

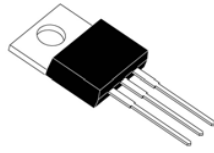


MBR2060LCT THRU MBR20100LCT

20.0 A Schottky Barrier Rectifier

Features

- ✧ Low power loss, high efficiency
- ✧ High current capability, low forward voltage drop
- ✧ Plastic material used carriers Underwriters Laboratory Classification 94V-0
- ✧ High surge current capability
- ✧ Guard-ring for overvoltage protection
- ✧ For use in low voltage - high frequency inverter, free wheeling, and polarity protection application



Mechanical Data

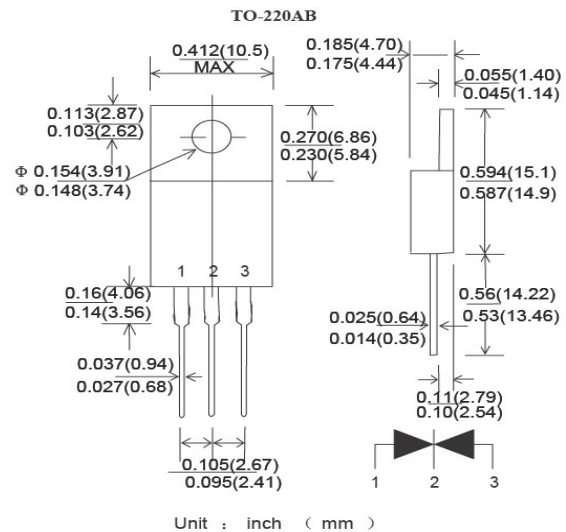
- ✧ Terminals: Pure tin plated leads, solderable per MIL-STD-202, Method 208 guaranteed
- ✧ Polarity: As marked
- ✧ Mounting position: Any
- ✧ Mounting torque: 5 in- lbs, max
- ✧ Weight: 1.92 grams

VOLTAGE RANGE

60 to 100 Volts

CURRENT

20.0 Ampere



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 2060LCT	MBR 20100LCT	Unit
Maximum Repetitive Peak Reverse Voltage	VRRM	60	100	V
Maximum RMS Voltage	VRMS	42	70	V
Maximum DC Blocking Voltage	VDC	60	100	V
Maximum Average Forward Rectified Current	IF	20		A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	IFSM	120		A
Maximum Instantaneous Forward Voltage @10A	VF	0.6	0.75	V
Maximum Reverse Current @ Rated VR TA=25 °C TA=125 °C	IR	100 1500		uA
Typical Junction Capacitance (Note 1)	Cj	320		pF
Typical Thermal Resistance(Note 2)	RθJA	30		°C/w
Operating and Storage Temperature Range	TJ	-65--+150		°C

NOTE1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

NOTE2. Leads maintained at ambient temperature at a distance of 9.5mm from the case

RATING AND CHARACTERISTIC CURVES

MBR2060LCT thru MBR20100LCT



FIG. 1 – FORWARD CURRENT DERATING CURVE

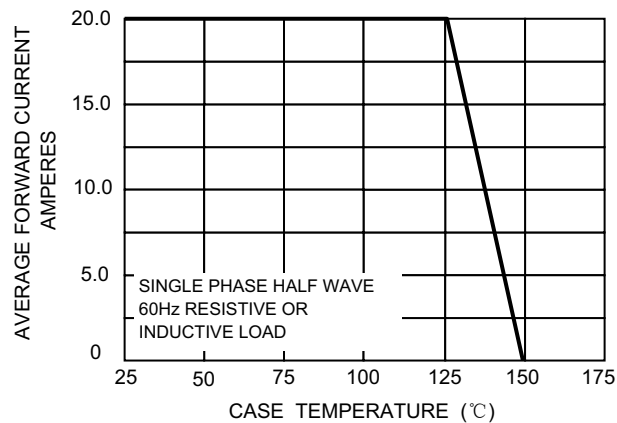


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

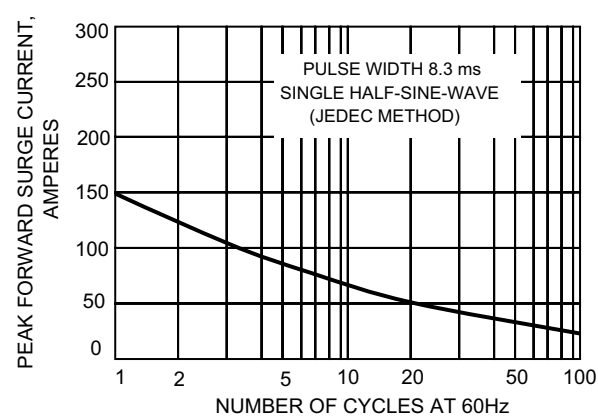


FIG.3-TYPICAL REVERSE CHARACTERISTICS

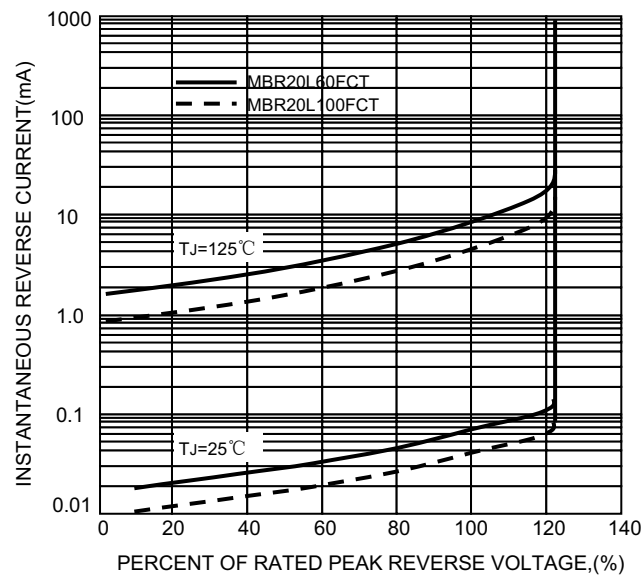


FIG.4-TYPICAL FORWARD CHARACTERISTICS

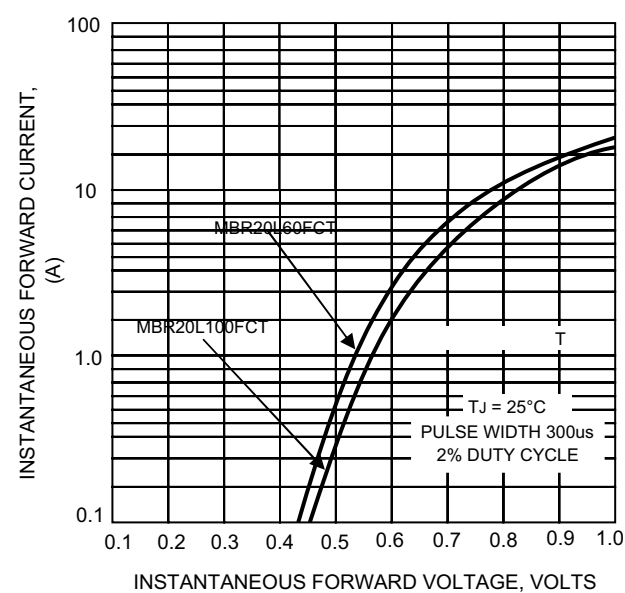


FIG.5 – TYPICAL JUNCTION CAPACITANCE

