

MBR2035CT - MBR20200CT

20.0 AMPS. Schottky Barrier Rectifiers

TO-220AB



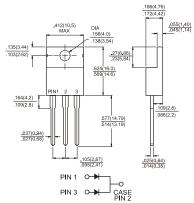


Features

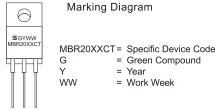
- UL Recognized File # E-326243
- Plastic material used carries Underwriters Laboratory Classifications 94V-0
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- High current capability, low forward voltage drop
- High surge capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- Guardring for overvoltage protection
- High temperature soldering guaranteed: 260°C/10 seconds,0.25"(6.35mm)from case
- Green compound with suffix "G" on packing code & prefix "G" on datecode.

Mechanical Data

- Cases: JEDEC TO-220AB molded plastic Terminals: Pure tin plated, lead free. solderable per MIL-STD-750, Method 2026 Polarity: As marked Mounting position: Any Mounting torque: 5 in. Ibs. max Weight: 1.71 grams



Dimensions in inches and (millimeters)



Maximum Ratings and Electrical Characteristics Rating at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Type Number	Symbol	MBR 2035 CT	MBR 2045 CT	MBR 2050 CT	MBR 2060 CT	MBR 2090 CT	MBR 20100 CT	MBR 20150 CT	MBR 20200 CT	Units
Maximum Recurrent Peak Reverse Voltage	VRRM	35	45	50	60	90	100	150	200	V
Maximum RMS Voltage	VRMS	24	31	35	42	63	70	105	140	V
Maximum DC Blocking Voltage	VDC	35	45	50	60	90	100	150	200	V
Maximum Average Forward Rectified Current at T _C =135°C	IF(AV)	20								А
Peak Repetitive Forward Current (Rated V _R , Square Wave, 20KHz) at Tc=135°C	IFRM	20								А
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	IFSM	150								А
Peak Repetitive Reverse Surge Current (Note 2)	IRRM	1.0 0.5							Α	
Maximum Instantaneous Forward Voltage at IF=10A, TA=25°C IF=10A, TA=125°C IF=20A, TA=25°C IF=20A, TA=25°C	VF	0.	 57 84 72	0. 0.	80 70 95 85	0. 0.	85 75 95 85	5 0.87 5 1.23		V
Maximum Instantaneous Reverse Current at Rated DC Blocking Voltage @ TA=25°C	l _R	0.1							mA mA	
(Note1) @ T _A =125°C		1	5	1	0		5.0		0.15	
Voltage Rate of Change, (Rated V _R)	dV/dt	10,000							V/uS	
Typical Junction Capacitance	Cj	400 320						pF		
Typical Thermal Resistance Per Leg (Note 3)	Rejc	1.0 2.0					°C/W			
Operating Junction Temperature Range	Тл	-65 to +150							°C	
Storage Temperature Range	TSTG	-65 to +175								°C

Notes: 1. Pulse Test: 300us Pulse Width, 1% Duty Cycle

- 2. 2.0us Pulse Width, f=1.0 KHz 3. Mount on Heatsink Size of (4"x6"x0.25") Al-Plate.

Version: F10



RATINGS AND CHARACTERISTIC CURVES (MBR2035CT THRU MBR20200CT)

