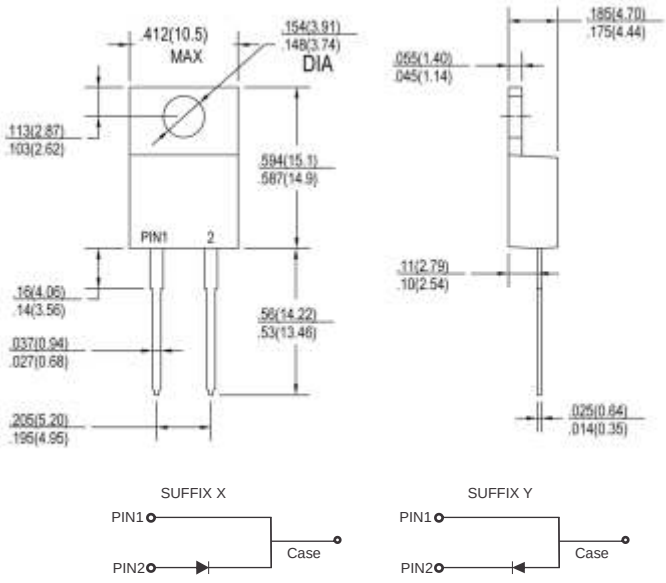
SCHOTTKY BARRIER RECTIFIER
MBR1020 *Thru MBR1060* 10 Amps

RoHS

FEATURES

- Low power loss, high efficiency
- High current capability, low forward voltage drop
- High surge capability
- For use in low voltage, high frequency inverters, free wheeling and polarity protection applications
- High temperature soldering : 260°C / 10seconds , 0.25 " (6.35mm) from case



TO-220AC

Dimensions in inches and (millimeters)

MECHANICAL DATA

- Molded plastic body (UL 94V-0 rated)
- Terminals: lead free. solderable per MIL-STD-750, Method 2026
- Polarity: As marked
- Mounting position: Any
- Mounting torque: 5 in . lbs . max
- Weight: 0.08 ounce, 2.24 grams

MAXIMUM RATINGS & ELECTRICAL CHARACTERISTICS

TA= 25°C unless otherwise specified .

Parameter	Symbol	MBR1020*	MBR1030*	MBR1040*	MBR1050*	MBR1060*	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	V
Maximum Average Forward Rectified Current @ Tc = 125°C	I_O	10.0					A
Peak Forward Surge Current 60Hz Half-Sine Wave, 1 Cycle	I_{FSM}	250					A
Forward Voltage Drop @ IF = 10A, Ta = 25°C @ IF = 10A, Ta = 100°C	V_{FM}	0.55			0.70		V
Peak DC Reverse Current @ Ta = 25°C	I_{RM}	0.2					Ma
at rated DC Blocking Voltage @ Ta = 100°C		50					°C/W
Typical Thermal Resistance Junction to Lead (Note)	$R_{\theta JC}$	3.0					
Operating Temperature Range	T_J	-55 to +125			-55 to +150		°C
Storage Temperature Range	T_{STG}	-55 to +150					°C

NOTE: Thermal Resistance from Junction to lead, with Heatsink Size (2 " x3 " x0.25 ") Al -Plate .

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RATING & CHARACTERISTIC CURVES

FIG.1-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

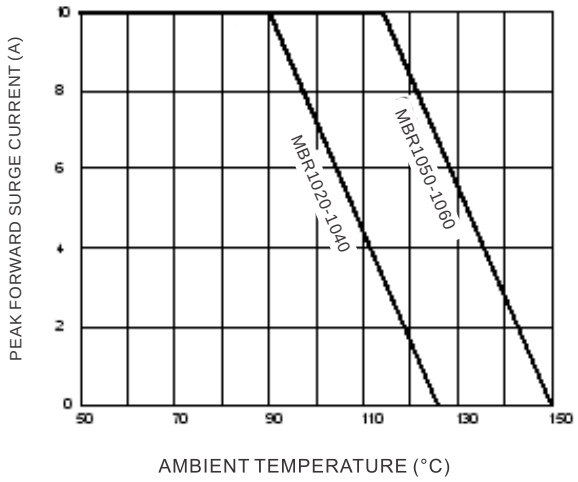


FIG.2-MAXIMUM FORWARD CURRENT DERATING

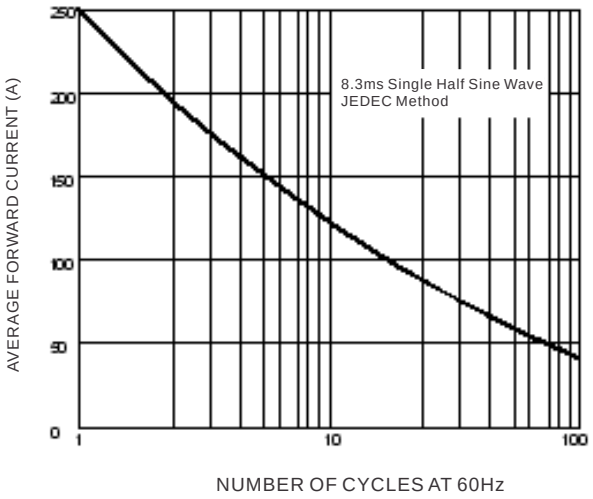


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

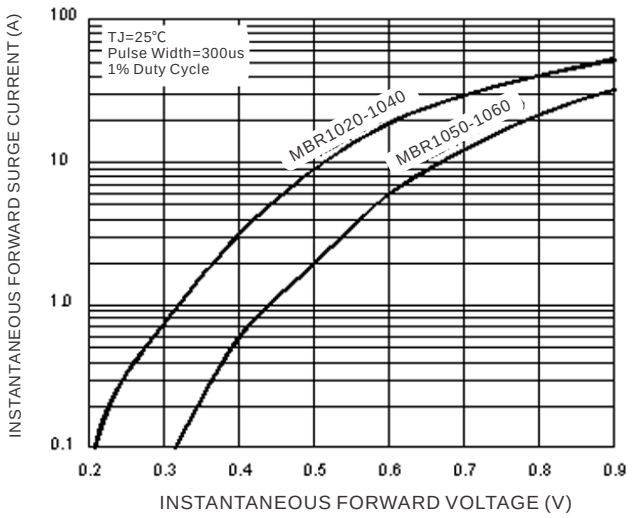
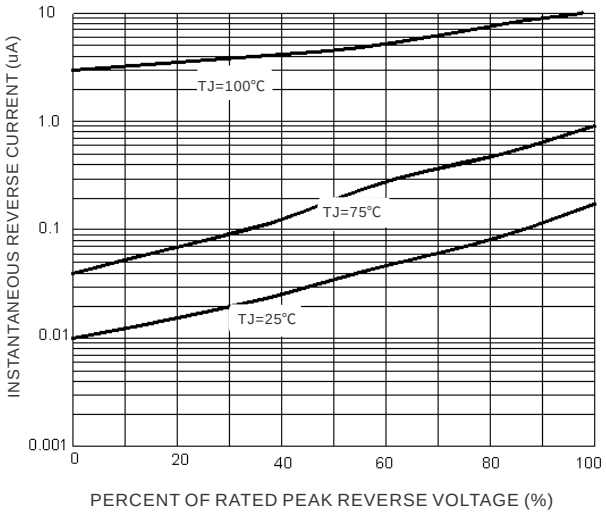


FIG.4-TYPICAL REVERSE CHARACTERISTICS



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