

## **Schottky Barrier Rectifier**

## INCHANGE SEMICONDUCTOR

## **MBR1635CT**

### FEATURES

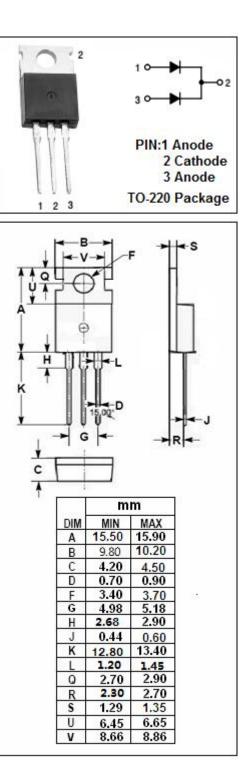
- Low Forward Voltage
- 150℃ Operating Junction Temperature
- Guaranteed Reverse Avalanche
- Low Power Loss/High Efficiency
- High Surge Capacity
- Low Stored Charge Majority Carrier Conduction
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

### **MECHANICAL CHARACTERISTICS**

- · Case: Epoxy, Molded
- Finish: All External Surfaces Corrosion Resistant and Terminal Leads are Readily Solderable
- Lead Temperature for Soldering Purposes: 260  $^\circ\!\mathrm{C}$  Max. for 10 Seconds

### ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>RRM</sub> V <sub>RMS</sub> V <sub>R</sub>	Peak Repetitive Reverse Voltage RMS Voltage DC Blocking Voltage	35 24.5 35	V
IF(AV)	Average Rectified Forward Current (Rated V <sub>R</sub> ) T <sub>C</sub> = 100 $^{\circ}$ C	16	A
IFSM	Nonrepetitive Peak Surge Current 8.3ms single half sine-wave superimposed on rated load conditions		
I <sub>RRM</sub>	Peak Repetitive Reverse Current (2.0 μ s, 1.0kHz)	0.5	
TJ	Junction Temperature	-55~150	°C
T <sub>stg</sub>	Storage Temperature Range	-55~175	°C



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#### THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	МАХ	UNIT
Rth j-c	Thermal Resistance, Junction to Case	2.0	°C/W

#### **ELECTRICAL CHARACTERISTICS**(Pulse Test: Pulse Width=300 $\mu$ s,Duty Cycle $\leq$ 2%)

SYMBOL	PARAMETER	CONDITIONS	МАХ	UNIT
VF	Maximum Instantaneous Forward Voltage	I <sub>F</sub> = 8A ; T <sub>C</sub> = 25℃ I <sub>F</sub> = 8A ; T <sub>C</sub> = 125℃	0.70 0.57	V
IR	Maximum Instantaneous Reverse Current	Rated DC Voltage, T <sub>C</sub> = 25 $^\circ\!\mathrm{C}$ Rated DC Voltage, T <sub>C</sub> = 100 $^\circ\!\mathrm{C}$	0.1 50	mA

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