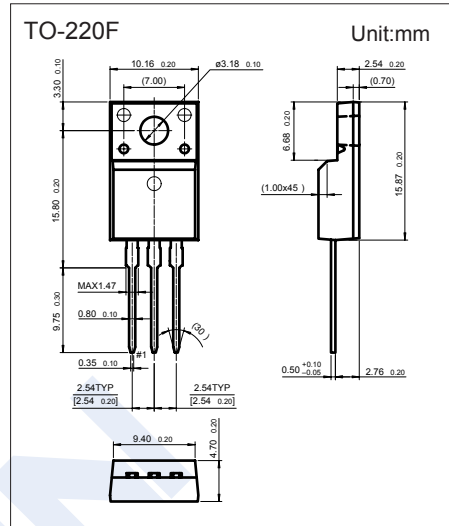
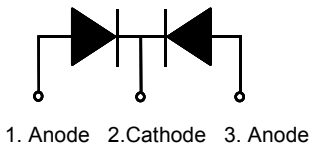


Schottky Diodes

MBRF20100ACT

■ Features

- Low forward voltage drop
- High frequency properties and switching speed
- Guard ring for over-voltage protection



■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Repetitive Reverse Voltage	V_{RRM}	100	V
DC Reverse Voltage	V_R	100	
DC Forward Current $T_c = 105^\circ\text{C}$	$I_{F(AV)}$	16	A
Peak forward surge current @ 60Hz Sine Half-Sine Wave	I_{FSM}	140	
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage temperature range	T_{stg}	-65 to 150	

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	V_{RM}	$I_D = 200\mu\text{A}$	100			V
Forward voltage (Note.1)	V_F	$I_F = 8\text{ A}, T_c = 25^\circ\text{C}$			850	mV
		$I_F = 8\text{ A}, T_c = 125^\circ\text{C}$			740	
Reverse voltage leakage current (Note.1)	I_R	$T_c = 25^\circ\text{C}$			0.1	mA
		$T_c = 100^\circ\text{C}$			50	

Note.1: Pulse Test: Pulse Width=300 μs , Duty Cycle=2%

Schottky Diodes MBRF20100ACT

■ Typical Characteristics

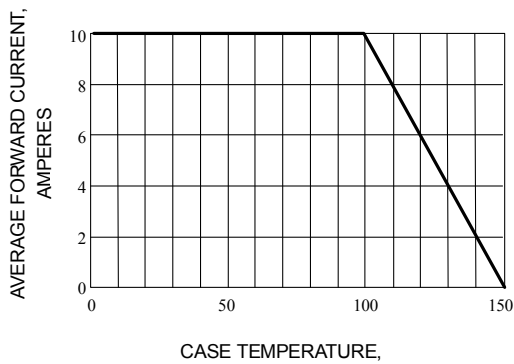


Fig. 1-FORWARD CURRENT DERATING CURVE

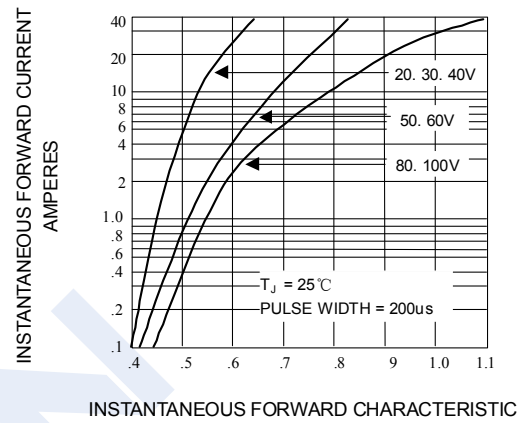


Fig. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

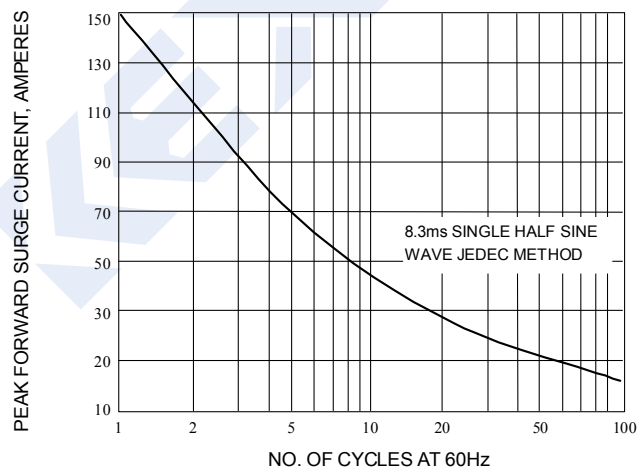


Fig. 3-MAXIMUM NON-REPETITIVE SURGE CURRENT