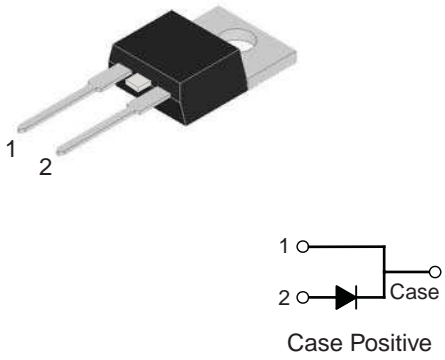


7.5 Amp. Schottky Barrier Rectifier

<p>TO-220AC</p> 	<p>Voltage 45 to 150 V</p> <p>Current 7.5 A</p>
<ul style="list-style-type: none"> Metal silicon junction, majority carrier conduction Low power loss, high efficiency High current capability The plastic material carries U/L recognition 94 V-0 Terminals: Leads solderable per MIL-STD202 High surge capability Low forward Voltage drop 	

Absolute Maximum Ratings, according to IEC publication No. 134

		MBR745	MBR760	MBR7100	MBR7150
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 at $T_C = 150\text{ }^\circ\text{C}$	7.5 A			
I_{FSM}	8.3 ms. peak forward surge current (Jedec Method)	150 A			
I_{RRM}	Peak repetitive reverse surge current (Note 1)	1.0 A	0.5 A		
T_j	Operating temperature range	- 65 to + 150 °C			
T_{stg}	Storage temperature range	- 65 to + 175 °C			

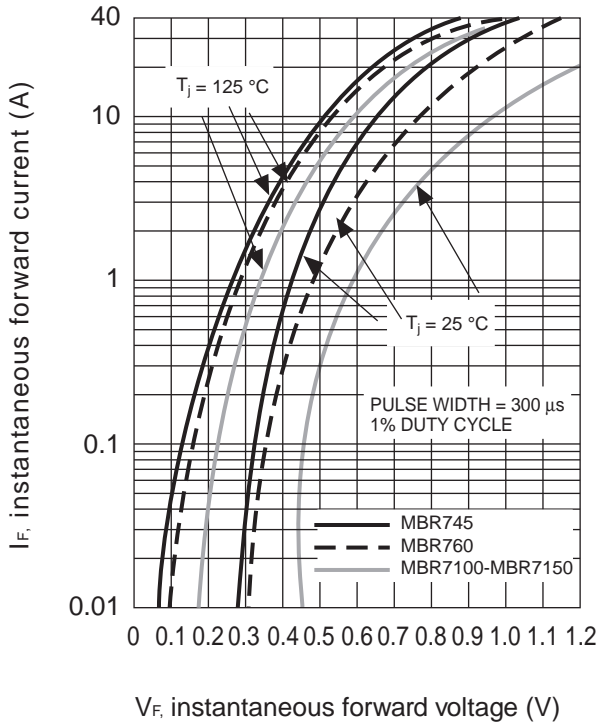
Electrical Characteristics

		MBR745	MBR760	MBR7100	MBR7150	
V_F	Max. forward voltage drop at $I_F = 7.5\text{ A}$ (Note 2)	$T_C = 25\text{ }^\circ\text{C}$	--	0.75 V	0.92 V	0.95 V
		$T_C = 125\text{ }^\circ\text{C}$	0.57 V	0.65 V	0.82 V	0.92 V
	Max. forward voltage drop at $I_F = 15\text{ A}$	$T_C = 25\text{ }^\circ\text{C}$	0.84 V	--	--	--
		$T_C = 125\text{ }^\circ\text{C}$	0.72 V	--	--	--
I_R	Max. Instantaneous reverse current at $V_R = V_{RRMax}$ (Note 1)	$T_C = 25\text{ }^\circ\text{C}$	0.10 mA			
		$T_C = 125\text{ }^\circ\text{C}$	15.0 mA	10.0 mA	5.0 mA	
$R_{th(j-c)}$	Typical Thermal Resistance	5.0 °C/W				
$R_{th(j-a)}$		15.0 °C/W				

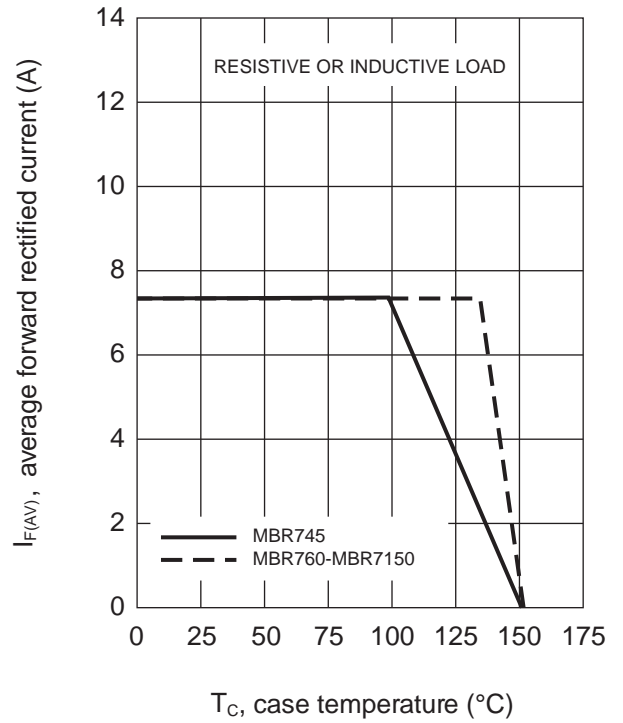
Notes: 1. 2.0µs Pulse Width, f = 1.0 KHz
 2. Pulse Test: 300µs Pulse Width, 1% Duty Cycle
 3. Mounted on Heatsink Size of 2 in x 3 in x 0.25 in Al-Plated.

Rating And Characteristic Curves

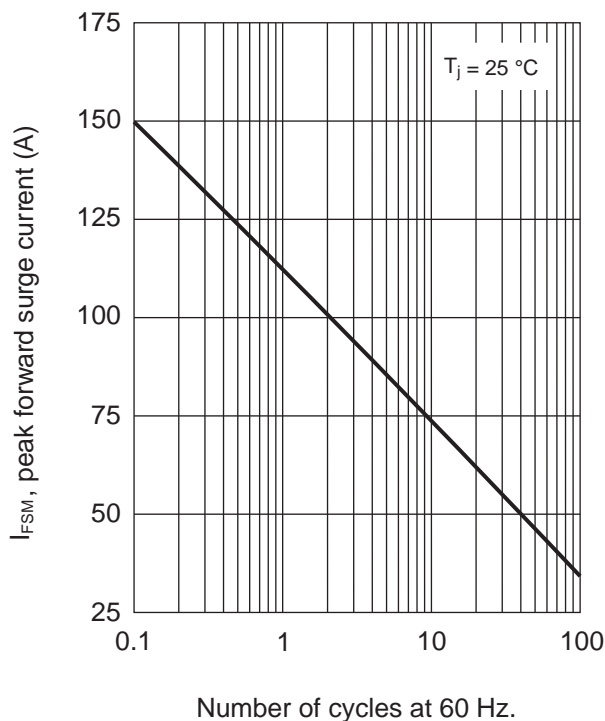
TYPICAL FORWARD CHARACTERISTIC



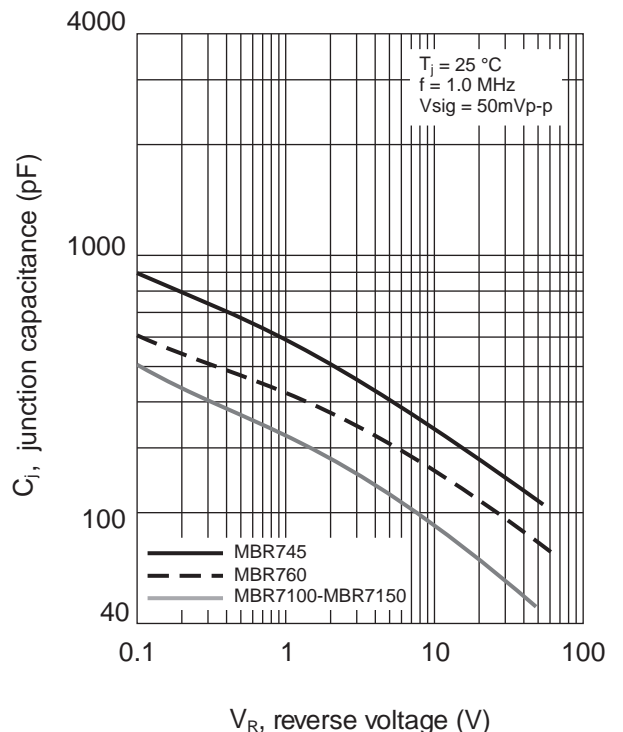
FORWARD CURRENT DERATING CURVE



MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

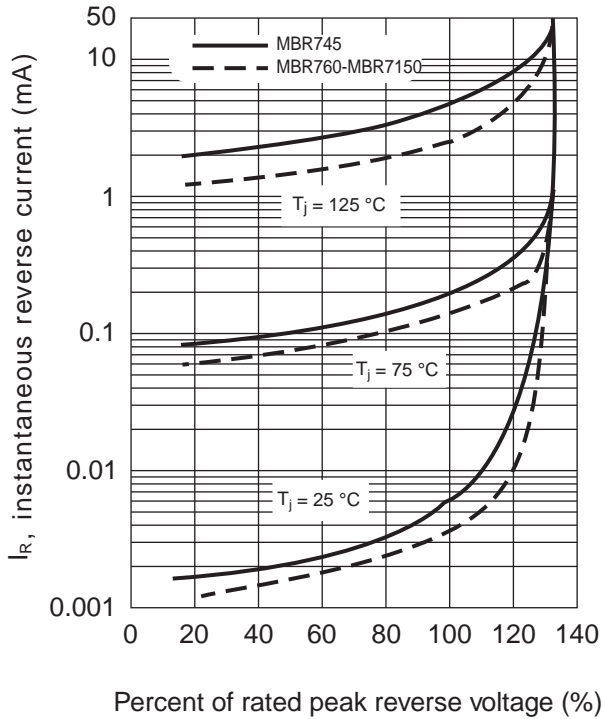


TYPICAL JUNCTION CAPACITANCE

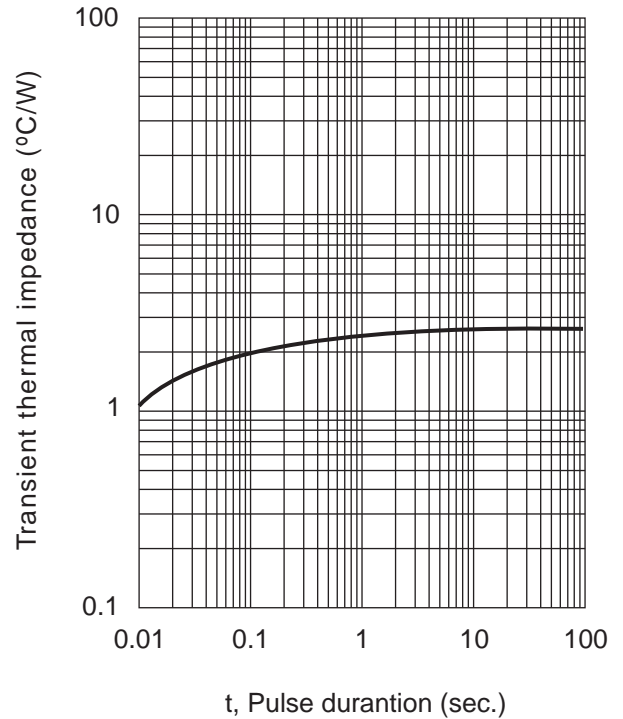


Rating And Characteristic Curves

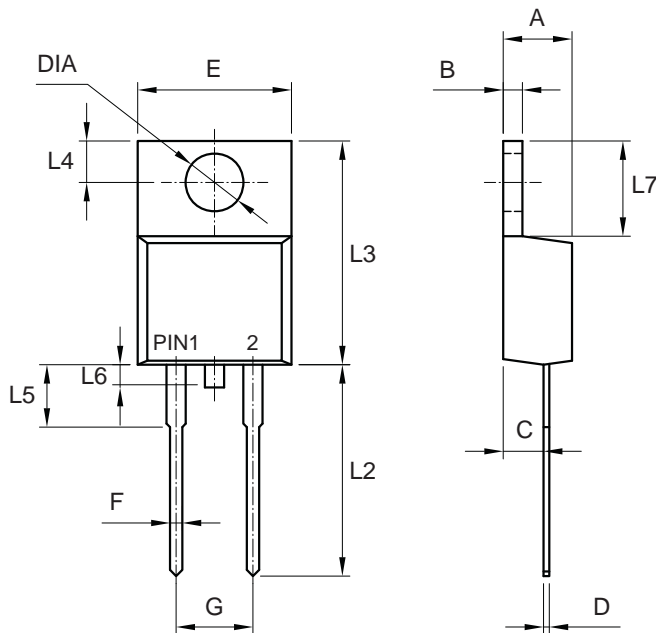
TYPICAL REVERSE CHARACTERISTIC



TYPICAL TRANSIENT THERMAL CHARACTERISTIC



PACKAGE MECHANICAL DATA TO-220AC



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	-	10.50
F	0.68	0.94
G	4.95	5.20
L2	13.46	14.22
L3	14.9	15.10
L4	2.62	2.87
L5	3.56	4.06
L6	-	1.60
L7	5.84	6.86
DIA	3.74	3.91