

Schottky Barrier Rectifier

INCHANGE SEMICONDUCTOR

MBR30100

FEATURES

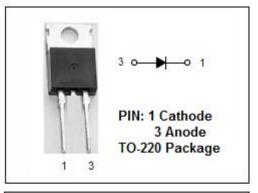
- Dual Rectifier Conduction, Positive Center Tap
- Low Power Loss/High Efficiency
- High Current Capability, Low Forward Voltage Drop
- · High Surge Capacity
- Guarding for Overvoltage protection
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

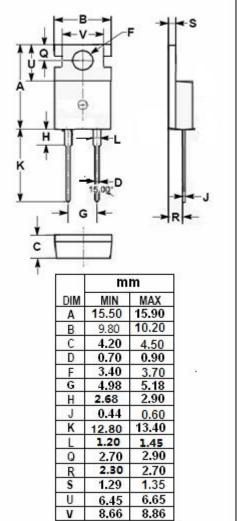
APPLICATIONS

 Designed for AC/DC switching adaptor and other switching power supply applications.

ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
Vrrm Vrwm Vr	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	100	V
V _{R(RMS})	RMS Reverse Voltage	70	V
I _{F(AV)}	Average Rectified Forward Current Tc= 105 $^\circ\!\!\!\mathrm{C}$	30	A
IFSM	Nonrepetitive Peak Surge Current 8.3ms single half sine-wave superimposed on rated load conditions	400	A
TJ	Junction Temperature	-55~150	°C
T _{stg}	Storage Temperature Range -55~175		°C





isc website: <u>www.iscsemi.com</u>



Schottky Barrier Rectifier

MBR30100

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
Rth j-c	Thermal Resistance, Junction to Case	3.25	°C/W

ELECTRICAL CHARACTERISTICS(Pulse Test: Pulse Width≤300 µ s,Duty Cycle≤1%)

SYMBOL	PARAMETER	CONDITIONS	МАХ	UNIT
VF	Maximum Instantaneous Forward Voltage	IF= 30A ; Tc= 25°C	0.84	V
IR	Maximum Instantaneous Reverse Current	Rated DC Voltage, T _C = 25 $^\circ$ C Rated DC Voltage, T _C = 100 $^\circ$ 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.