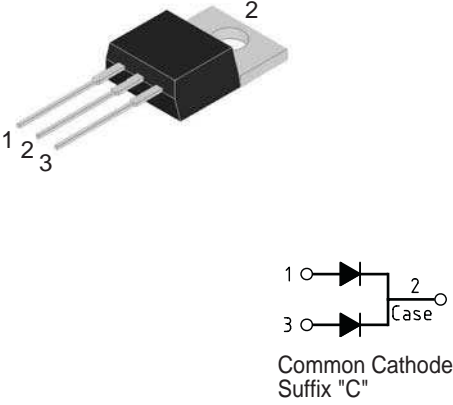


## 15.0 Amp. Schottky Barrier Rectifier

<h3 style="margin: 0;">TO-220AB</h3>  <p style="text-align: center; margin: 0;">Common Cathode Suffix "C"</p>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center; width: 50%;"><b>Voltage</b></td> <td style="text-align: center; width: 50%;"><b>Current</b></td> </tr> <tr> <td style="text-align: center;">45 to 150 V</td> <td style="text-align: center;">15.0 A</td> </tr> </table> <ul style="list-style-type: none"> <li>Plastic material used carries Underwriters Laboratory Classifications 94V-0</li> <li>Metal silicon junction, majority carrier conduction</li> <li>Low power loss, high efficiency.</li> <li>High current capability, low forward voltage drop</li> <li>High surge capability</li> <li>For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications</li> <li>Guardring for overvoltage protection</li> <li>High temperature soldering guaranteed: 260°C/10 seconds, 6.35mm from case</li> </ul> <p><b>Mechanical Data</b></p> <ul style="list-style-type: none"> <li>Cases: JEDEC TO-220AB molded plastic body</li> <li>Terminals: Pure tin plated, lead free, solderable per MIL-STD-750, Method 2026</li> <li>Polarity: As marked</li> <li>Mounting position: Any</li> <li>Mounting torque: 5 in. - lbs. max</li> <li>Weight: 2.24 grams</li> </ul>	<b>Voltage</b>	<b>Current</b>	45 to 150 V	15.0 A
<b>Voltage</b>	<b>Current</b>				
45 to 150 V	15.0 A				

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

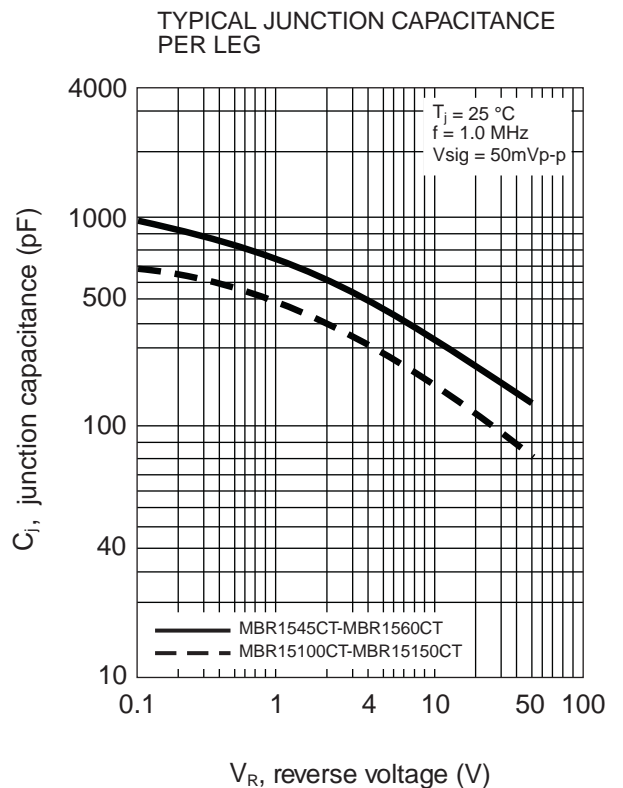
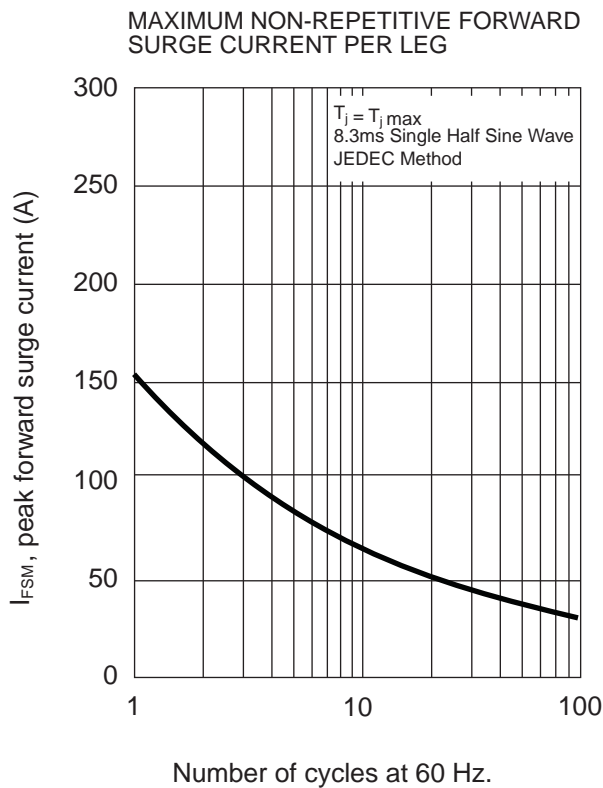
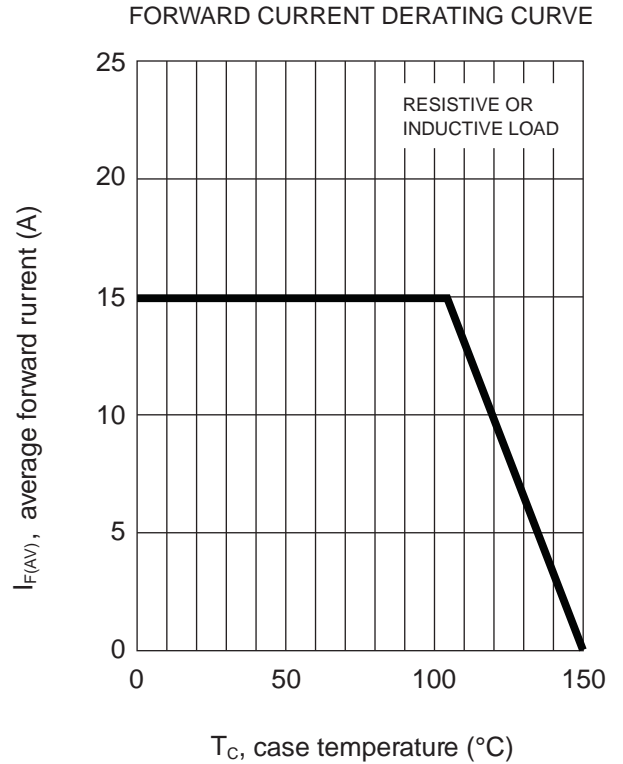
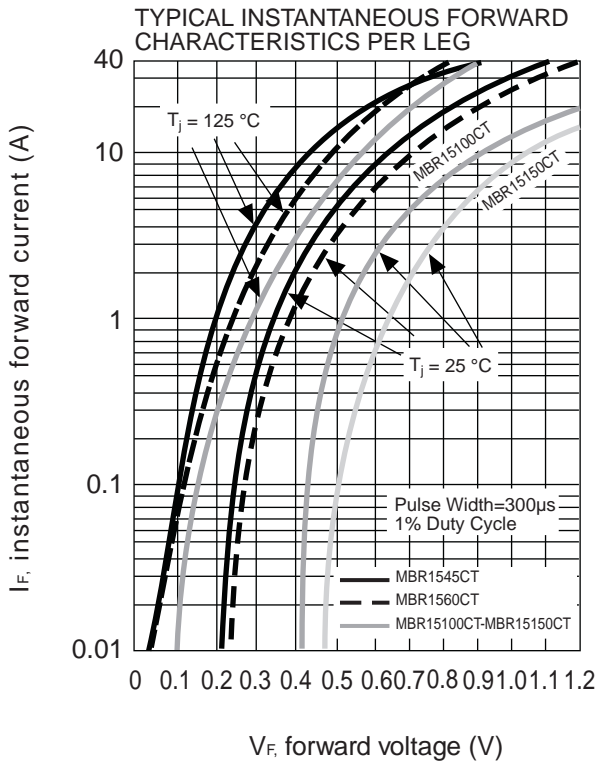
		MBR 1545CT	MBR 1560CT	MBR 15100CT	MBR 15150CT
$V_{RRM}$	Maximum Recurrent Peak Reverse Voltage (V)	45	60	100	150
$V_{RMS}$	Maximum RMS Voltage (V)	31	42	70	105
$V_{DC}$	Maximum DC blocking voltage (V)	45	60	100	150
$I_{F(AV)}$	Maximum Average Forward Rectified Current at $T_C = 105^\circ C$	15 A			
$I_{FSM}$	Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	150 A			
$I_{RRM}$	Peak Repetitive Reverse Surge Current (Note 1)	1.0 A	0.5 A		
$C_j$	Typical Junction Capacitance	400 pF		200 pF	
$T_j$	Operating Junction Temperature Range	- 65 to + 150 °C			
$T_{stg}$	Storage Temperature Range	- 65 to + 175 °C			

### Electrical Characteristics

		MBR 1545CT	MBR 1560CT	MBR 15100CT	MBR 15150CT
$V_F$	Maximum Instantaneous Forward Voltage at (Note 2) $I_F = 7.5 A, T_c = 25^\circ C$ $I_F = 7.5 A, T_c = 125^\circ C$ $I_F = 15 A, T_c = 25^\circ C$ $I_F = 15 A, T_c = 125^\circ C$	0.57 V 0.84 V 0.72 V -	0.75 V 0.65 V - -	0.92 V 0.82 V - -	1.05 V 0.92 V - -
$I_R$	Max. Instantaneous Reverse Current @ $T_C=25^\circ C$ at Rated DC Blocking Voltage (Note 2) @ $T_C=125^\circ C$	0.5 mA 10 mA	0.3 mA 7.5 mA	0.1 mA 5.0 mA	
$R_{thj-a}$ $R_{thj-c}$	Maximum Typical Thermal Resistance (Note 3)	10 °C/W 1.5 °C/W			

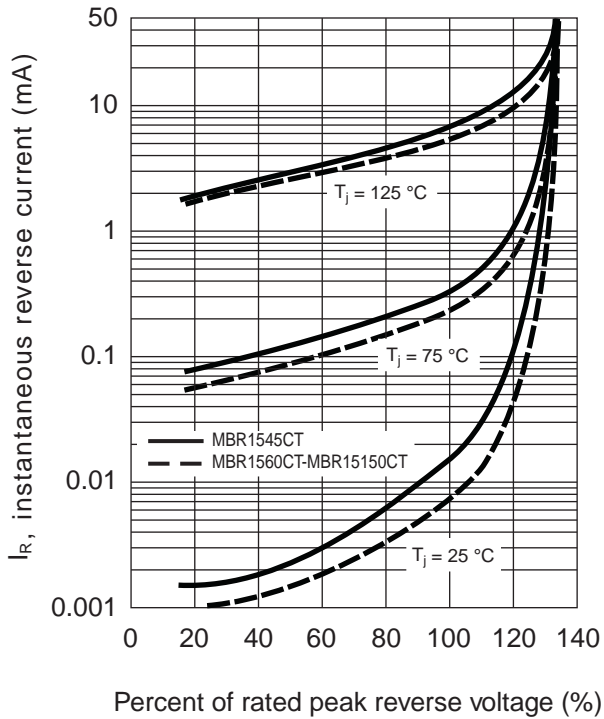
Notes: 1. 2.0µs Pulse Width, f=1.0 KHz  
 2. Pulse Test: 300µs Pulse Width, 1% Duty Cycle  
 3. Mount on Heatsink Size of 50.4 mm x 76.2 mm x 6.35 mm Al-Plate.

**Rating And Characteristic Curves**

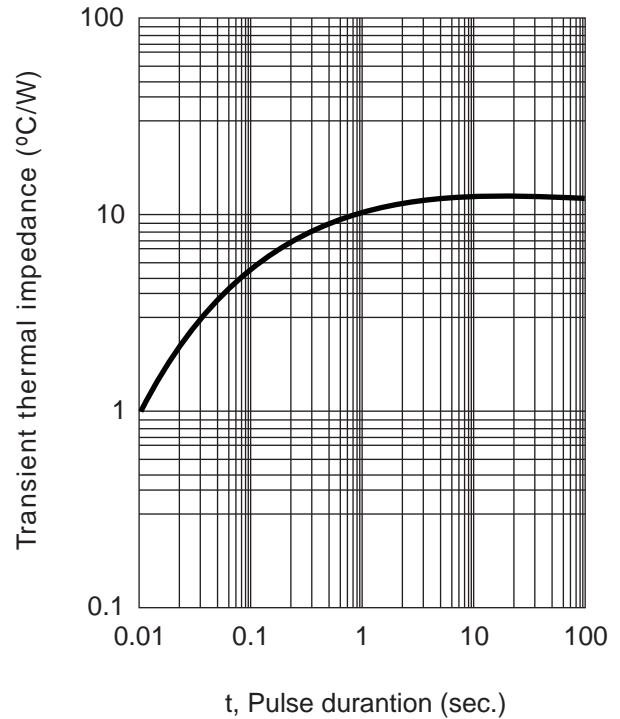


**Rating And Characteristic Curves**

TYPICAL REVERSE CHARACTERISTIC PER LEG



TYPICAL TRANSIENT THERMAL CHARACTERISTICS PER LEG



**PACKAGE MECHANICAL DATA**

**TO-220AB**



REF.	DIMENSIONS	
	Milimeters	
	Min.	Max.
A	4.44	4.70
B	1.14	1.40
C	2.54	2.79
D	0.35	0.64
E	--	10.5
F	0.68	0.94
G	2.41	2.67
L2	13.46	14.22
L3	14.90	15.10
L4	2.62	2.87
L5	3.56	4.06
L7	5.84	6.86
DIA	3.91	3.74