

# MBRL20100CT

# SCHOTTKY BARRIER RECTIFIER DIODES

**PRV : 100 Volts**

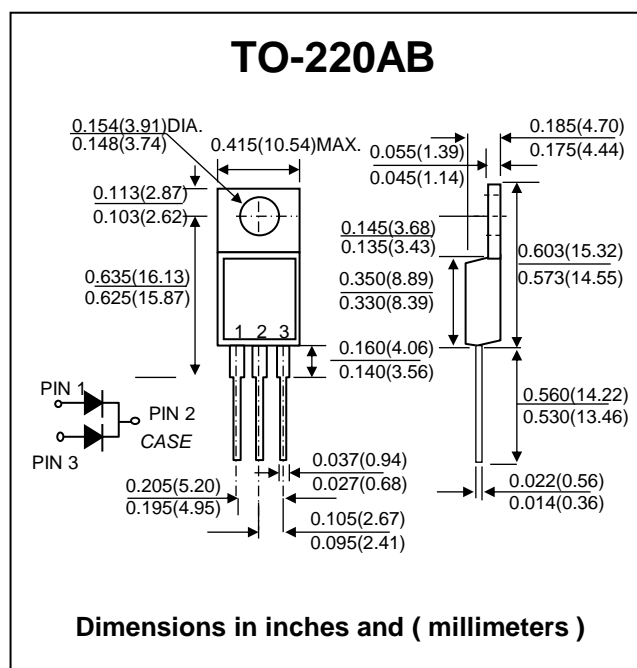
**Io : 20 Ampere**

### 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 : 1.9 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	$I_{F(AV)}$	20	A
Maximum Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) at $T_a = 25^\circ\text{C}$	$I_{FSM}$	150	A
Maximum Instantaneous Forward Voltage at $I_F = 10\text{ A}$	$V_F$	0.72	V
Maximum Reverse Current at $T_J = 25^\circ\text{C}$	$I_R$	0.1	mA
Rated DC Blocking Voltage $T_J = 100^\circ\text{C}$	$I_{R(H)}$	20	mA
Maximum Thermal Resistance, Junction to Case	$R_{\theta JC}$	4.0	$^\circ\text{C/W}$
Operating Junction Temperature Range	$T_J$	-55 to + 150	$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to + 150	$^\circ\text{C}$

#### Note :

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

RATING AND CHARACTERISTIC CURVES ( MBRL20100CT )

FIG.1 - FORWARD CURRENT DERATING CURVE

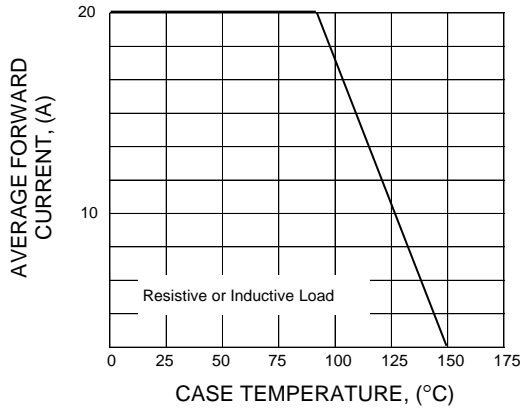


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

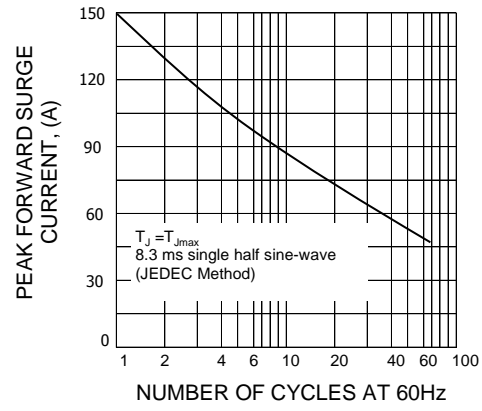


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

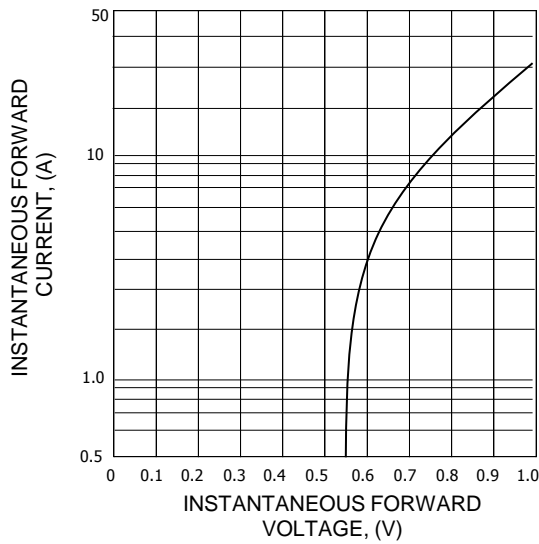


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

