

## SCHOTTKY BARRIER RECTIFIERS

REVERSE VOLTAGE - 40 Volts  
FORWARD CURRENT - 20 Amperes

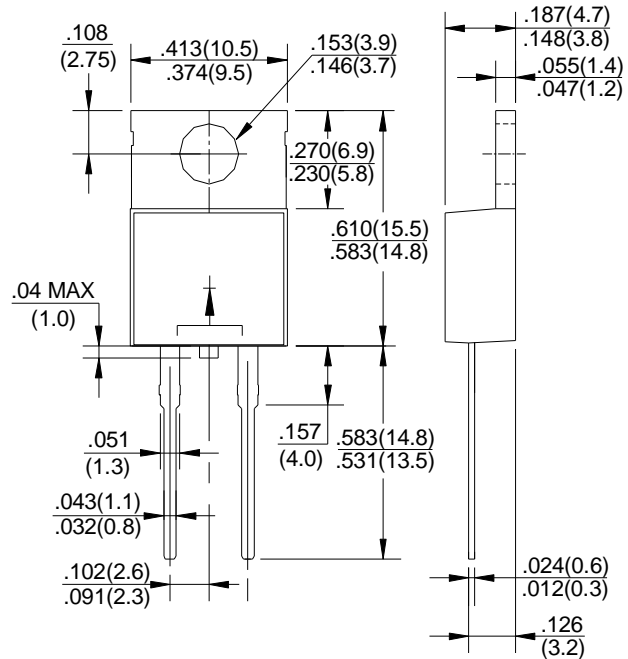
### FEATURES

- Metal of silicon rectifier , majority carrier conduction
- Guard ring for transient protection
- Low power loss,high efficiency
- High current capability,low IR
- 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
- Mounting position :Any

### TO-220AC



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 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	MBRB2040	UNIT
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	40	V
Maximum RMS Voltage	V <sub>RMS</sub>	28	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	40	V
Maximum Average Forward Rectified Current ( See Fig.1) @T <sub>C</sub> =95 °C	I <sub>(AV)</sub>	20	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	275	A
Peak Forward Voltage at 20A DC(Note1)	V <sub>F</sub>	0.7	V
Maximum DC Reverse Current @T <sub>J</sub> =25°C at Rated DC Blocking Voltage @T <sub>J</sub> =125°C	I <sub>R</sub>	0.5 50	mA
Typical Thermal Resistance(Note2)	R <sub>θjc</sub>	1.5	°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +200	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +200	°C

NOTES:1.300us pulse width,2% dudy cycle.

2.Thermal Resistance Junction to case

FIG. 1 – FORWARD CURRENT DERATING CURVE

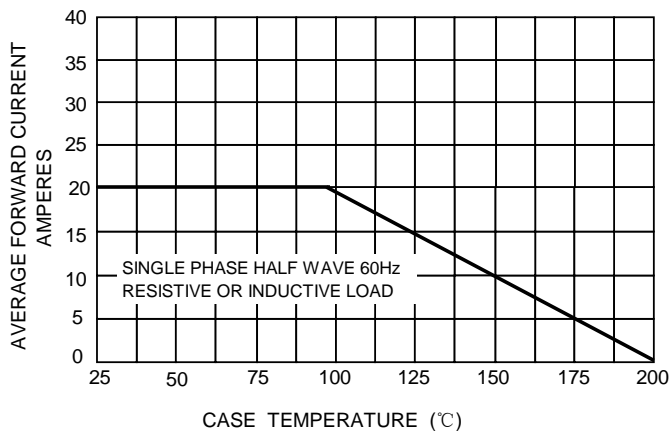


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

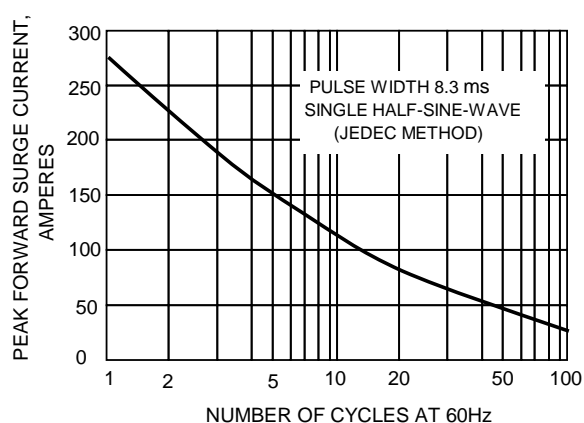


FIG.3-TYPICAL REVER CHARACTERISTICS

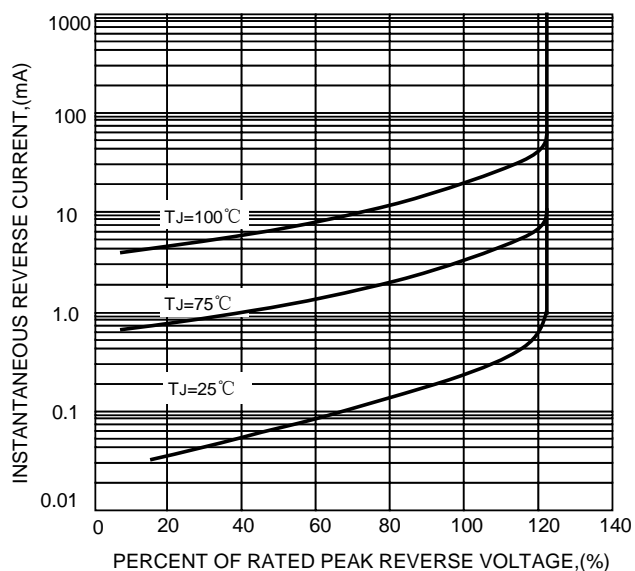


FIG.4-TYPICAL FORWARD CHARACTERISTICS

