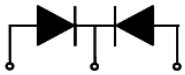
MBR20200CT
Schottky Barrier Rectifier

Features

- Plastic package has underwriters Laboratory Flammability Classification 94V-0
- Dual rectifier construction, positive center tap
- Low forward voltage,chigh efficiency
- Guarding for over voltage protection
- For use in low voltage, high frequency inverters
- Free wheeling and polarity protection applications

CASE:TO-220-AB



1. Anode 2.Cathode 3. Anode

Mechanical Characteristics

- Case：Epoxy, Molded
- Weight: 1.9 grams (approximately)
- Finish：All external surfaces corrosion resistant and terminal leads are solderable
- Lead temperature for soldering purposes：260°C Max. for 10 sec
- Shipped 50 units per plastic tube

Maximum Ratings and Electrical Characteristics (TC=25°C unless otherwise Noted)

PARAMETER	TEST CONDITIONS		SYMBOL	MBR20200CT	UNIT
Maximum repetitive peak reverse voltage			V_{RRM}	200	V
Working peak reverse voltage			V_{RWM}	200	V
Maximum DC blocking voltage			V_{DC}	200	V
Maximum average forward rectified current at Tc=105°C total device per diode			$I_{F(AV)}$	20 10	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load per diode			I_{FSM}	200	A
Peak repetitive reverse current per leg at tp=2.0us ， 1KHz			I_{RRM}	1.0	A
Voltage rate of change（rated VR）			DV/dt	10000	V/us
Operating junction temperature range			T_J	-55 to+150	°C
Storage temperature range			T_{STG}	-55 to+150	°C
Isolation voltage (TO220F-AB only) from terminal to heatsink t = 1 sec			V_{AC}	1500	V
Maximum instantaneous forward voltage per leg	I_F=10A I_F=10A	T_C=25℃ T_C=125℃	V_F	0.94 0.85	V
Maximum reverse current per leg at working peak Reverse voltage		T_J=25℃ T_J=100°C	I_R	200 15	uA mA

Thermal Characteristics Ta=25℃ unless otherwise noted

Symbol	Parameter	Max	Unit
$R_{\theta JC}$	Thermal Resistance，Junction to Case per Leg	2.0	°C /W
$R_{\theta JA}$	Thermal Resistance，Junction to Ambient per Leg	62.5	°C /W

Note：

1. Screw mounting with 4-40 screw，where washer diameteris≤4.9mm(0.19〃)
2. Pulse test:300us pulse width,1% duty cycle

Rating and Characteristic Curves (Tc=25℃ Unless otherwise noted)

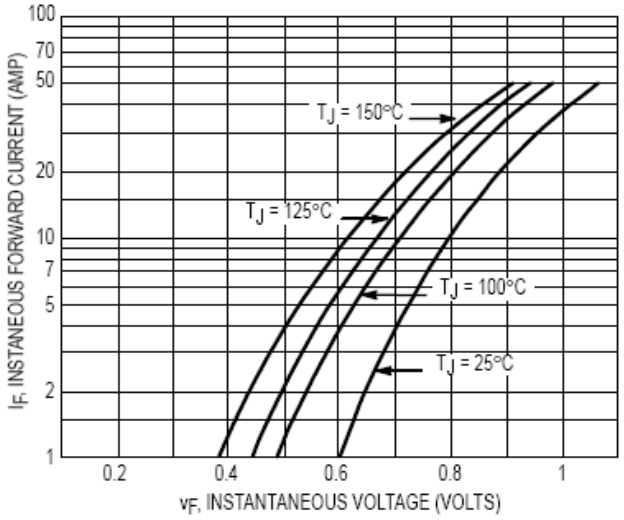


Figure 1. Typical Forward Voltage (Per Leg)

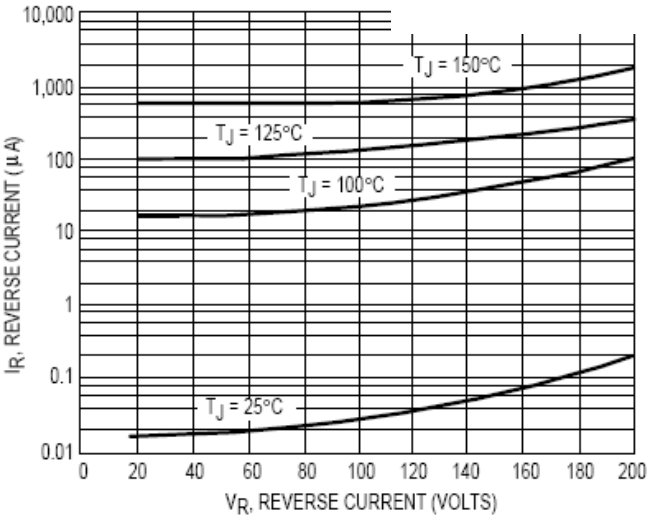


Figure 2. Typical Reverse Current (Per Leg)

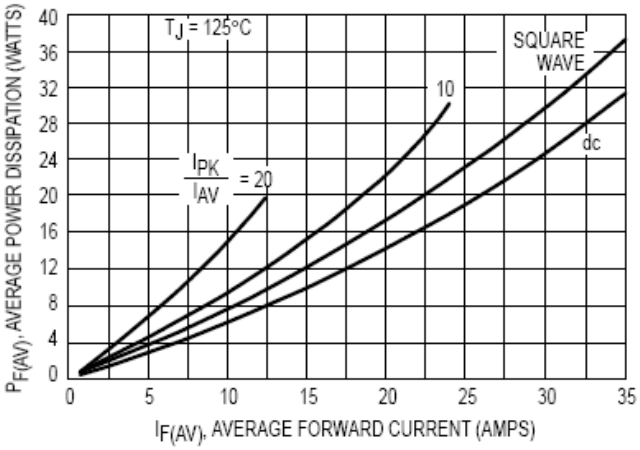


Figure 3. Forward Power Dissipation

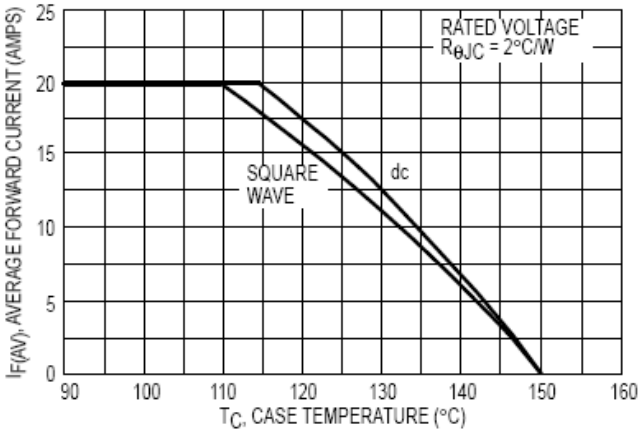


Figure 4. Current Derating, Case

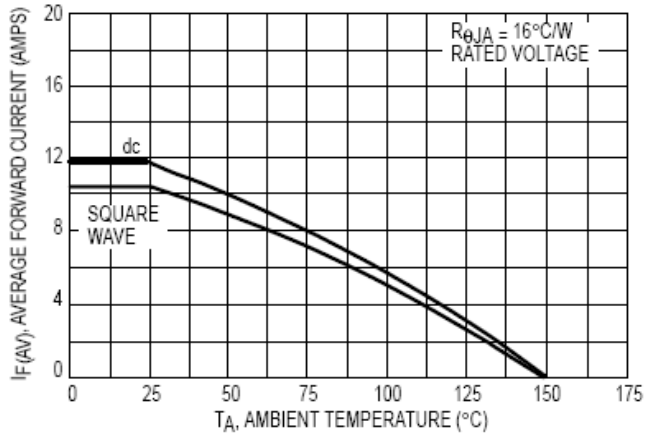


Figure 5. Current Derating, Ambient

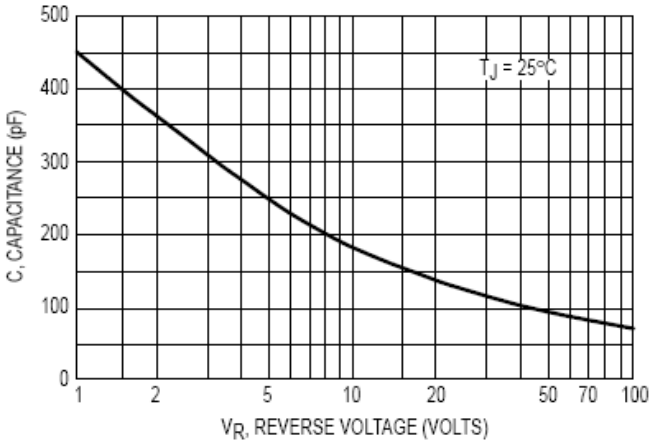
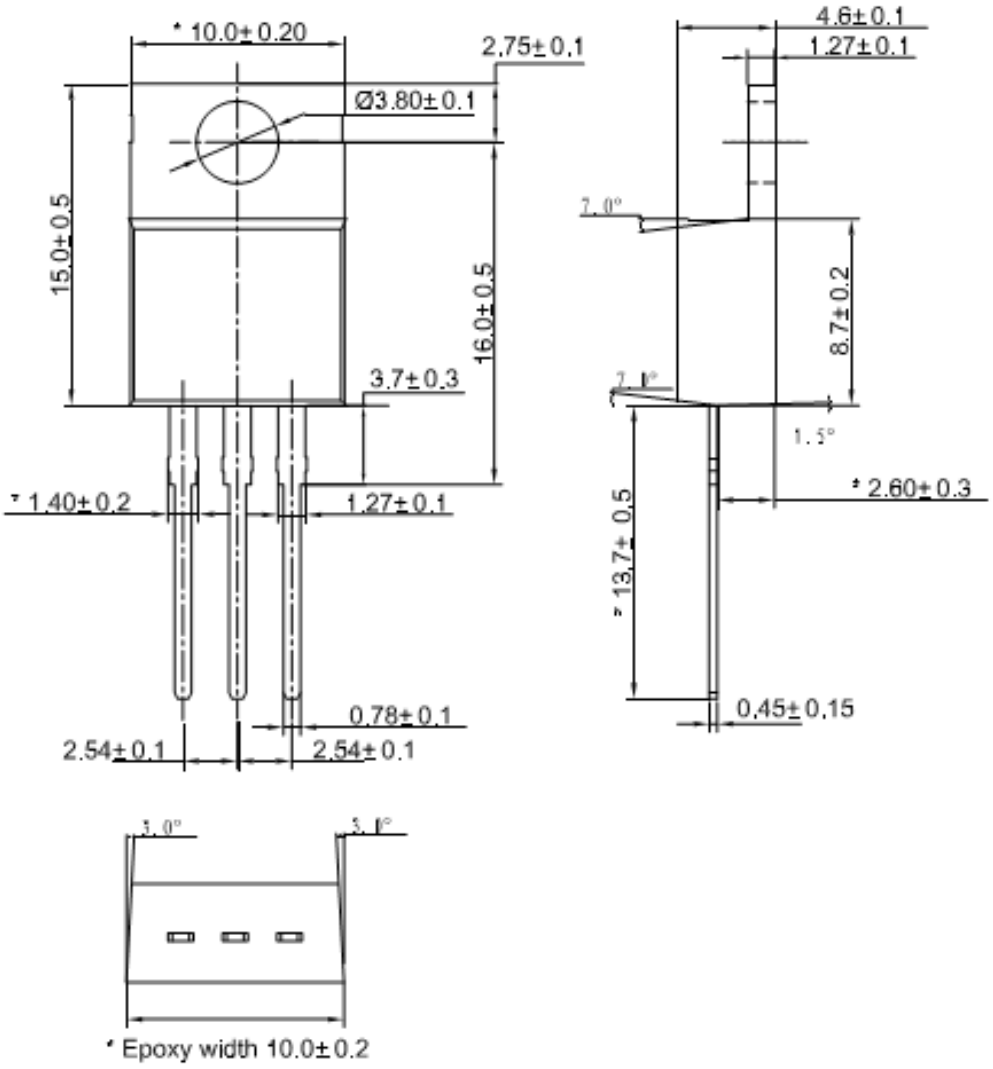


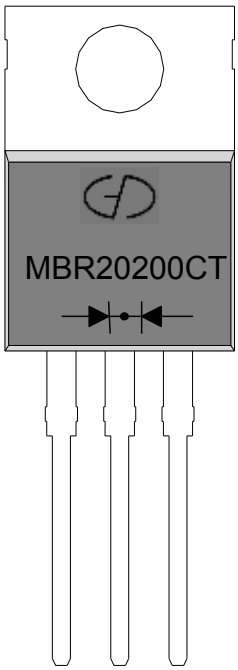
Figure 6. Typical Capacitance (Per Leg)

Package Outline (TO-220-AB) **U N I T : M M**



Lead Frame Material : Copper Plating: Pure Tin Plating

Marking



1. Part Name : MBR20200CT
2. Logo Mark:
3. Polarity：