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MBR1535CT THRU MBR15200CT 15.0 A Schottky Barrier Rectifier

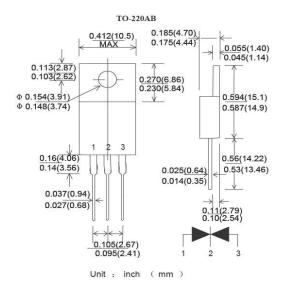
## **FEATURES**

- \* Low forward voltage drop
- \* High current capability
- \* High reliability
- \* Low Power Loss, High Efficiency

### **MECHANICAL DATA**

- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: Axial leads, solderable per MIL-STD-202, method 208 guranteed
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any
- \* Weight: 1.98 grams

### VOLTAGE RANGE 35 to 200 Volts CURRENT 15.0 Ampere



# **Maximum Ratings and Electrical Characteristics**

- \* Rating at 25  $^\circ\!\!\mathbb{C}$  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 1535 CT	MBR 1545 CT	MBR 1550 CT	MBR 1560 CT	MBR 1590 CT	MBR 15100 CT	MBR 15150 CT	MBR 15200 CT	Unit
Maximum Repetitive Peak Reverse Voltage	VRRM	35	45	50	60	90	100	150	200	V
Maximum RMS Voltage	VRMS	24	31	35	42	63	70	105	140	V
Maximum DC Blocking Voltage	VDC	35	45	50	60	90	100	150	200	V
Maximum Average Forward Rectified Current	IF	15								А
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	IFSM	125								A
Maximum Instantaneous Forward Voltage @7.5A	VF	0.75		0.	85 0		.9 0.		95	V
Maximum Reverse Current @ Rated VR TA=25 ℃ TA=125℃	IR	300 1500								uA
Typical Junction Capacitance (Note 1)	Cj	150								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



0.1

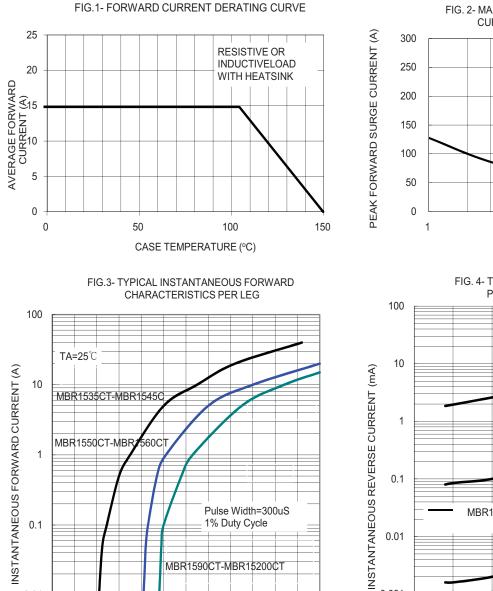
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# MBR1535CT THRU MBR15200CT 15.0 A Schottky Barrier Rectifier RATINGS AND CHARACTERISTIC CURVES (MBR1535CT THRU MBR15200CT)



Pulse Width=300uS

1

1.1 1.2

0.01

0.001

0

20

40

60

80

PERCENT OF RATED PEAK REVERSE VOLTAGE (%)

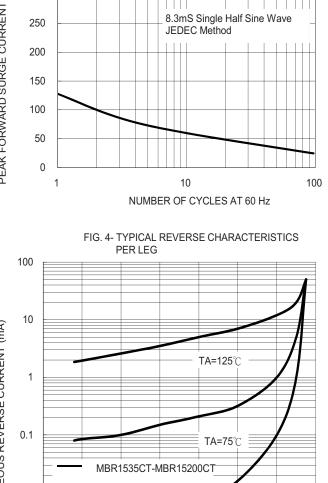
1% Duty Cycle

MBR1590CT-MBR15200CT

0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9

FORWARD VOLTAGE (V)

#### FIG. 2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG



TA=25℃

100

120

140