

MBRL10100FCT

SCHOTTKY BARRIER RECTIFIER DIODES

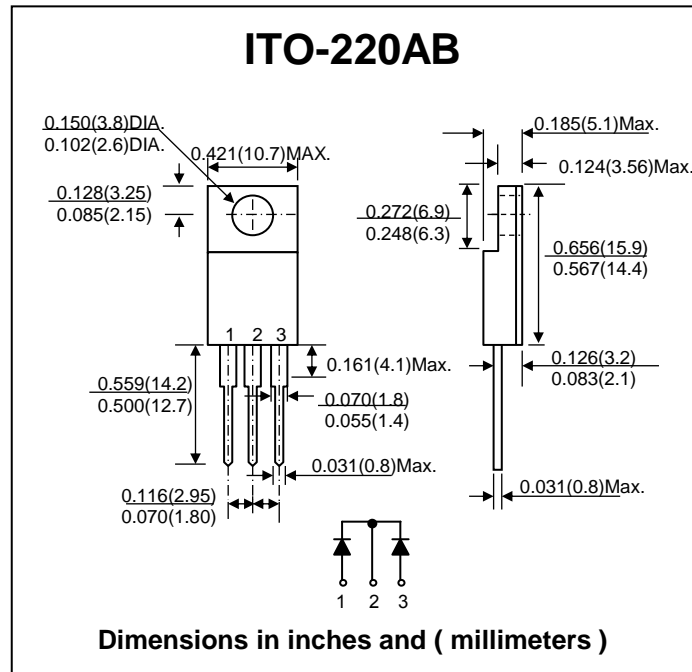
PRV : 100 Volts
I_o : 10 Ampere

FEATURES :

- * Low forward voltage drop
- * 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 : 1.6 grams (Approximately)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

RATING	SYMBOL	VALUE	UNIT
Maximum Peak Repetitive Reverse Voltage	V_{RRM}	100	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	0.72	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	$R_{\theta JC}$	4.0	$^{\circ}C/W$
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 μs pluse width, 1% duty cycle

RATING AND CHARACTERISTIC CURVES (MBRL10100FCT)

FIG.1 - FORWARD CURRENT DERATING CURVE

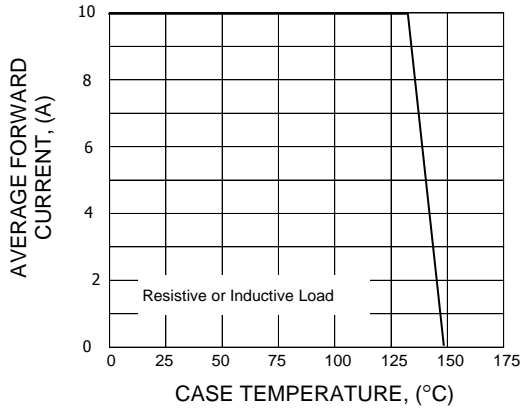


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

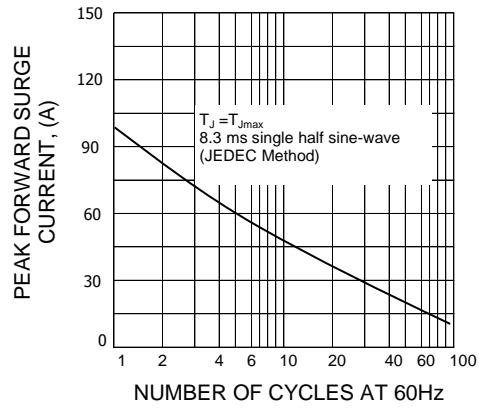


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

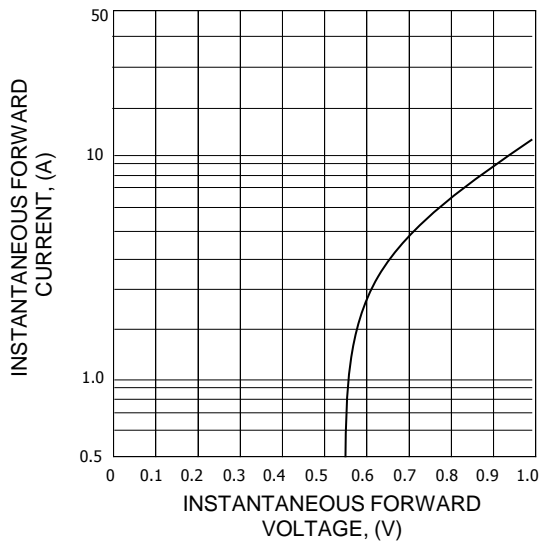


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

