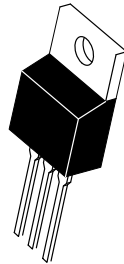




# MBR2020CT THRU MBR20200CT

## 20.0 AMP SCHOTTKY BARRIER RECTIFIERS



### FEATURES

- \* Low forward voltage drop
- \* High current capability
- \* High reliability
- \* High surge current capability
- \* Good for switching mode application

### MECHANICAL DATA

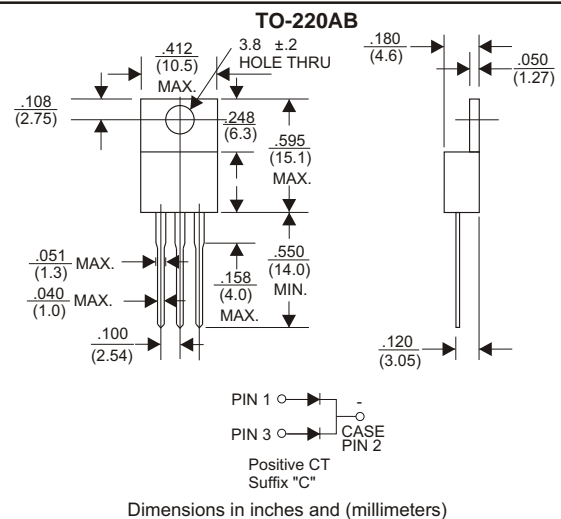
- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: Lead solderable per MIL-STD-202, method 208 guaranteed
- \* Polarity: As Marked
- \* Mounting position: Any

### VOLTAGE RANGE

20 to 200 Volts

### CURRENT

20.0 Amperes



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwise specified.  
Single phase half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

TYPE NUMBER	MBR2020CT	MBR2045CT	MBR2060CT	MBR2080CT	MBR20100CT	MBR20150CT	MBR20200CT	UNITS	
Maximum Recurrent Peak Reverse Voltage	20	45	60	80	100	150	200	V	
Maximum RMS Voltage	14	32	42	56	70	105	140	V	
Maximum DC Blocking Voltage	20	45	60	80	100	150	200	V	
Maximum Average Forward Rectified Current									
at T <sub>c</sub> =125°C								20	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)								200	A
Maximum Instantaneous Forward Voltage at 20A	0.55	0.7	0.85	0.92				V	
Maximum DC Reverse Current				0.2				mA	
at Rated DC Blocking Voltage				50				mA	
Typical Junction Capacitance (Note1)								500	pF
Typical Thermal Resistance R <sub>θJC</sub> (Note 2)								2.5	°C/W
Operating Temperature Range T <sub>j</sub>								-65 — +150	°C
Storage Temperature Range T <sub>stg</sub>								-65 — +150	°C

#### NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Case.

## RATING AND CHARACTERISTIC CURVES (MBR2020CT THRU MBR20200CT)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

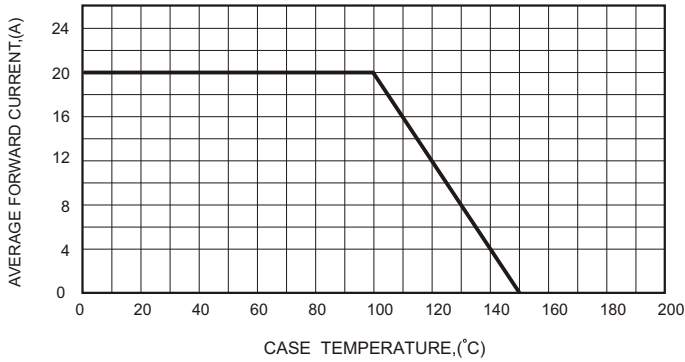


FIG.2-TYPICAL FORWARD CHARACTERISTICS

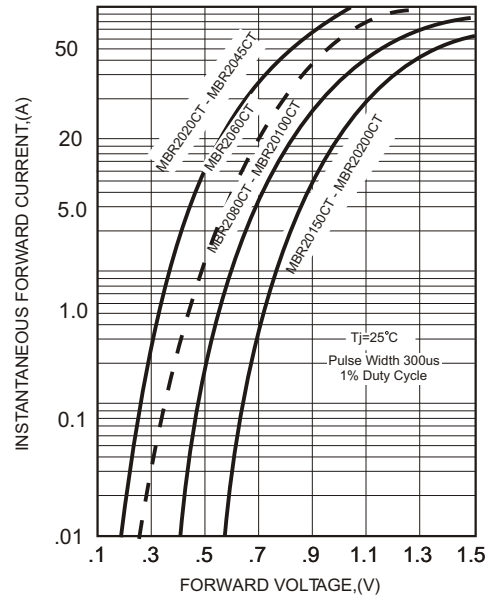


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

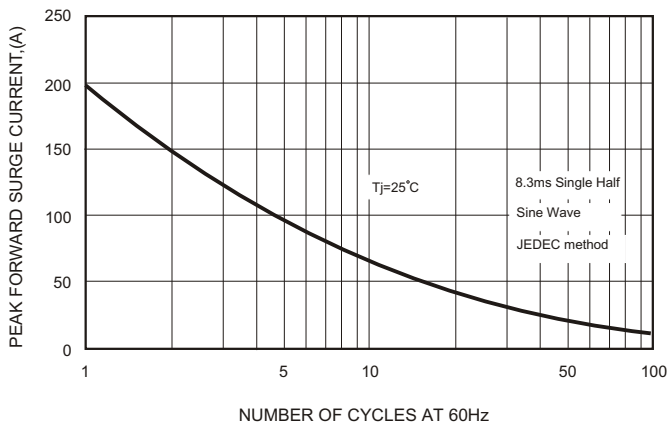


FIG.4-TYPICAL JUNCTION CAPACITANCE

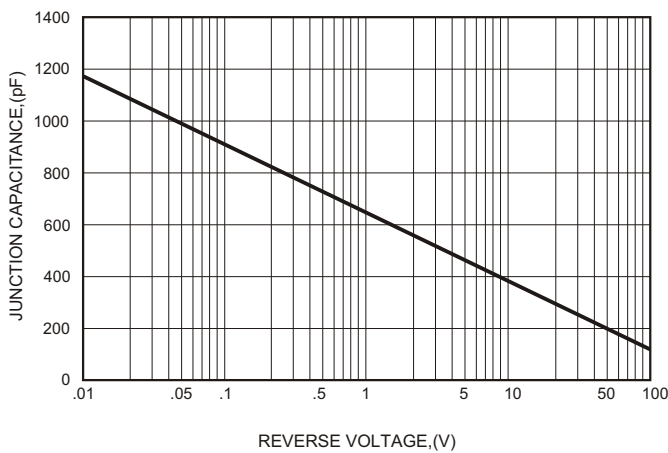


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

