

MBR1660CT

PRV : 60 Volts
Io : 16 Amperes

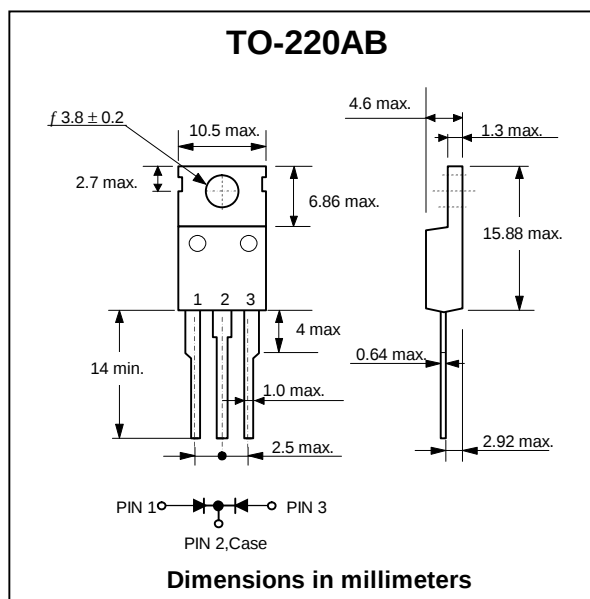
FEATURES :

- * 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

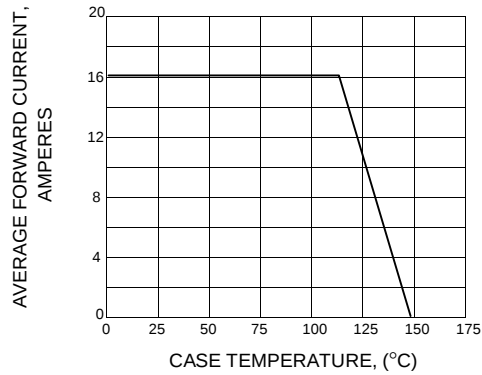


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

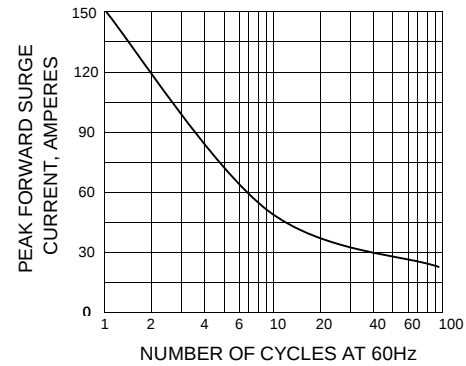


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

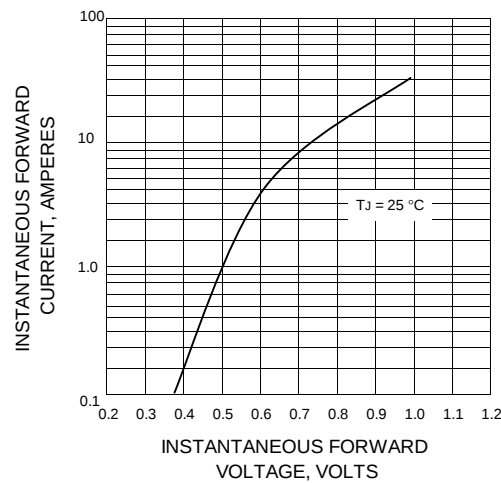


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

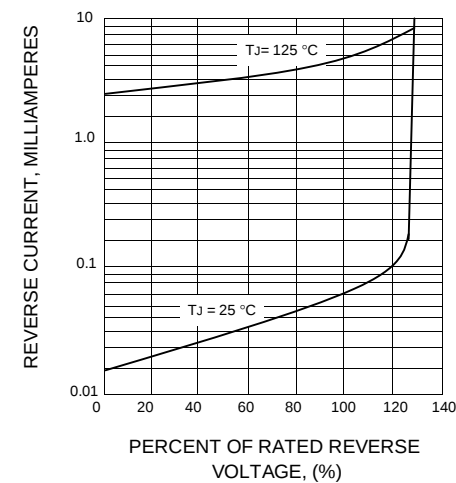


FIG.5 - TYPICAL JUNCTION CAPACITANCE

