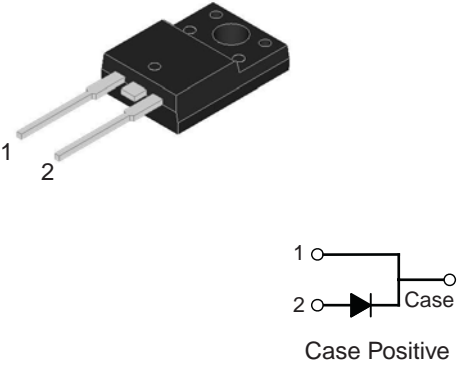


20 Amp. Schottky Barrier Rectifier

ITO-220AC 	Voltage 45 to 150 V	Current 20 A
	<ul style="list-style-type: none"> • Metal silicon junction, majority carrier conduction • High current capability • The plastic material carries U/L recognition 94 V-0 • Terminals: Leads solderable per MIL-STD202 • Low power loss, high efficiency • Low forward Voltage drop 	

Absolute Maximum Ratings, according to IEC publication No. 134

		MBRF2045	MBRF2060	MBRF20100	MBRF20150
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 $T_c = 125\text{ }^\circ\text{C}$	20 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			

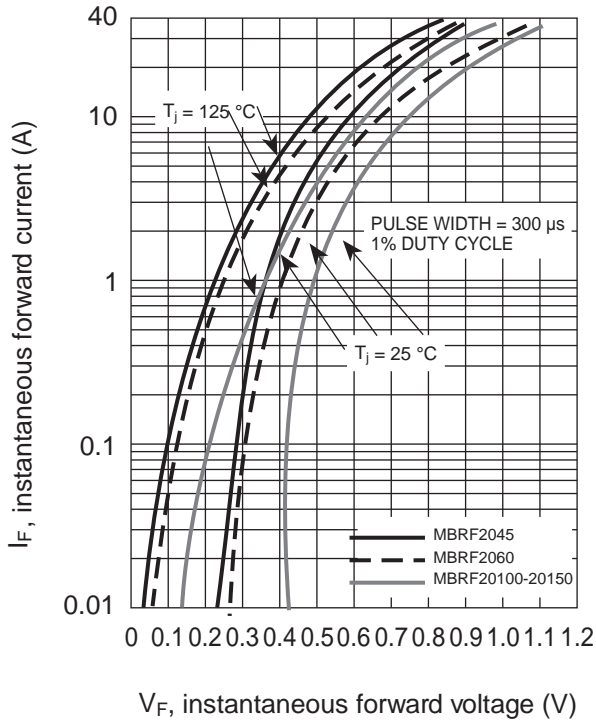
Electrical Characteristics

		MBRF2045	MBRF2060	MBRF20100	MBRF20150	
V_F	Max. forward voltage drop at $I_F = 20\text{ A}$ (Note 2)	$T_c = 25\text{ }^\circ\text{C}$	0.75 V	0.82 V	0.95 V	1.02 V
		$T_c = 125\text{ }^\circ\text{C}$	0.65 V	0.72 V	0.87 V	0.98 V
I_R	Max. Instantaneous reverse current at $V_R = V_{RRMax}$	$T_c = 25\text{ }^\circ\text{C}$	0.20 mA		0.10 mA	
		$T_c = 125\text{ }^\circ\text{C}$	15.0 mA	10.0 mA	5.0 mA	
R_{thj-c}	Typical Thermal Resistance (Note 3)	3.0 °C/W				

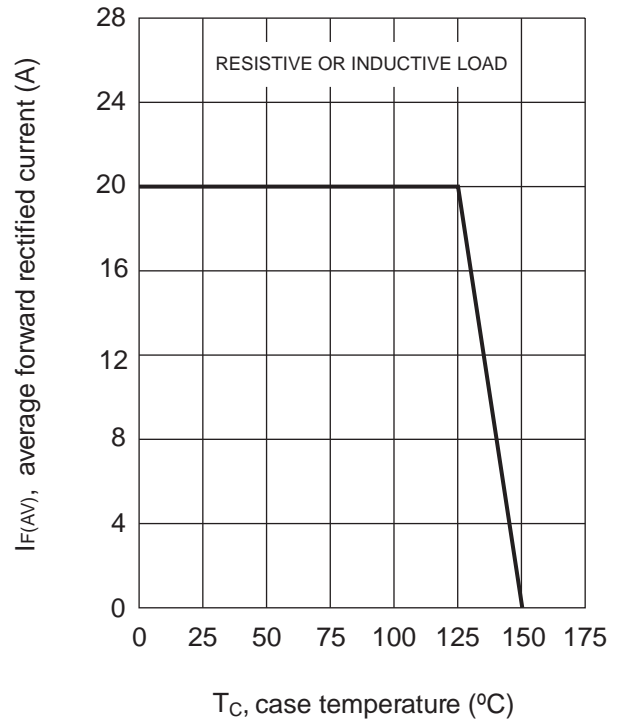
NOTES: 1. 2.0 μs Pulse Width, $f = 1.0\text{ kHz}$
 2. Pulse Test With $PW = 300\text{ }\mu\text{sec}$, 1% Duty Cycle
 3. Mounted on Heatsink Size of 2 in x 3 in x 0.25 in Al-Plate.

Rating And Characteristic Curves

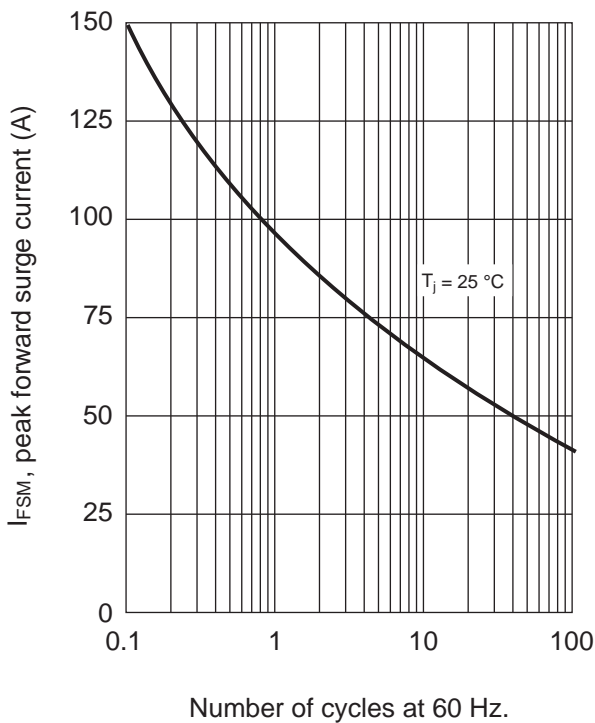
TYPICAL FORWARD CHARACTERISTIC



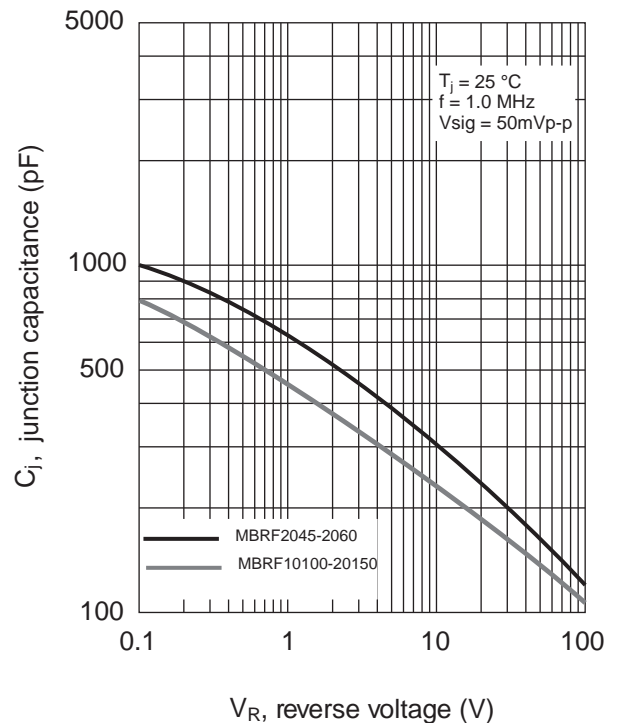
FORWARD CURRENT DERATING CURVE



MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

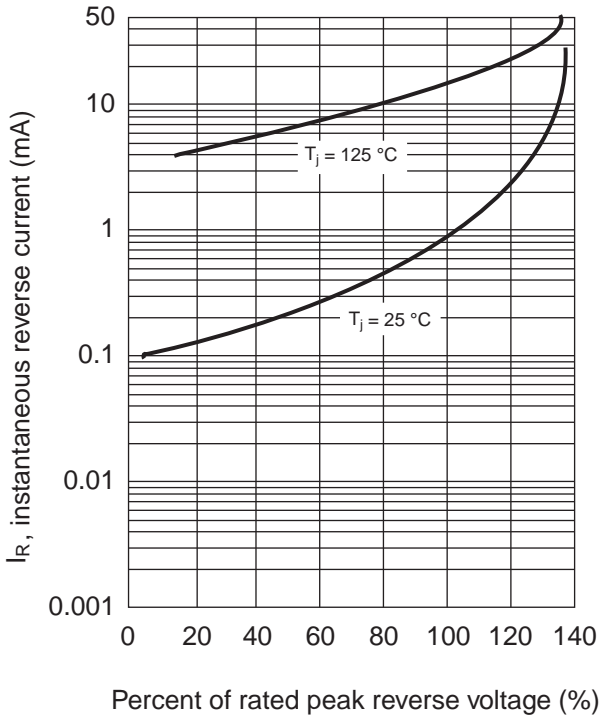


TYPICAL JUNCTION CAPACITANCE

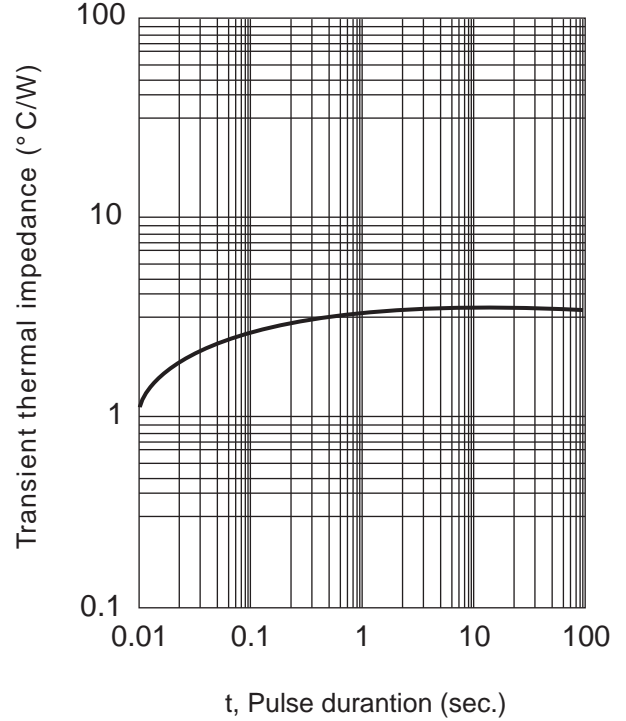


Rating And Characteristic Curves

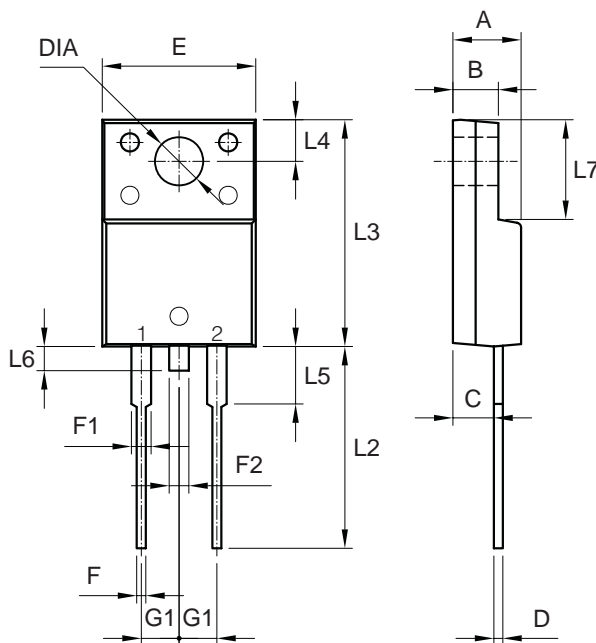
TYPICAL REVERSE CHARACTERISTIC



TYPICAL TRANSIENT THERMAL IMPEDANCE PER LEG



PACKAGE MECHANICAL DATA ITO-220AC



REF.	DIMENSIONS		
	Millimeters		
	Min.	Nominal	Max.
A	4.40	-	4.70
B	3.00	-	3.16
C	2.50	-	2.80
D	0.50	-	0.76
E	9.90	-	10.30
F	0.50	-	0.90
F1	1.10	-	1.40
F2	-	-	1.80
G1	2.40	2.55	2.70
L2	13.20	-	13.80
L3	14.80	-	15.50
L4	2.55	-	2.85
L5	3.70	-	4.10
L6	-	-	1.60
L7	6.30	-	6.90
DIA	3.00	-	3.40