO-220AB



**10 Amp. Schottky Barrier Rectifier**
**Ratings and Characteristics (Ta 25 °C unless otherwise noted)**
**TYPICAL FORWARD CHARACTERISTIC**

**FORWARD CURRENT DERATING CURVE**

**MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**

**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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