



MBR1535CT THRU MBR15150CT

**15AMPS. SCHOTTKY
BARRIER RECTIFIER**

**Voltage Range
35 to 150 Volts
Current
15 Amperes**

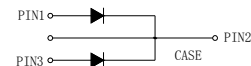
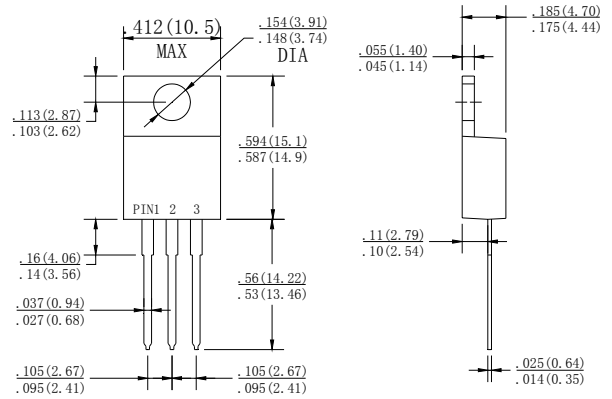
Features

- 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

Mechanical Data

- Cases: JEDEC TO-220AB molded plastic body
- Terminals: Pure tin plated, lead free. solderable per MIL-STD-750, Method 2026
- Polarity: As marked
- Mounting position: Any
- Mounting torque: 5 in. - lbs. max
- Weight: 0.08 ounce, 2.24 grams

TO-220AB



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 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		MBR 1535 CT	MBR 1545 CT	MBR 1550 CT	MBR 1560 CT	MBR 1590 CT	MBR 15100 CT	MBR 15150 CT	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	35	45	50	60	90	100	150	V
Maximum RMS Voltage	V _{RMS}	24	31	35	42	63	70	105	V
Maximum DC Blocking Voltage	V _{DC}	35	45	50	60	90	100	150	V
Maximum Average Forward Rectified Current at @ TC = 105°C	I _O	15							A
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	150							A
Forward Voltage Drop @ I _F = 7.5 A, TC = 25°C @ I _F = 7.5 A, TC = 125°C @ I _F = 15 A, TC = 25°C @ I _F = 15 A, TC = 125°C	V _{FM}	0.67 0.57 0.84 0.72		0.75 0.65 0.92 0.80		0.92 0.82 1.09 0.97		1.05 0.92 1.22 1.10	V
Peak Reverse Current @ TC = 25°C at Rated DC Blocking Voltage @ TC = 125°C	I _{RM}	0.5 15.0		0.3 7.5		0.1 5.0			mA
Typical Thermal Resistance Junction to Case (Note)	R _θ JA R _θ Jc	10 1.5							°C/W
Operating Junction Temperature Range	T _J	-65 to +150							°C
Storage Temperature Range	T _{STG}	-65 to +175							°C

NOTE: Mount on Heatsink Size of 2" x 3" x 0.25" Al-Plate.

RATING AND CHARACTERISTIC CURVES MBR1535CT THRU MBR15150CT



FIG.1-MAXIMUM NONO-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMMENT

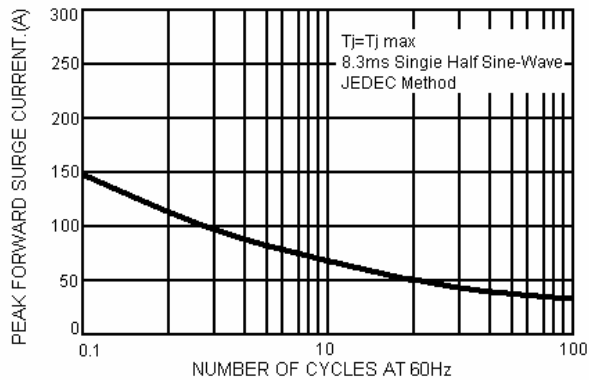


FIG.2-MAXIMUM FORWARD CURRENT DERATING CURVE

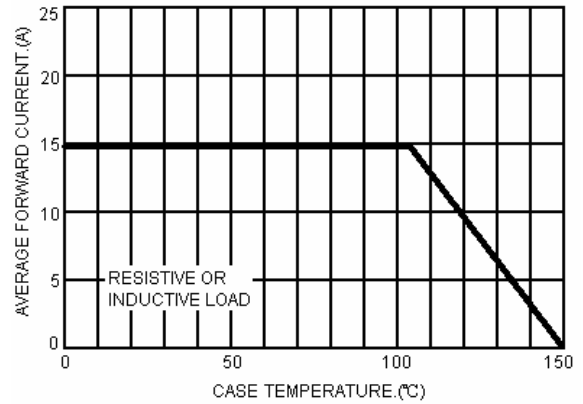


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

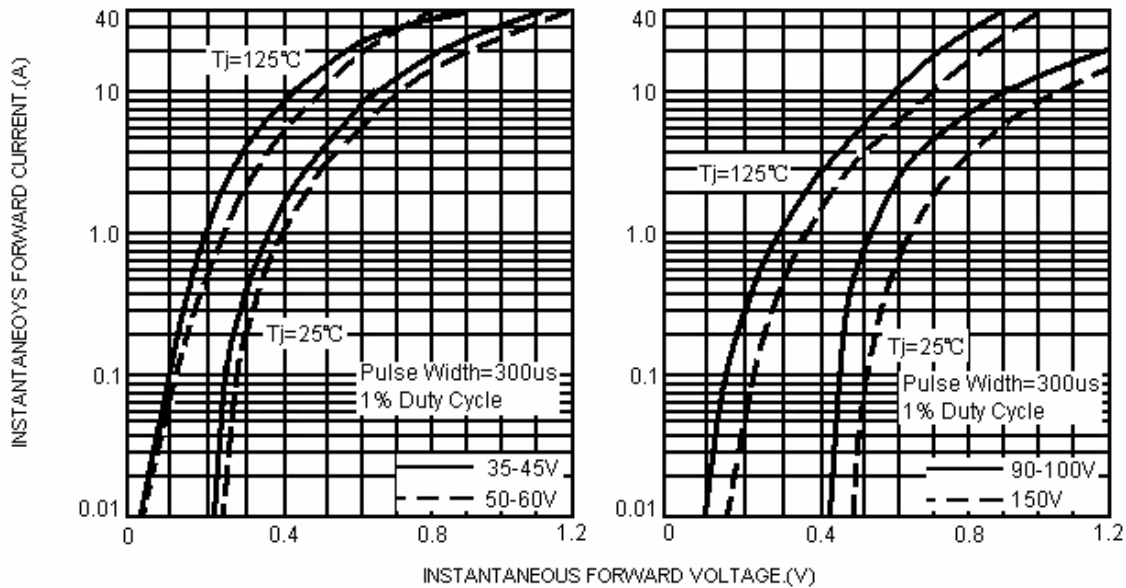


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

