

# MBR1660CT

**PRV : 60 Volts**  
**Io : 16 Amperes**

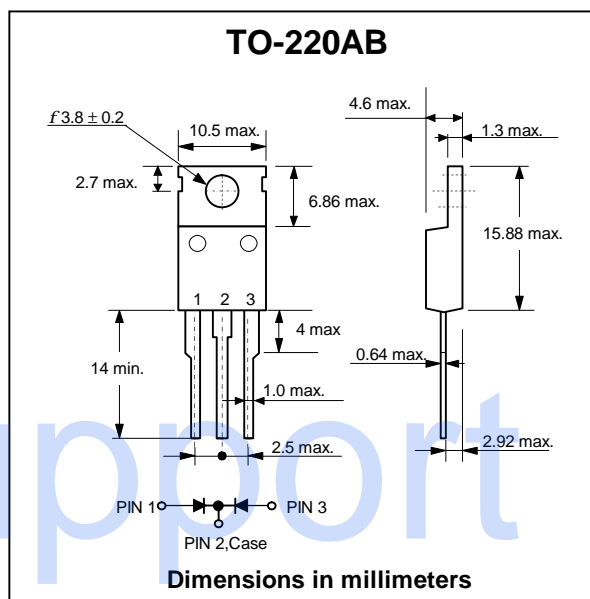
### FEATURES :

- \* High current capability
- \* High surge current capability
- \* High reliability
- \* Low forward voltage drop
- \* High surge capability
- \* Pb / RoHS Free

### MECHANICAL DATA :

- \* Case : TO-220AB Molded plastic
- \* Polarity : As marked on the body
- \* Mounting position : Any
- \* Weight : 2.24 grams

## SCHOTTKY BARRIER RECTIFIER DIODE



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

RATINGS	SYMBOL	VALUE	UNIT
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	60	V
Maximum RMS Voltage	$V_{RMS}$	42	V
Maximum DC Blocking Voltage	$V_{DC}$	60	V
Maximum Average Forward Current $T_c = 115 \text{ }^\circ\text{C}$	$I_{F(AV)}$	16	A
Peak Forward Surge Current, 8.3ms single half sine wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	150	A
Maximum Forward Voltage at $I_F = 8 \text{ A}$	$V_F$	0.75	V
Maximum Reverse Current at $T_a = 25 \text{ }^\circ\text{C}$	$I_R$	1.0	mA
Rated DC Blocking Voltage $T_a = 100 \text{ }^\circ\text{C}$	$I_{R(H)}$	50	mA
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	3.0	$^\circ\text{C/W}$
Typical junction Capacitance (Note 2)	$C_j$	460	pF
Operating Temperature Range	$T_j$	- 55 to + 150	$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	- 55 to + 175	$^\circ\text{C}$

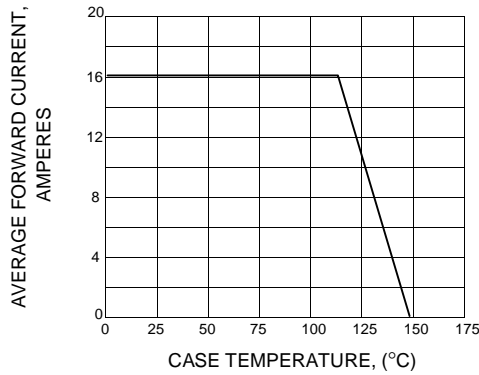
### Notes :

( 1 ) Thermal Resistance Junction to Ambient Vertical PC Board Mounting, 0.375" (9.5mm) Lead Length.

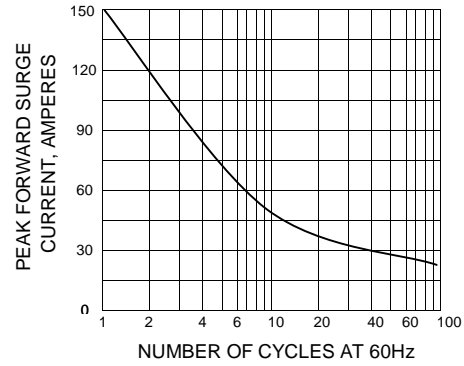
( 2 ) Measured at 1MHz and applied reverse voltage of 4.0 Vdc.

## RATING AND CHARACTERISTIC CURVES ( MBR1660CT )

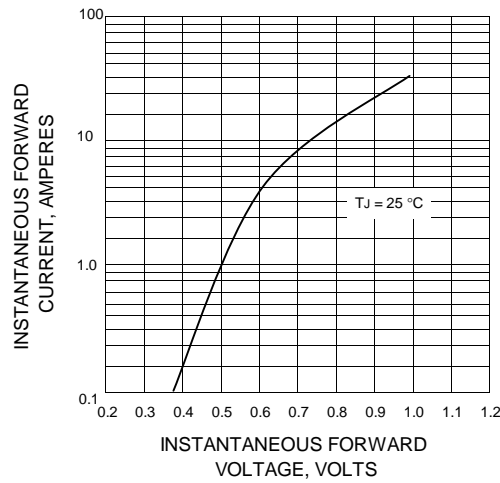
**FIG.1 - FORWARD CURRENT DERATING CURVE**



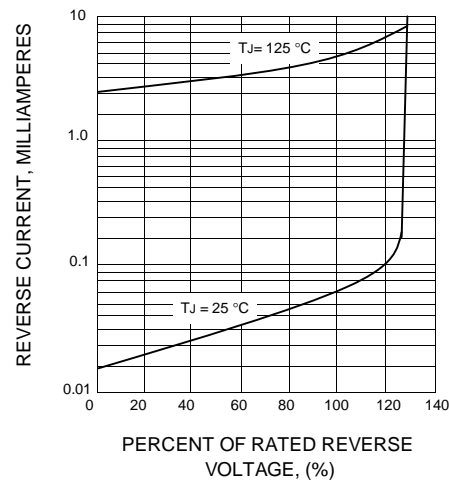
**FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 - TYPICAL REVERSE CHARACTERISTICS**



**FIG.5 - TYPICAL JUNCTION CAPACITANCE**

