

# **Schottky Barrier Rectifier**

## INCHANGE SEMICONDUCTOR

# **MBR3035CT**

#### FEATURES

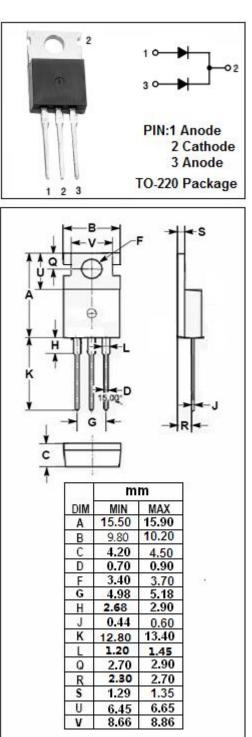
- Schottky Barrier Chip
- Dual Rectifier Conduction, Positive Center Tap
- Low Power Loss/High Efficiency
- High Current Capability, Low Forward Voltage Drop
- High Surge Capacity
- Guarding for Overvoltage protection
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

#### APPLICATIONS

• Designed for low-voltage, high frequency inverters, free wheeling and polarrity protection applications.

#### ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
Vrrm Vrwm Vr	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	35	V
V <sub>R(RMS</sub> )	RMS Reverse Voltage	24.5	V
I <sub>F(AV)</sub>	Average Rectified Forward Current (Rated V <sub>R</sub> ) T <sub>C</sub> = 100 $^{\circ}$ C		A
IFSM	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half- wave, single phase, 60Hz)	200	А
TJ	T <sub>J</sub> Junction Temperature -5		°C
T <sub>stg</sub>	Storage Temperature Range	-55~175	
dv/dt	dv/dt Voltage Rate of Change (Rated V <sub>R</sub> )		<b>V</b> / µ <b>s</b>



## isc website: <u>www.iscsemi.com</u>\_\_\_\_

### <sup>1</sup> *isc & iscsemi* is registered trademark



## **Schottky Barrier Rectifier**

# **MBR3035CT**

## THERMAL CHARACTERISTICS

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

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

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
VF	Maximum Instantaneous Forward Voltage	I <sub>F</sub> = 15A ; T <sub>C</sub> = 25℃ I <sub>F</sub> = 30A ; T <sub>C</sub> = 25℃ I <sub>F</sub> = 30A ; T <sub>C</sub> = 125℃	0.70 0.84 0.72	V
I <sub>R</sub>	Maximum Instantaneous Reverse Current	Rated DC Voltage, T <sub>C</sub> = 25 $^{\circ}$ C Rated DC Voltage, T <sub>C</sub> = 125 $^{\circ}$ C	0.2 40	mA

## Notice:

ISC reserves the rights to make changes of the content herein the datasheet at any time without notification. The information contained herein is presented only as a guide for the applications of our products.

ISC products are intended for usage in general electronic equipment. The products are not designed for use in equipment which require specialized quality and/or reliability, or in equipment which could have applications in hazardous environments, aerospace industry, or medical field. Please contact us if you intend our products to be used in these special applications.

ISC makes no warranty or guarantee regarding the suitability of its products for any particular purpose, nor does ISC assume any liability arising from the application or use of any products, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages.