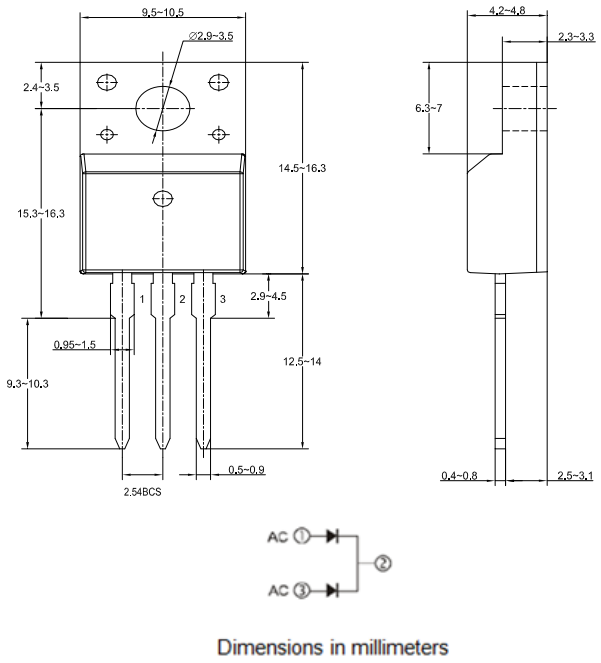
MBRF2020CT THRU MBRF20200CT

Schottky Barrier Rectifier
Reverse Voltage - 20 to 200 V
Forward Current - 20 A



Dimensions in millimeters

Features
- Low power loss
- High efficiency
- Low forward voltage
- High current capability
- High surge capacity

Mechanical Data
- **Case:** TO-220F, molded plastic body
- **Terminals:** Solderable per MIL-STD-750, Method 2026
- **Polarity:** As marked
- **Mounting position:** Any

Maximum Ratings and Characteristics
Ratings at 25℃ ambient temperature unless otherwise specified.

Parameter		Symbols	MBRF2020CT	MBRF2040CT	MBRF2045CT	MBRF2060CT	MBRF2080CT	MBRF2090CT	MBRF20100CT	MBRF20150CT	MBRF20200CT	Units
		Marking	MBRF2020CT	MBRF2040CT	MBRF2045CT	MBRF2060CT	MBRF2080CT	MBRF2090CT	MBRF20100CT	MBRF20150CT	MBRF20200CT	-
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	20	40	45	60	80	90	100	150	200	V
Maximum Working Peak Reverse Voltage		V_{RWM}	14	26	31.5	42	56	63	70	105	140	V
Maximum DC Blocking Voltage		V_{DC}	20	40	45	60	80	90	100	150	200	V
Maximum Average Forward Rectified Current at T_C = 100℃		$I_{F(AV)}$	20									A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimpos on Rated Load ed		I_{FSM}	150							200		A
Maximum Forward Voltage per Leg	at I_F = 10 A	V_F	0.7			0.75	0.85			0.92		V
	at I_F = 20 A		0.75			0.85	0.95			-		
Maximum DC Reverse Current at Rated DC Blocking Voltage	at T_A = 25℃	I_R	0.5									mA
	at T_A = 100℃		50							100		
Maximun Junction Capacitance [1]		C_J	400							1100		pF
Operating Junction Temperature Range		T_j	- 50 to + 150									℃
Storage Temperature Range		T_{stg}	- 50 to + 150									℃

[1] Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

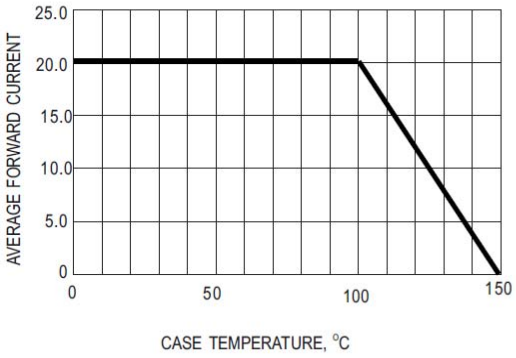


Fig.1- FORWARD CURRENT DERATING CURVE

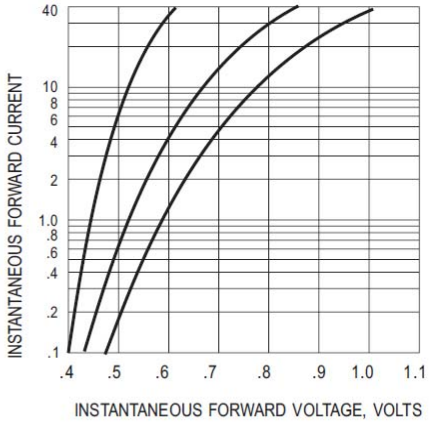


Fig.2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

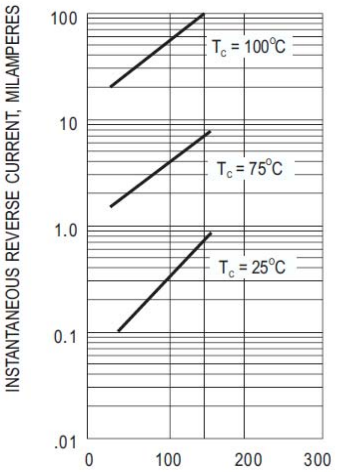


Fig.3- TYPICAL REVERSE CHARACTERISTIC

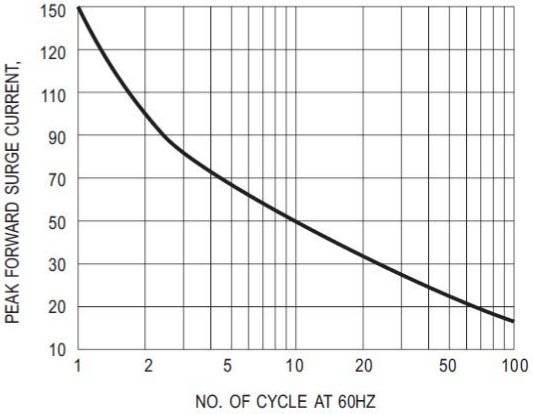


Fig.4- MAXIMUM NON-REPETITIVE SURGE CURRENT

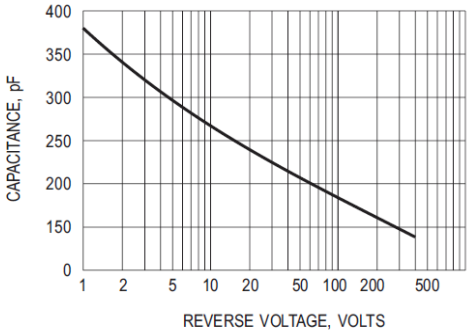


Fig.5- TYPICAL JUNCTION CAPACITANCE