

MBR1040 - MBR10200

SCHOTTKY BARRIER RECTIFIER DIODES

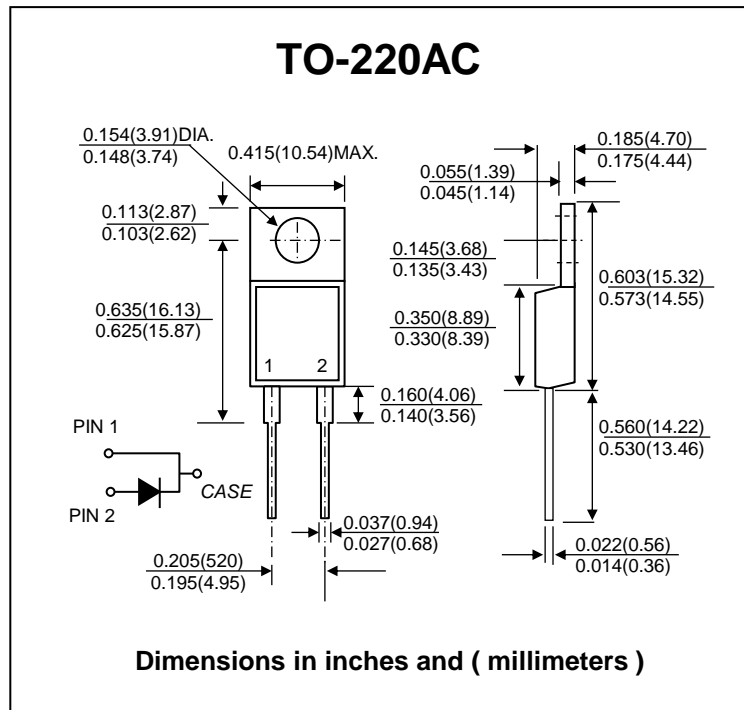
PRV : 40 - 200 Volts
Io : 10 Ampere

FEATURES :

- * High surge forward current capability
- * High efficiency
- * High speed switching
- * Low Power loss
- * Pb / RoHS Free

MECHANICAL DATA :

- * Case : Molded plastic
- * Polarity: As marked
- * Mounting Position: Any
- * Weight : 1.8 grams (Approximately)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

RATING	SYMBOL	MBR 1040	MBR 1060	MBR 10100	MBR 10150	MBR 10200	UNIT
Maximum Peak Repetitive Reverse Voltage	V _{RRM}	40	60	100	150	200	V
Maximum Average Forward Current	I _{F(AV)}	10.0					A
Maximum Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) at Ta = 25°C	I _{FSM}	150					A
Maximum Instantaneous Forward Voltage at I _F = 10 A	V _F	0.55	0.75	0.85	0.9	0.95	V
Maximum Reverse Current at T _J = 25 °C	I _R	0.1					mA
Rated DC Blocking Voltage T _J = 100 °C	I _{R(H)}	20					mA
Maximum Thermal Resistance, Junction to Case	R _{θJC}	2.0					°C/W
Operating Junction Temperature Range	T _J	-55 to + 150					°C
Storage Temperature Range	T _{STG}	-55 to + 150					°C

Note :

(1) Pulse test : 300 μs pluse width, 1% duty cycle

RATING AND CHARACTERISTIC CURVES (MBR1040 - MBR10200)

FIG.1 - FORWARD CURRENT DERATING CURVE

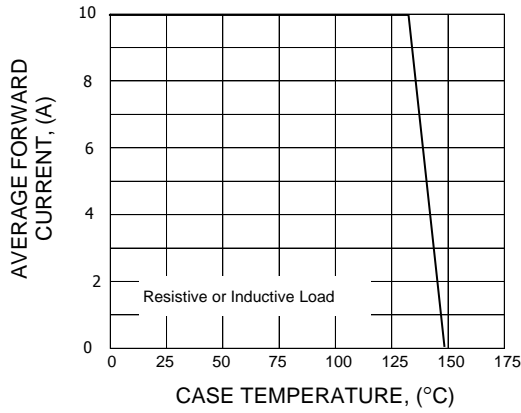


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

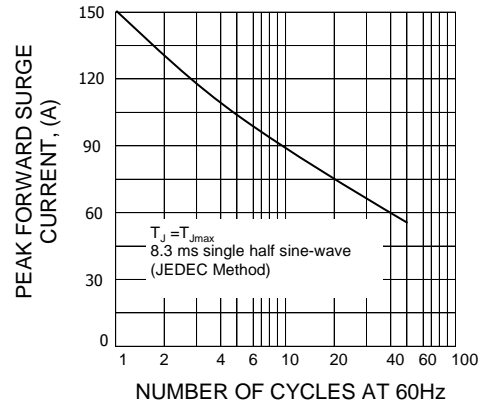


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

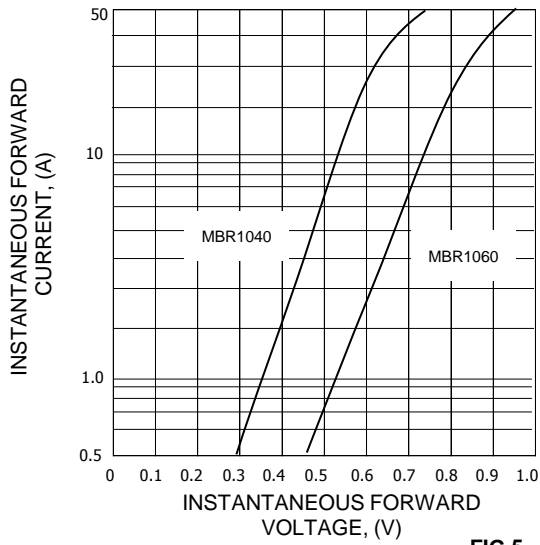


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

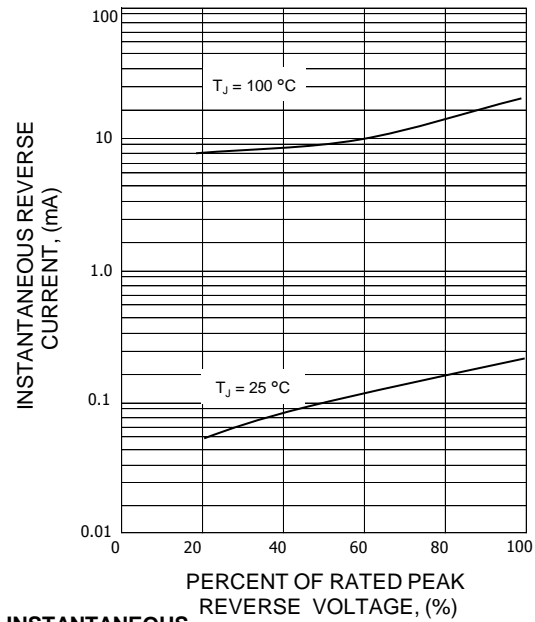


FIG.5 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

