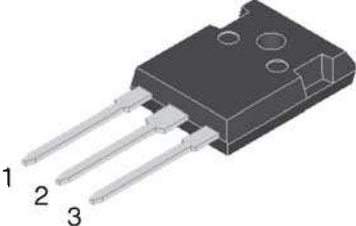
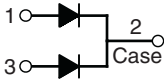




## 30.0 Amp. Schottky Barrier Rectifier

<p><b>TO-3P / TO-247AD</b></p>   <p>Common Cathode Suffix "C"</p>	<p><b>Voltage</b> 45 to 150 V</p>	<p><b>Current</b> 30.0 A</p>	
	<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 / 17" (4.3 mm) from case</li> <li>Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC</li> <li>Meets MSL level 1, per J-STD-020, LF maximum peak of 260° C</li> </ul>		  <b>RoHS</b> COMPLIANT
	<p><b>MECHANICAL DATA</b></p> <ul style="list-style-type: none"> <li><b>Case:</b> TO-3P / TO-247AD. Epoxy meets UL 94V-0 flammability rating.</li> <li><b>Polarity:</b> As marked on the body.</li> <li><b>Mounting Torque:</b> 10 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>			

### Maximun Ratings and Electrical Characteristics at 25°C

		MBR3045PT	MBR3060PT	MBR30100PT	MBR30150PT
Marking Code		MBR3045PT	MBR3060PT	MBR30100PT	MBR30150PT
$V_{RRM}$	Peak recurrent reverse voltage (V)	45	60	100	150
$V_{RMS}$	Maximum RMS voltage (V)	31	42	70	105
$V_{DC}$	Maximum DC blocking voltage (V)	45	60	100	150
$I_F (AV)$	Maximum average Forward current (both diodes conducting) (See graphic)	30 A			
$I_{FSM}$	8.3 ms. peak forward surge current (Jedec Method)	200 A			
$I_{RRM}$	Peak repetitive reverse surge current	2.0 A	1.0 A		
$T_j$	Operating temperature range	- 65 to + 150 °C			
$T_{stg}$	Storage temperature range	- 65 to + 175 °C			

### Electrical Characteristics at Tamb = 25 °C

$V_F$	Max. forward voltage drop at $I_F = 15 A$ (Note 1)	$T_c = 25\text{ °C}$	--	0.75 V	0.85 V	0.95 V
		$T_c = 125\text{ °C}$	0.60 V	0.65 V	0.75 V	0.92 V
	Max. forward voltage drop at $I_F = 30 A$	$T_c = 25\text{ °C}$	0.82 V	--	--	1.02 V
		$T_c = 125\text{ °C}$	0.72 V	--	--	0.98 V
$I_R$	Max. Instantaneous reverse current at $V_R = V_{RRMax}$ (Note 3)	$T_c = 25\text{ °C}$	1.0 mA		0.5 mA	
		$T_c = 125\text{ °C}$	20.0 mA	15.0 mA	10.0 mA	
$R_{thj-C}$	Typical Thermal Resistance (Note 2)	1.4 °C/W				

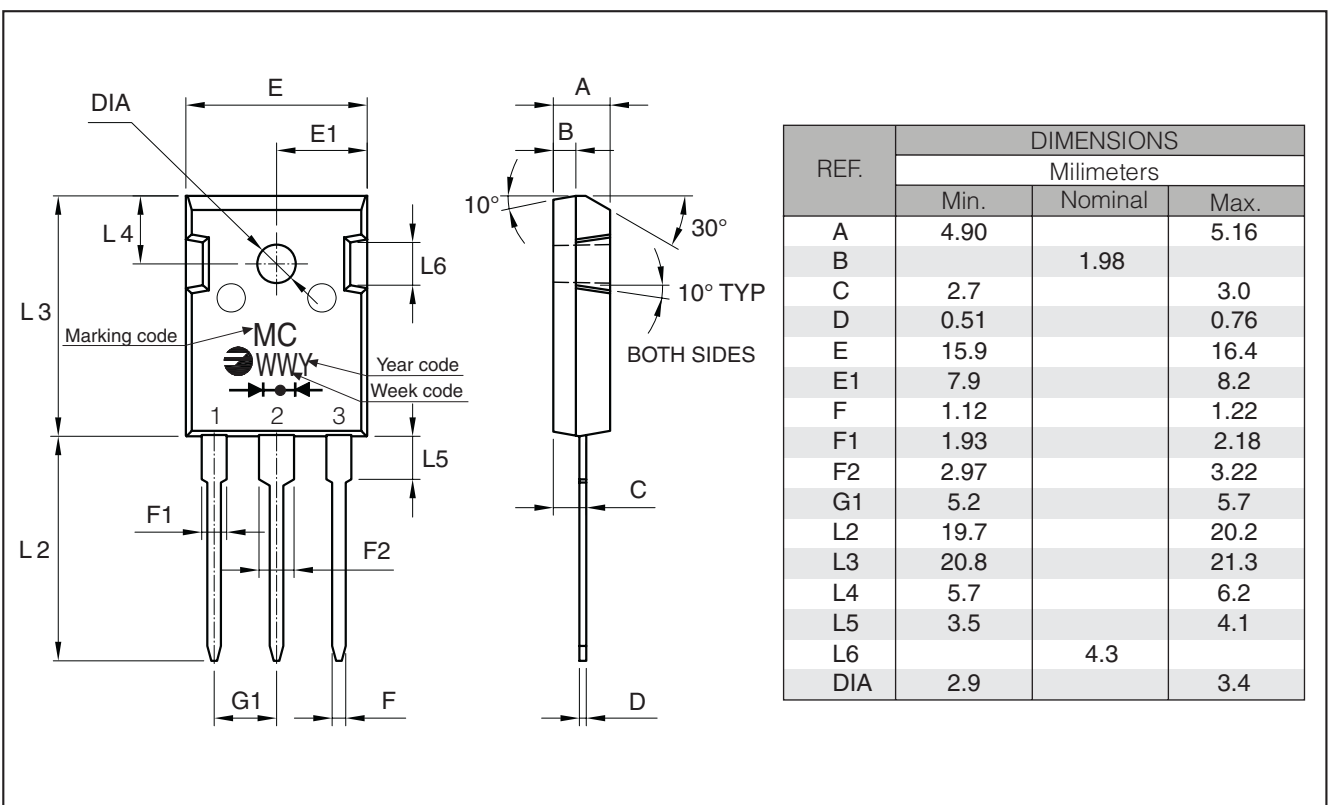
Notes: 1. Pulse Test: 300µ Pulse Width, 1% Duty Cycle  
 2. Thermal Resistance from Junction to Case per diode  
 3. Pulse test: Pulse width ≤ 40ms

## 30.0 Amp. Schottky Barrier Rectifier

### Ordering information

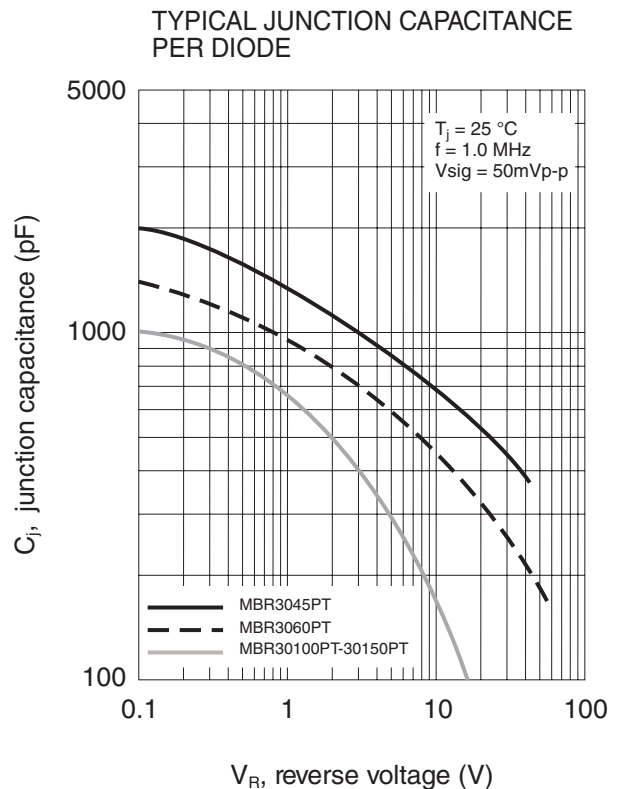
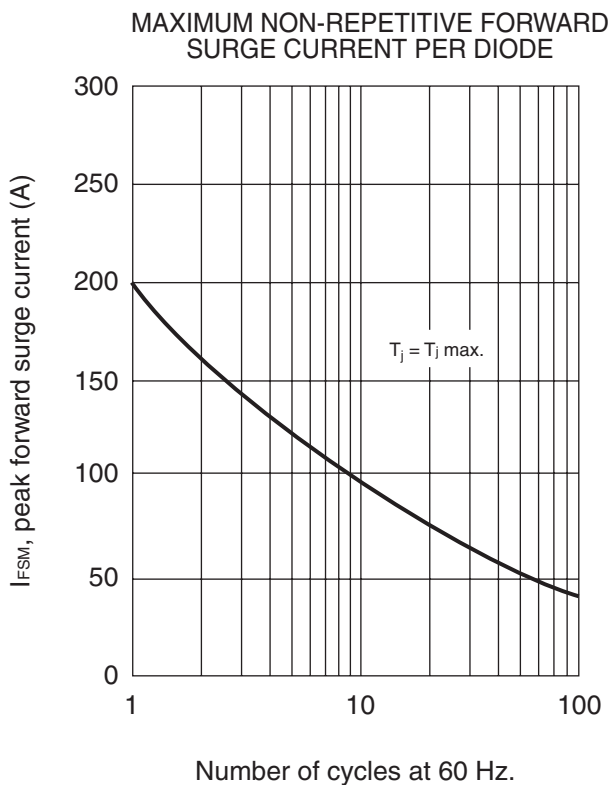
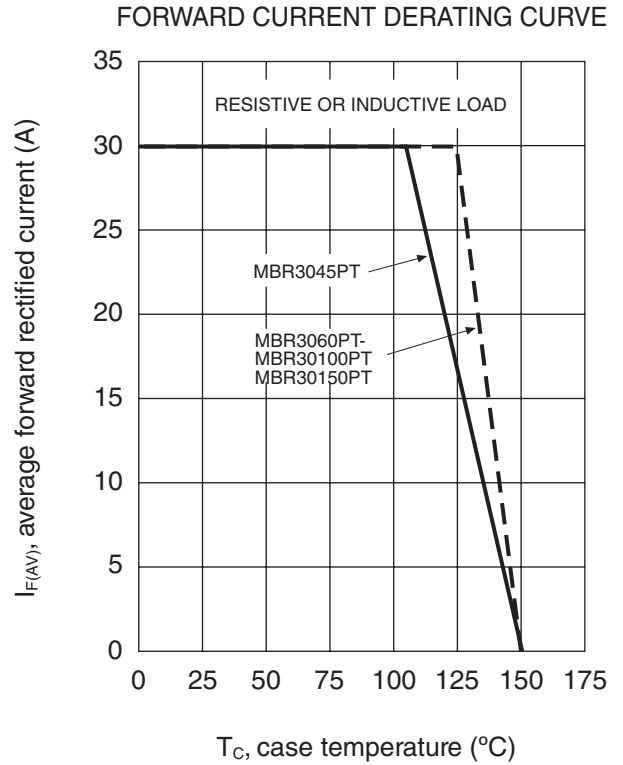
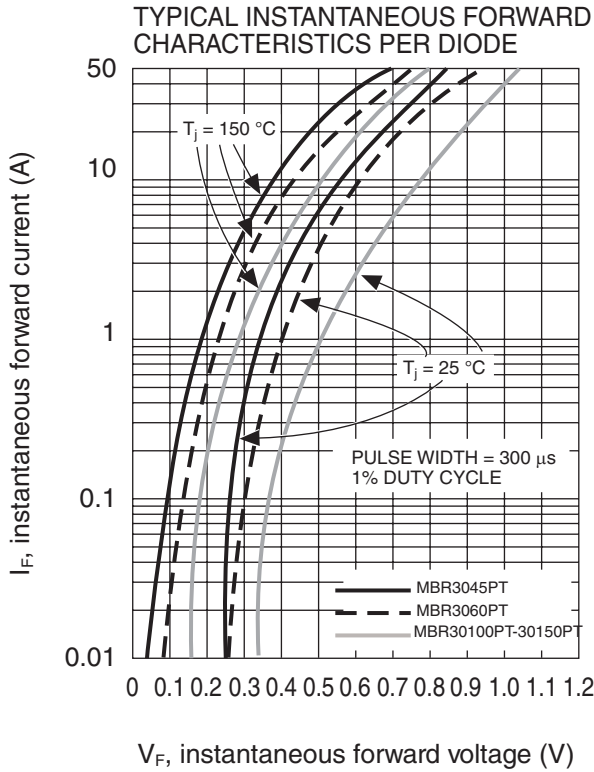
PREFERRED P/N	PACKAGE CODE	DELIVERY MODE	BASE QUANTITY	UNIT WEIGHT (g)
MBR3060PTC 00TUC	TU	TUBE	900	6.12

### Package Outline Dimensions: (mm) TO-3P / TO-247AD



**30.0 Amp. Schottky Barrier Rectifier**

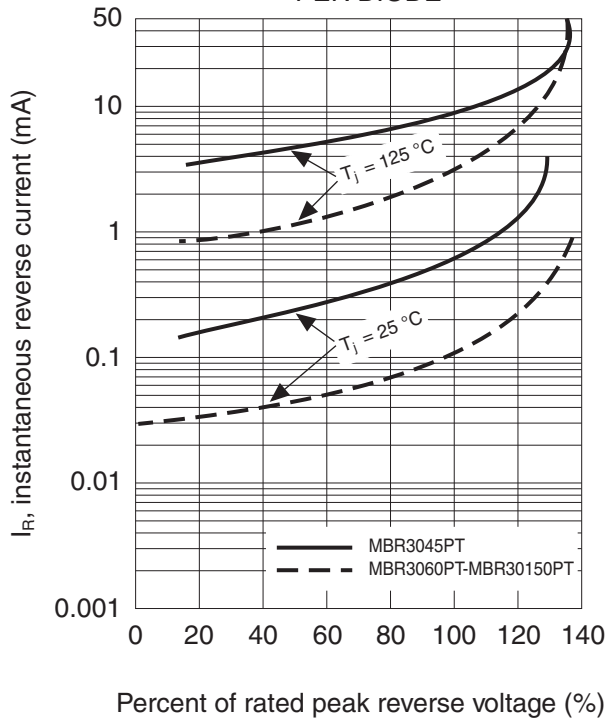
**Ratings and Characteristics (Ta 25 °C unless otherwise noted)**



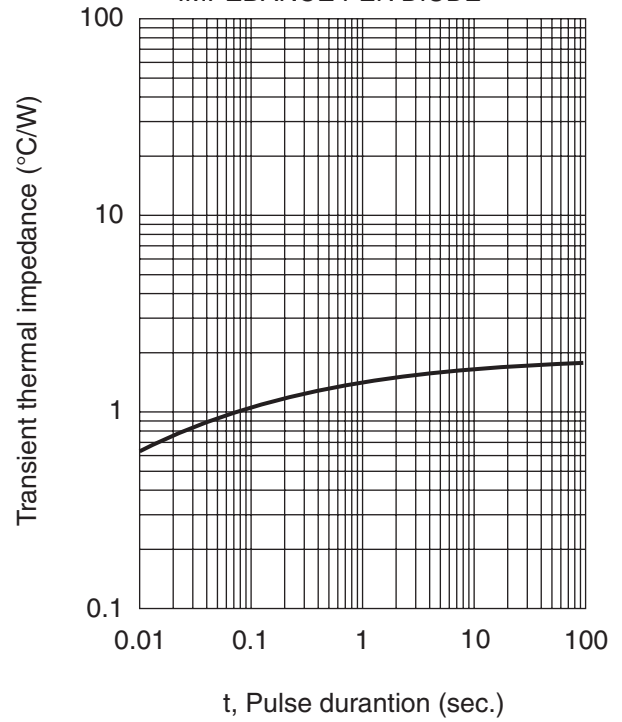
**30.0 Amp. Schottky Barrier Rectifier**

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

TYPICAL REVERSE CHARACTERISTICS PER DIODE



TYPICAL TRANSIENT THERMAL IMPEDANCE PER DIODE



**30.0 Amp. Schottky Barrier Rectifier**

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