

SCHOTTKY BARRIER RECTIFIERS

REVERSE VOLTAGE - 70 to 100 Volts
FORWARD CURRENT - 10 Amperes

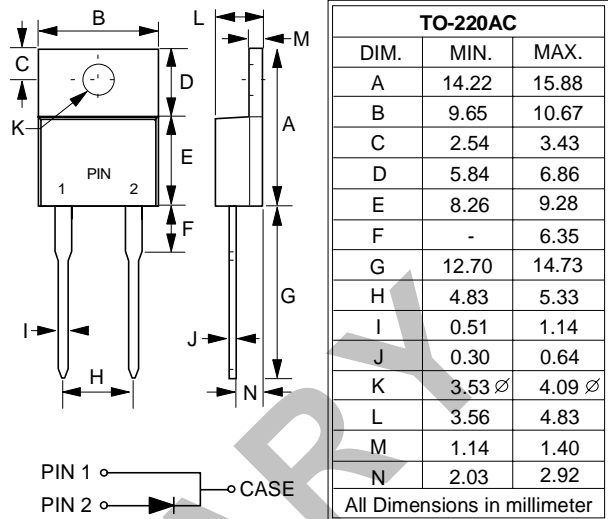
FEATURES

- Metal of silicon rectifier, majority carrier conductor
- Guard ring for transient protection
- Low power loss, high efficiency
- High current capability, low VF
- High surge capacity
- Plastic package has UL flammability classification 94V-0
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

MECHANICAL DATA

- Case : TO-220AC molded plastic
- Polarity : As marked on the body
- Weight : 0.08 ounces, 2.24 grams
- Mounting position : Any

TO-220AC



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	MBR1070	MBR1080	MBR1090	MBR10100	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	70	80	90	100	V
Maximum RMS Voltage	VRMS	49	56	63	70	V
Maximum DC Blocking Voltage	VDC	70	80	90	100	V
Maximum Average Forward Rectified Current (See Fig.1) @Tc=135°C	IAV	10				A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC METHOD)	IFSM	150				A
Voltage Rate of Change (Rated VR)	dv/dt	10000				V/us
Maximum Forward Voltage (Note 1)	VF	IF=10A @ TJ=25°C 0.85 IF=10A @ TJ=125°C 0.75 IF=20A @ TJ=125°C 0.80				V
Maximum DC Reverse Current at Rated DC Blocking Voltage @TJ=25°C @TJ=125°C	IR	0.1 100				mA
Typical Thermal Resistance (Note 2)	RAJC	2.0				°C/W
Typical Junction Capacitance (Note 3)	CJ	1100				pF
Operating Temperature Range	TJ	-55 to +150				°C
Storage Temperature Range	TSTG	-55 to +175				°C

NOTES : 1.300us Pulse Width, 2% Duty Cycle.
2. Thermal Resistance Junction to Case.
3. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

