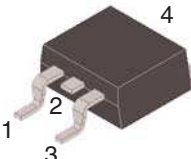
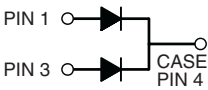


## 20 Amp. Surface Mount Schottky Barrier Rectifiers

<b>D<sup>2</sup>PAK</b>	<b>Voltage</b> 45 to 150 V	<b>Current</b> 20 A
	<ul style="list-style-type: none"> <li>• For surface mounted application</li> <li>• Ideal for automated pick &amp; place</li> <li>• Low power loss, high efficiency</li> <li>• High current capability, low VF</li> <li>• High reliability</li> <li>• Epitaxial construction</li> <li>• Guard-ring for transient protection</li> </ul>	
	<b>Mechanical Data</b> <ul style="list-style-type: none"> <li>• Cases: D<sup>2</sup>PAK molded plastic</li> <li>• Epoxy: UL 94V-0 rate flame retardant</li> <li>• Terminals: Pure tin plated, lead free. solderable per MIL-STD-202, Method 208 guaranteed</li> <li>• Polarity: As marked</li> <li>• High temperature soldering guaranteed: 260 °C/10 seconds at terminals</li> <li>• Weight: 1.70 grams</li> </ul>	

### Absolute Maximum Ratings, according to IEC publication No. 134

		<b>MBRS 2045CT</b>	<b>MBRS 2060CT</b>	<b>MBRS 20100CT</b>	<b>MBRS 20150CT</b>
V <sub>RRM</sub>	Maximum recurrent peak reverse voltage (V)	45	60	100	150
V <sub>RMS</sub>	Maximum RMS voltage (V)	31	42	70	105
V <sub>DC</sub>	Maximum DC blocking voltage (V)	45	60	100	150
I <sub>F(AV)</sub>	Maximum average forward rectified current See Fig.	20 A			
I <sub>FSM</sub>	Peak Forward Surge Current 8.3 ms. single Half Sine-wave Superimposed on Rated Load (Jedec Method)	200 A			
C <sub>j</sub>	Typical junction capacitance (1MHz; -4V)	600 pF	400 pF	350 pF	
T <sub>j</sub>	Operating junction temperature range	- 65 to + 125 °C		- 65 to + 150 °C	
T <sub>stg</sub>	Storage temperature range	- 65 to + 150 °C			

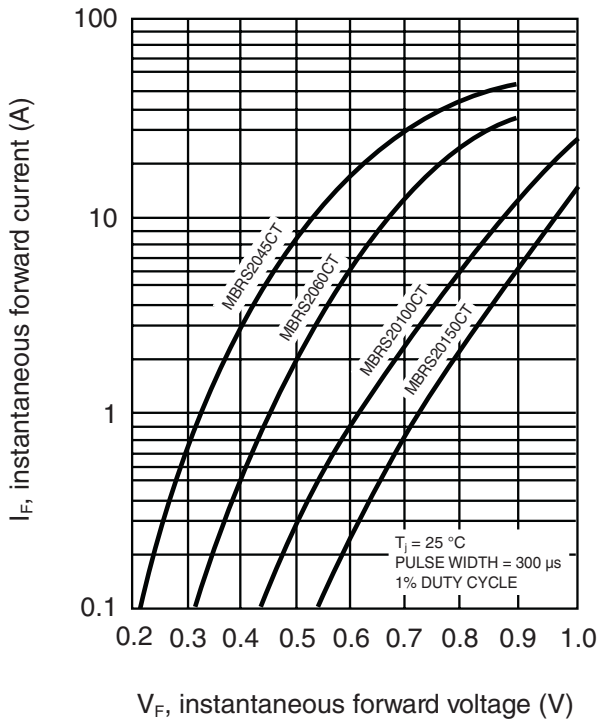
### Electrical Characteristics

		<b>MBRS 2045CT</b>	<b>MBRS 2060CT</b>	<b>MBRS 20100CT</b>	<b>MBRS 20150CT</b>
V <sub>F</sub>	Max. instantaneous forward voltage @ 10 A	0.55 V	0.70 V	0.92 V	1.02 V
I <sub>R</sub>	Maximum D.C. Reverse Current @ T <sub>c</sub> = 25 °C at Rated DC Blocking Voltage @ T <sub>c</sub> = 100 °C	0.5 mA		0.1 mA	
		15 mA	10 mA	5.0 mA	
R <sub>thj-C</sub>	Typical Thermal Resistance (See note)	1.5 °C/W			

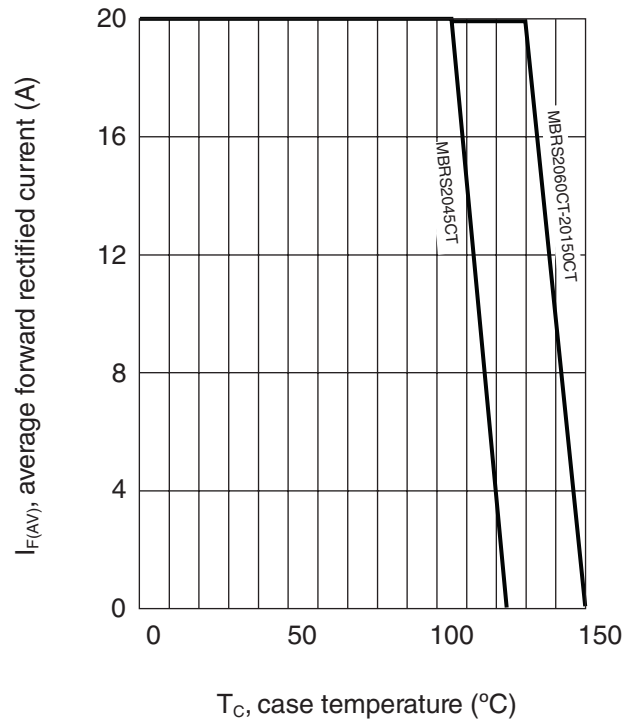
Note: Thermal Resistance from Junction to Case Per Leg

### 20 Amp. Schottky Barrier Rectifier

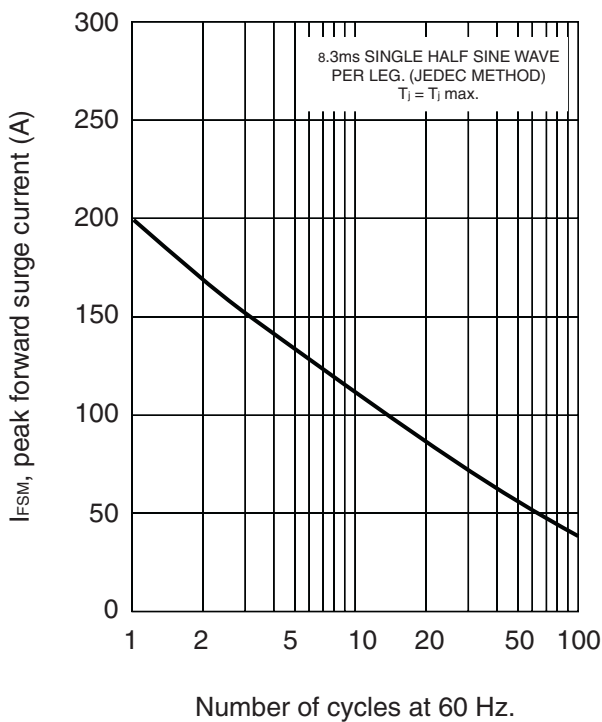
TYPICAL FORWARD CHARACTERISTIC PER LEG



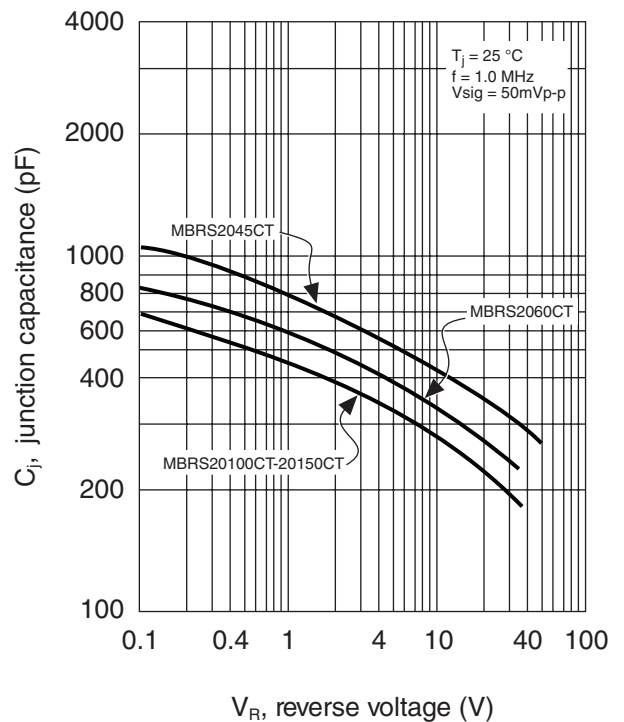
FORWARD CURRENT DERATING CURVE



MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

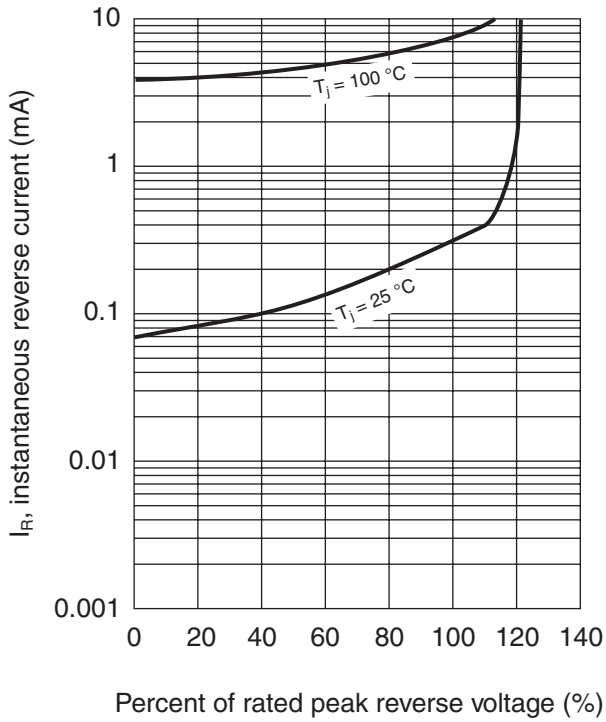


TYPICAL JUNCTION CAPACITANCE PER LEG

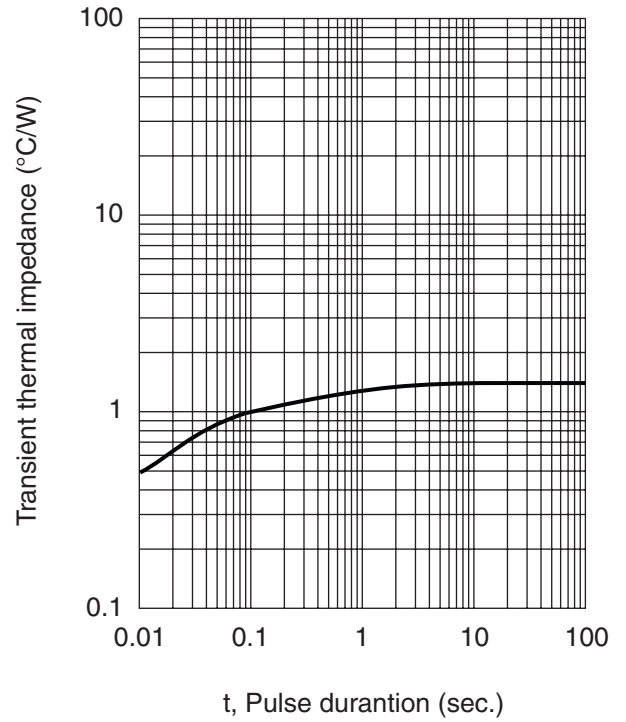


**20 Amp. Schottky Barrier Rectifier**

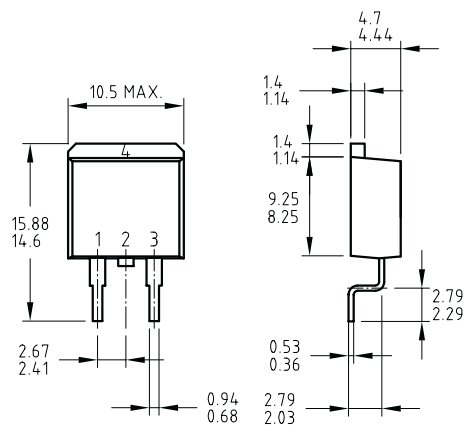
TYPICAL REVERSE CHARACTERISTICS PER LEG



TYPICAL TRANSIENT THERMAL IMPEDANCE PER LEG



**PACKAGE MECHANICAL DATA D<sup>2</sup>PAK**



Dimensions in mm.