

**Schottky Barrier Rectifier**
**MBR20300C**
**FEATURES**

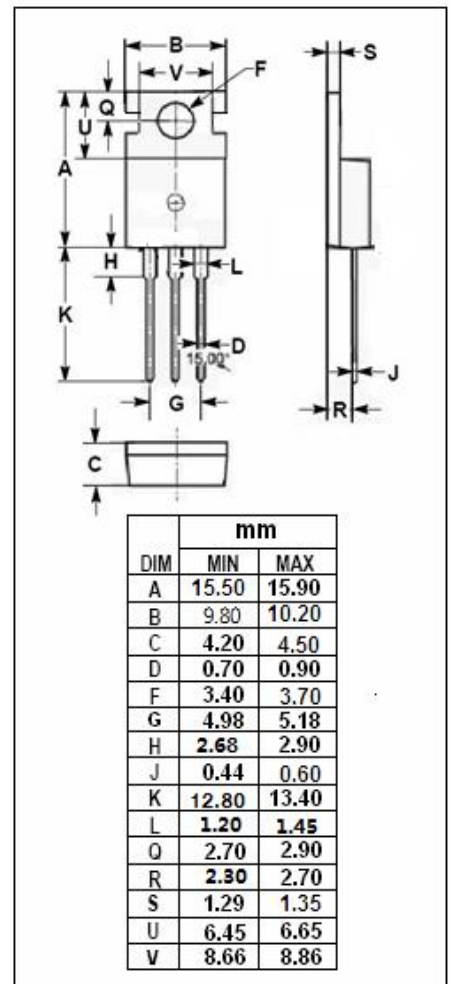
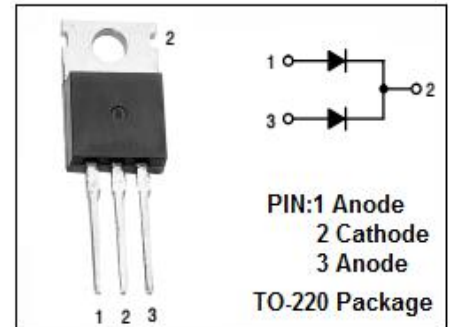
- Low leakage current
- Low forward voltage
- High surge current capability
- Low stored charge majority carrier conduction
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

- Switching power supply
- Converters
- Reverse battery protection

**ABSOLUTE MAXIMUM RATINGS (T<sub>a</sub>=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	300	V
I <sub>F(AV)</sub>	Average Rectified Forward Current @T <sub>c</sub> =125°C	20	A
I <sub>FSM</sub>	Nonrepetitive Peak Surge Current (60Hz half-sine wave )	180	A
T <sub>J</sub>	Junction Temperature	-65~150	°C
T <sub>stg</sub>	Storage Temperature Range	-65~150	°C



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**THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	3.0	$^{\circ}C/W$

**ELECTRICAL CHARACTERISTICS** (Pulse Test: Pulse Width=300  $\mu$  s, Duty Cycle  $\leq$  1%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
$V_F$	Maximum Instantaneous Forward Voltage	$I_F= 10A; T_C= 25^{\circ}C$ $I_F= 10A; T_C= 125^{\circ}C$	0.95 0.85	V
$I_R$	Maximum Instantaneous Reverse Current	$V_R= \text{rated } V_{RRM}; T_C= 25^{\circ}C$ $V_R= \text{rated } V_{RRM}; T_C= 125^{\circ}C$	0.5 3	$\mu A$ mA

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