

# MBR1040FCT - MBR10200FCT SCHOTTKY BARRIER RECTIFIER DIODES

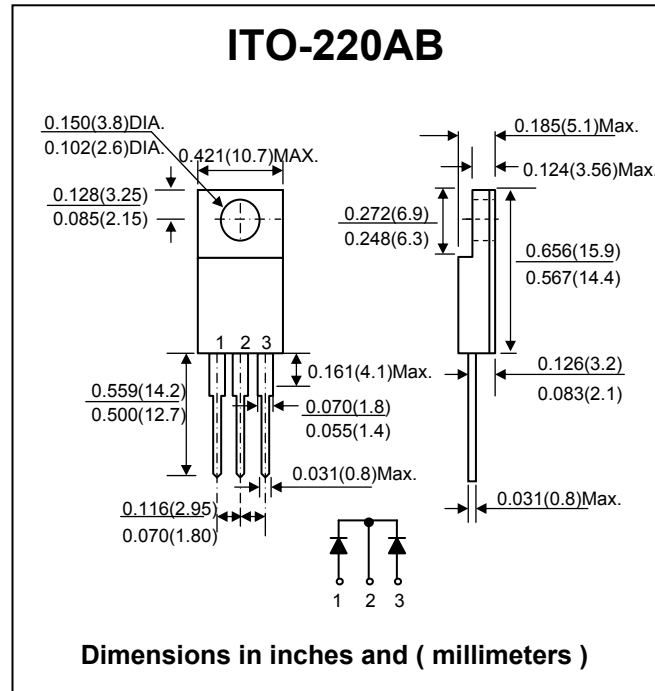
**PRV : 40 - 200 Volts**  
**Io : 10 Ampere**

**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 : 1.9 grams (Approximately)



**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Rating at 25 °C ambient temperature unless otherwise specified.

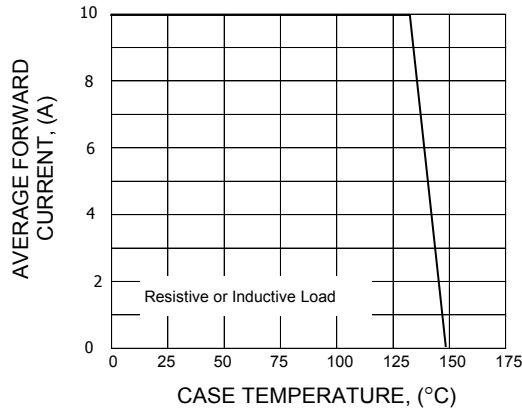
RATING	SYMBOL	MBR 1040FCT	MBR 1060FCT	MBR 10100FCT	MBR 10150FCT	MBR 10200FCT	UNIT
Maximum Peak Repetitive Reverse Voltage	$V_{RRM}$	40	60	100	150	200	V
Maximum Average Forward Current	$I_{F(AV)}$	10.0					A
Maximum Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) at $T_a = 25^{\circ}C$	$I_{FSM}$	100					A
Maximum Instantaneous Forward Voltage at $I_F = 5 A$	$V_F$	0.55	0.75	0.85	0.9	0.95	V
Maximum Reverse Current at $T_J = 25^{\circ}C$	$I_R$	0.1					mA
Rated DC Blocking Voltage $T_J = 100^{\circ}C$	$I_{R(H)}$	20					mA
Maximum Thermal Resistance, Junction to Case	$R_{\theta JC}$	2.0					$^{\circ}C/W$
Operating Junction Temperature Range	$T_J$	-55 to + 150					$^{\circ}C$
Storage Temperature Range	$T_{STG}$	-55 to + 150					$^{\circ}C$

**Note :**

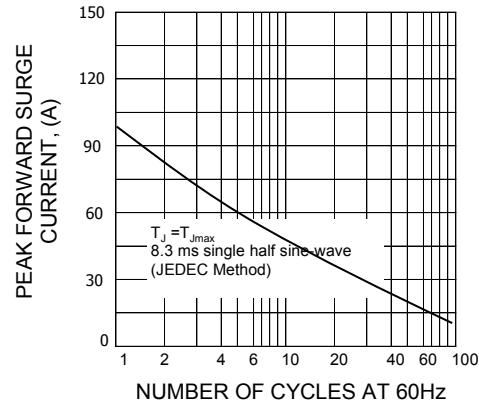
(1) Pulse test : 300  $\mu s$  pluse width, 1% duty cycle

**RATING AND CHARACTERISTIC CURVES ( MBR1040FCT - MBR10200FCT )**

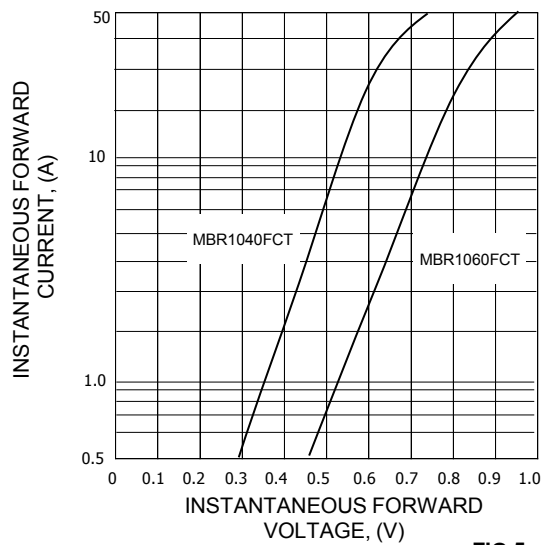
**FIG.1 - FORWARD CURRENT DERATING CURVE**



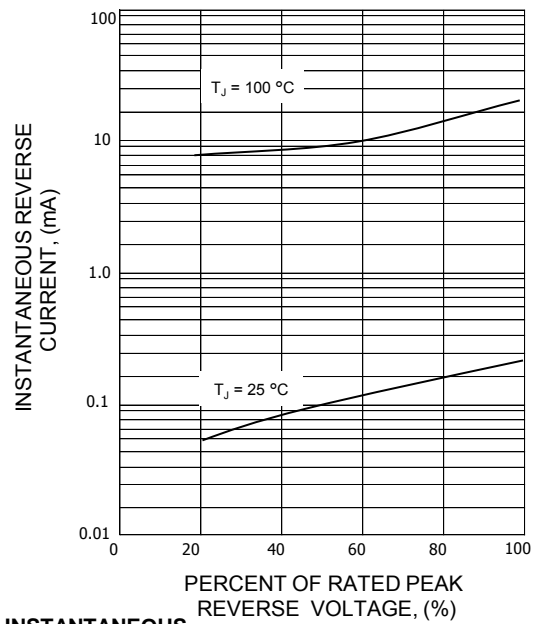
**FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG.4 - TYPICAL REVERSE CHARACTERISTICS**



**FIG.5 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**

