Certificate Number: Q10561

Certificate Number: E17276

MUR1620CT

ULTRAFAST RECTIFIERS

PRV : 200 Volts
Io : 8.0 Ampere

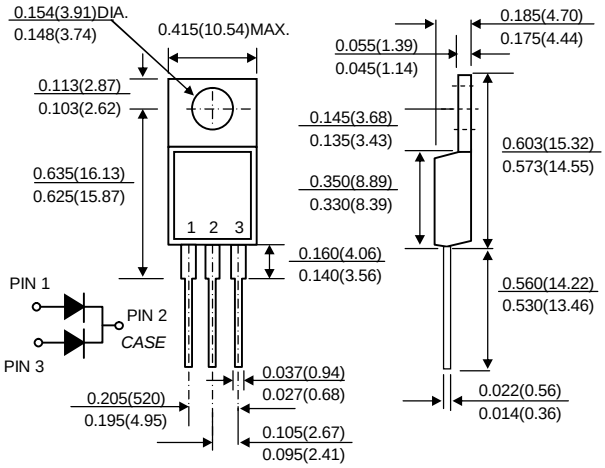
FEATURES :

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

MECHANICAL DATA :

* Case : Epoxy, Molded
* Lead Temperature for Soldering Purposes: 260°C Max. for 10 Seconds
* Weight : 2.1 grams (Approximately)

TO-220AB



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

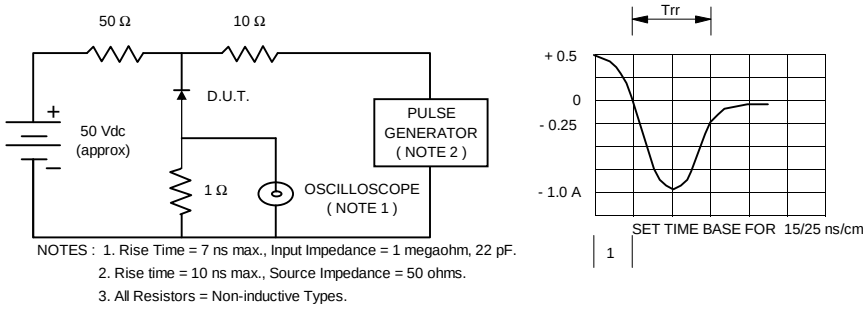
RATING	SYMBOL	VALUE	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	200	V
Maximum Working Reverse Voltage	V_{RWM}	200	V
Maximum DC Blocking Voltage	V_{DC}	200	V
Maximum Average Forward Current	$I_{F(AV)}$	8.0 (Per Leg)	A
Total Device,(Rated V_R), Tc = 150°C		16 (Total Device)	
Maximum Peak Rectified Forward Current (Rated V_R, Square Wave, 20 kHz) Tc = 150°C	I_{FRM}	16	A
Maximum Non-repetitive Peak Forward Surge Current (Halfwave, single phase, 60 Hz) Per Leg	I_{FSM}	100	A
Maximum Forward Voltage at I_F = 8 A, Tc = 25°C	V_F	0.975(1)	V
Maximum Instantaneous Reverse Current (1)	I_R	5 (Tc = 25°C)	µA
(Rated dc Voltage)	$I_{R(H)}$	250 (Tc = 150°C)	µA
Maximum Reverse Recovery Time (I_F = 0.5A, I_R = 1A ; Irr = 0.25 A)	Trr	25	ns
Maximum Thermal Resistance, Junction to Case	RθJC	3.0	°C/W
Junction Temperature Range	T_J	- 65 to + 175	°C
Storage Temperature Range	T_{STG}	- 65 to + 175	°C

Note :

(1) Pulse Test : Pulse Width = 300 µs, Duty Cycle ≤ 2.0%

RATING AND CHARACTERISTIC CURVES (MUR1620CT)

FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



NOTES : 1. Rise Time = 7 ns max., Input Impedance = 1 megaohm, 22 pF.
2. Rise time = 10 ns max., Source Impedance = 50 ohms.
3. All Resistors = Non-inductive Types.

FIG. 2 - CURRENT DERATING CASE, PER LEG

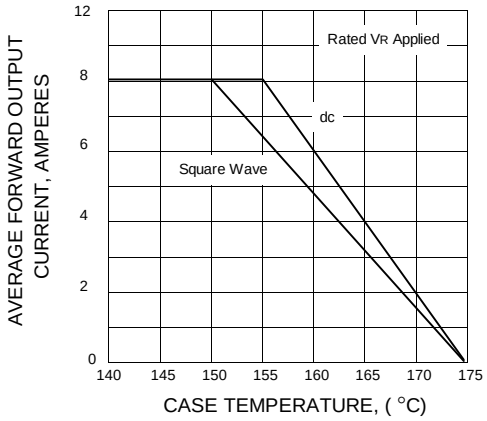


FIG. 3 - POWER DISSPATION, PER LEG

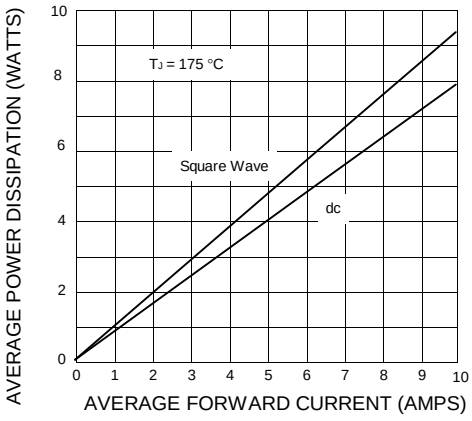


FIG. 4 - TYPICAL FORWARD VOLTAGE, PER LEG

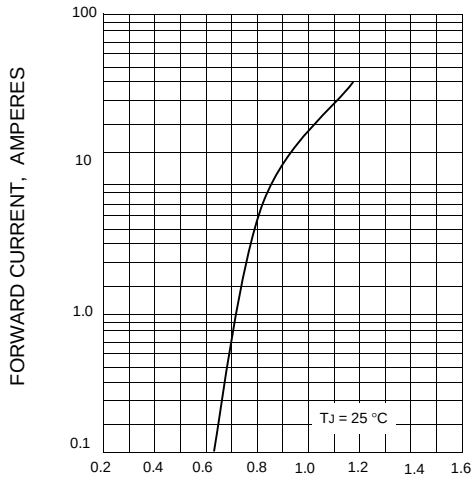


FIG. 5 - TYPICAL REVERSE CURRENT, PER LEG