

MBRF2020CT THRU MBRF20100CT

Schottky Barrier Rectifier
Reverse Voltage - 20 to 100 V
Forward Current - 20 A

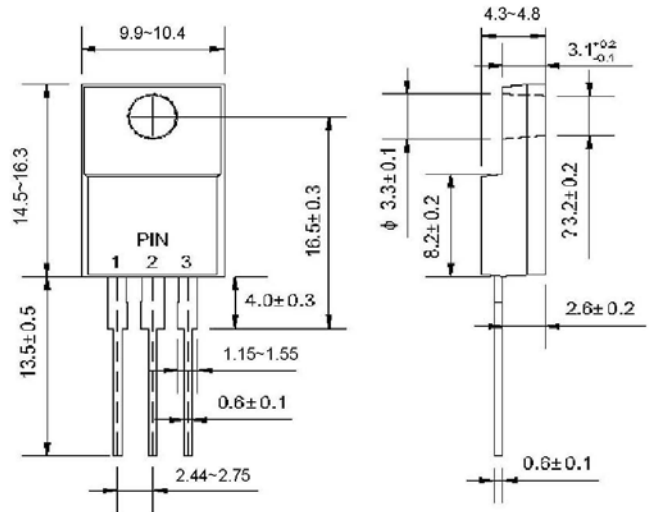
ITO-220AB

Features

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

Mechanical Data

- **Case:** ITO-220AB, molded plastic body
- **Terminals:** Solderable per MIL-STD-750, Method 2026
- **Polarity:** As marked
- **Mounting position:** Any

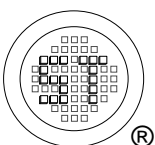


Dimensions in millimeters

Maximum Ratings and Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbols	MBRF20	MBRF20	MBRF20	MBRF20	MBRF20	MBRF20	MBRF20	Units
		20CT	40CT	45CT	60CT	80CT	90CT	100CT	
	Marking	MBRF20	MBRF20	MBRF20	MBRF20	MBRF20	MBRF20	MBRF20	-
		20CT	40CT	45CT	60CT	80CT	90CT	100CT	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	40	45	60	80	90	100	V
Maximum Working Peak Reverse Voltage	V_{RWM}	14	26	31.5	42	56	63	70	V
Maximum DC Blocking Voltage	V_{DC}	20	40	45	60	80	90	100	V
Maximum Average Forward Rectified Current at $T_C = 100^\circ\text{C}$	$I_{F(AV)}$	20							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	150							A
Maximum Forward Voltage per Leg	V_F	at $I_F = 10\text{ A}$		-	-	0.8		V	
		at $I_F = 20\text{ A}$		0.65	0.85	0.95			
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	at $T_A = 25^\circ\text{C}$		0.5				mA	
		at $T_A = 100^\circ\text{C}$		50					
Maximum Junction Capacitance	C_J	400							pF
Operating Junction Temperature Range	T_j	- 50 to + 150							°C
Storage Temperature Range	T_{stg}	- 50 to + 150							°C



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Dated: 23/02/2016 TL Rev: 01

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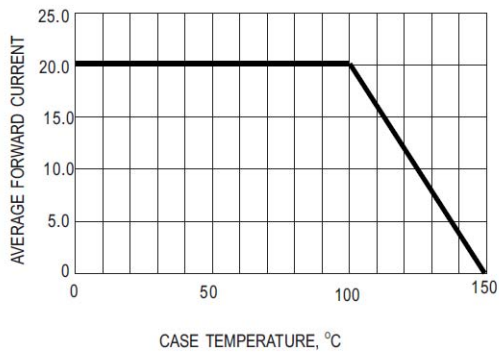


Fig.1- FORWARD CURRENT DERATING CURVE

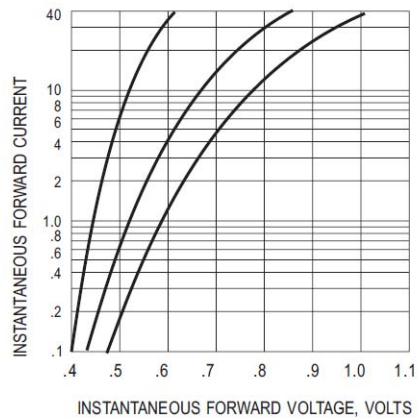


Fig.2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

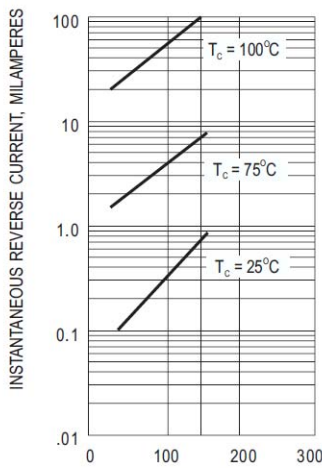


Fig.3- TYPICAL REVERSE CHARACTERISTIC

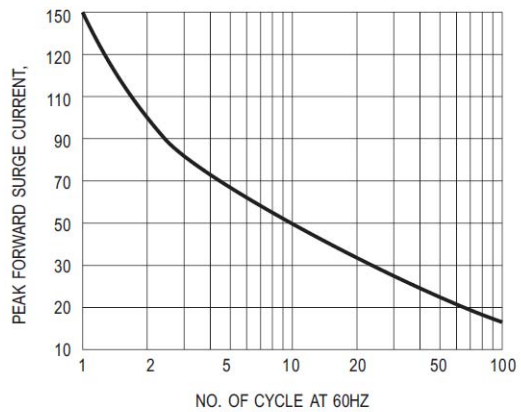


Fig.4- MAXIMUM NON-REPETITIVE SURGE CURRENT

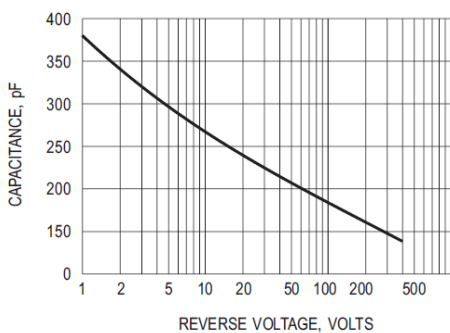
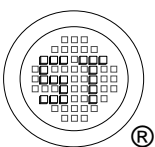


Fig.5- TYPICAL JUNCTION CAPACITANCE



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