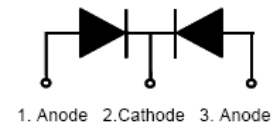
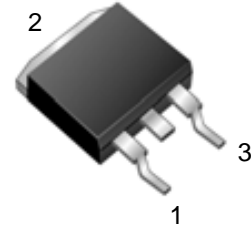


Dual Schottky Barrier Rectifier
Reverse Voltage 200 Volts , Forward Current 20A

Features

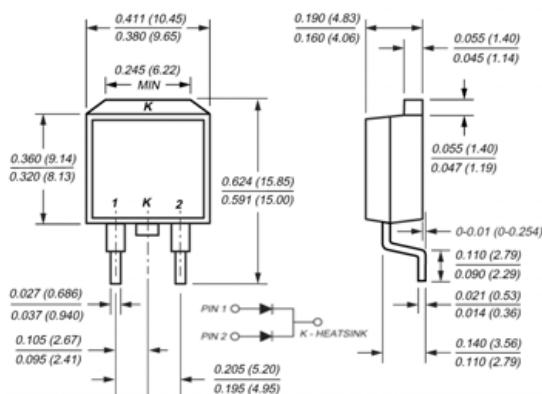
- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ◆ Dual rectifier construction, positive center tap
- ◆ Metal silicon junction, majority carrier conduction
- ◆ Low power loss, high efficiency
- ◆ Guardring for overvoltage protection
- ◆ For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- ◆ High temperature soldering guaranteed:
250°C/10 seconds, 0.25" (6.35mm) from case



Mechanical Data

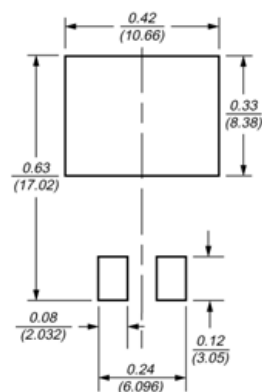
- ◆ Case: JEDEC TO-220AB, TO-220F molded plastic body
- ◆ Terminals: Plated leads, solderable per MIL-STD-750, Method 2026
- ◆ Polarity: As marked
- ◆ Mounting Position: Any
- ◆ Mounting Torque: 10 in-lbs maximum
- ◆ Weight: 0.08 ounce, 2.24 grams

TO-263



Dimensions in inches and (millimeters)

Mounting Pad Layout TO-263





Maximum Ratings and Electrical Characteristics

($T_c = 25^\circ\text{C}$ unless otherwise noted)

MAXIMUM RATINGS and ELECTRICAL CHARACTERISTICS($T_C=25^\circ\text{C}$ unless otherwise moted)					
PARAMETER	TEST CONDITIONS		SYMBOL	MBRB20200CT	UNIT
Maximum repetitive peak reverse voltage			VRRM	200	V
Working peak reverse voltage			VRWM	200	V
Maximum DC blocking voltage			VDC	200	V
Maximum average forward rectified current at $T_c=105^\circ\text{C}$ total device per diode			IF(AV)	20 10	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load per diode			IFSM	150	A
Peak repetitive reverse current per leg at $t_p=2.0\mu\text{s}$, 1KHz			IRRM	1.0	A
Voltage rate of change (rated VR)			DV/dt	10000	V/us
Operating junction temperature range			TJ	-55 to+150	$^\circ\text{C}$
Storage temperature range			TSTG	-55 to+150	$^\circ\text{C}$
Isolation voltage (TO220F-AB only) from terminal to heatsink $t = 1$ sec			VAC	1500	V
Maximum instantaneous forward voltage per leg	IF=10A IF=10A	TC=25 $^\circ\text{C}$ TC=125 $^\circ\text{C}$	VF	0.94 0.85	V
Maximum reverse current per leg at working peak Reverse voltage	TJ=25 $^\circ\text{C}$ TJ=100 $^\circ\text{C}$		IR	400 15	μA mA

Thermal Characteristics $T_a=25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Max	Unit
R θ JC	Thermal Resistance, Junction to Case per Leg	4.0	$^\circ\text{C}/\text{W}$
R θ JA	Thermal Resistance, Junction to Ambient per Leg	62.5	$^\circ\text{C}/\text{W}$

Note:

1. Screw mounting with 4-40 screw, where washer diameter is $\leq 4.9\text{mm}$ (0.19 ")
2. Pulse test: 300 μs pulse width, 1% duty cycle



MBRB20200CT

RATINGS AND CHARACTERISTIC CURVES

($T_A = 25^\circ\text{C}$ unless otherwise noted)

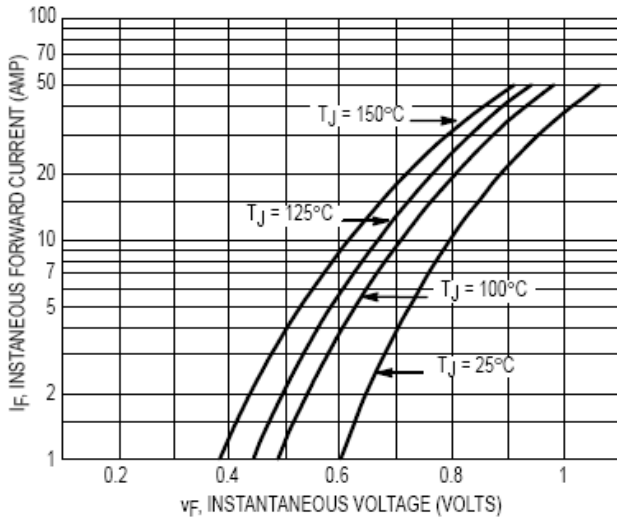


Figure 1. Typical Forward Voltage (Per Leg)

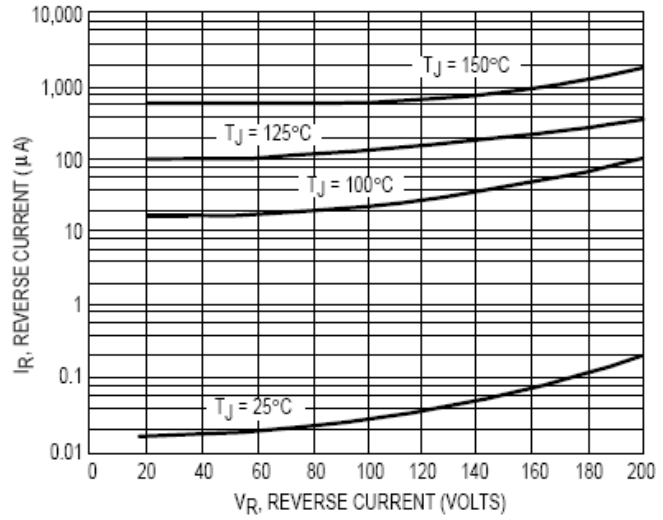


Figure 2. Typical Reverse Current (Per Leg)

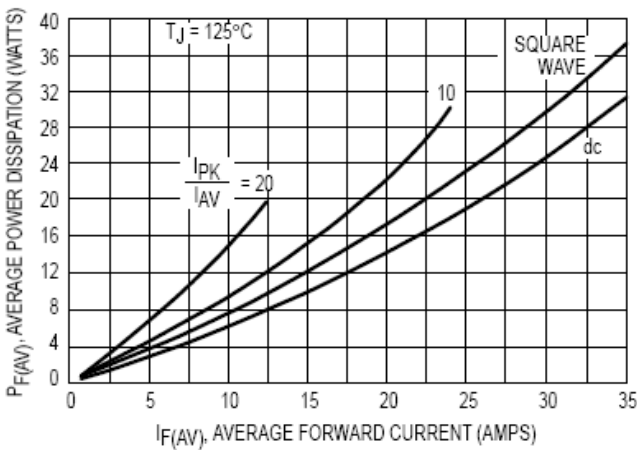


Figure 3. Forward Power Dissipation

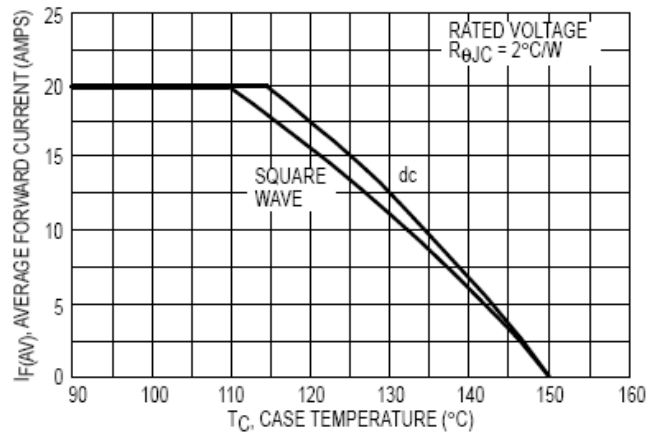


Figure 4. Current Derating, Case

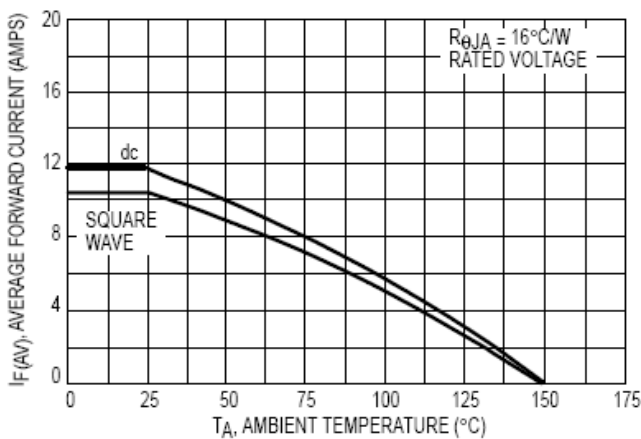


Figure 5. Current Derating, Ambient

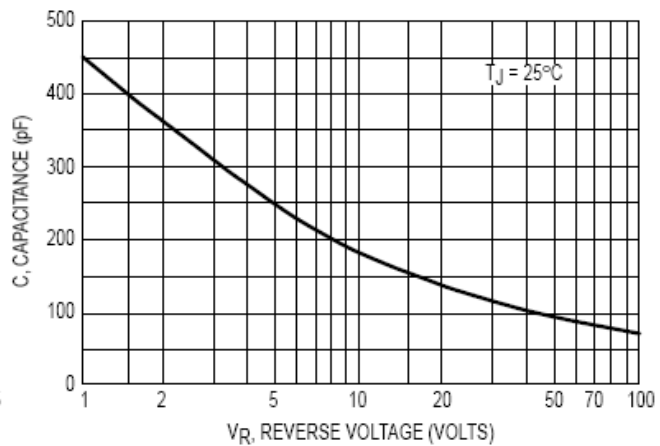


Figure 6. Typical Capacitance (Per Leg)