Certificate Number: Q10561

Certificate Number: E17276

MBR1660CT

SCHOTTKY BARRIER RECTIFIER DIODE

PRV : 60 Volts
Io : 16 Amperes

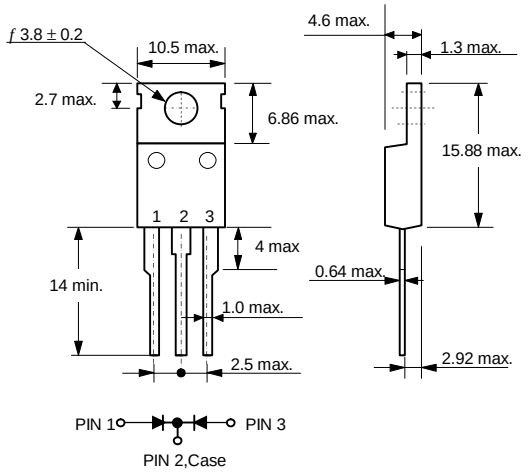
FEATURES :

* 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

TO-220AB



Dimensions in millimeters

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 Tc = 115 °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 A	V_F	0.75	V
Maximum Reverse Current at Ta = 25 °C	I_R	1.0	mA
Rated DC Blocking Voltage Ta = 100 °C	$I_{R(H)}$	50	mA
Typical Thermal Resistance (Note 1)	RθJA	3.0	°C/W
Typical junction Capacitance (Note 2)	Cj	460	pF
Operating Temperature Range	Tj	- 55 to + 150	°C
Storage Temperature Range	T_{STG}	- 55 to + 175	°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

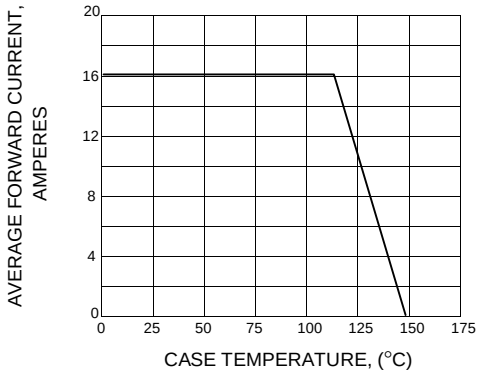


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

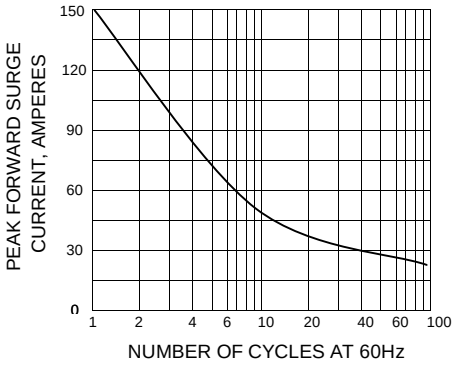


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

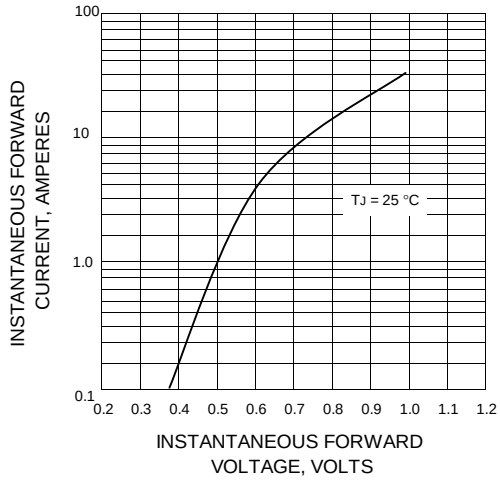


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

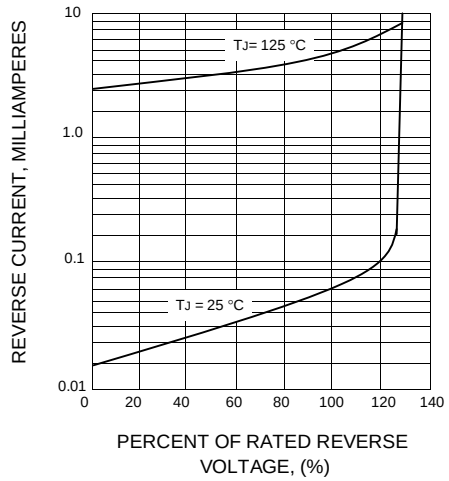


FIG.5 - TYPICAL JUNCTION CAPACITANCE

