

MUR2005C -MUR2060C

Super Fast Rectifiers

VOLTAGE RANGE: 50 --- 600 V

CURRENT: 20 A

TO-220AB

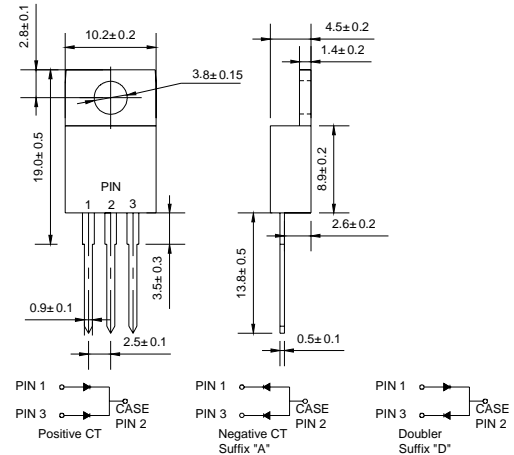


Features

- ◇ Low cost
- ◇ Low leakage
- ◇ Low forward voltage drop
- ◇ High current capability
- ◇ Easily cleaned with alcohol, Isopropanol and similar solvents
- ◇ The plastic material carries U/L recognition 94V-0

Mechanical Data

- ◇ Case: JEDEC TO-220AB, molded plastic
- ◇ Polarity: As marked
- ◇ Weight: 0.071 ounce, 2.006 grams
- ◇ Mounting position: Any



Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

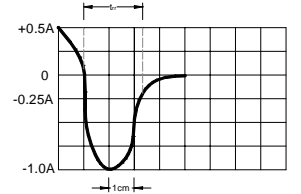
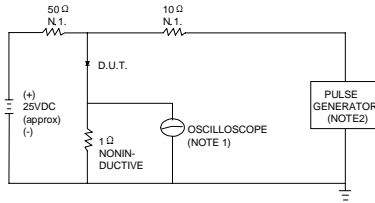
Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate by 20%.

		MUR 2005C	MUR 2010C	MUR 2015C	MUR 2020C	MUR 2040C	MUR 2060C	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	150	200	400	600	V
Maximum RMS voltage	V_{RMS}	35	70	105	140	280	420	V
Maximum DC blocking voltage	V_{DC}	50	100	150	200	400	600	V
Maximum average forward rectified current @ $T_C = 95^\circ\text{C}$	$I_{F(AV)}$	20						A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load @ $T_J = 125^\circ\text{C}$	I_{FSM}	125						A
Maximum instantaneous forward voltage @ 10A	V_F	0.975				1.3	1.5	V
Maximum reverse current @ $T_A = 25^\circ\text{C}$ at rated DC blocking voltage @ $T_A = 150^\circ\text{C}$	I_R	5.0				10.0		μA
		250				500		
Maximum reverse recovery time (Note1)	t_{rr}	25				50		ns
Operating junction temperature range	T_J	- 55 ----- + 150						$^\circ\text{C}$
Storage temperature range	T_{STG}	- 55 ----- + 150						$^\circ\text{C}$

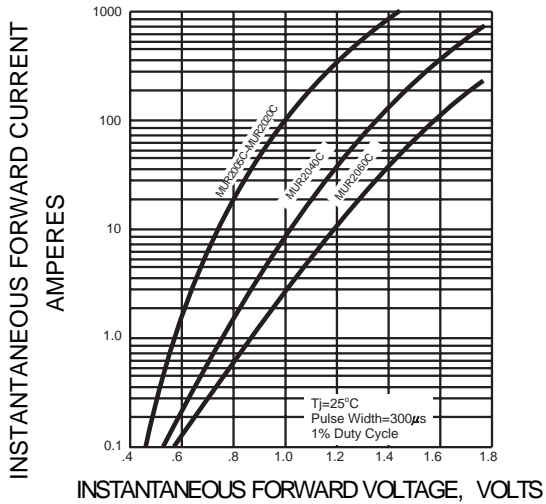
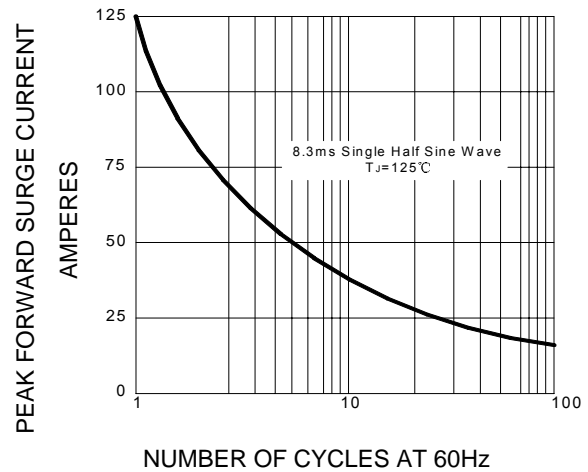
NOTE: 1. Measured with $I_F = 0.5\text{A}$, $I_R = 1\text{A}$, $I_{rr} = 0.25\text{A}$.

Ratings AND Characteristic Curves

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


SET TIME BASE FOR 10/20 ns/cm

NOTES:1.RISE TIME = 7ns MAX.INPUT IMPEDANCE =1MΩ. 22pF.
 2.RISE TIME =10ns MAX.SOURCE IMPEDANCE=50 Ω.

FIG.2 – TYPICAL FORWARD CHARACTERISTIC

FIG.3 – PEAK FORWARD SURGE CURRENT

FIG.4-FORWARD DERATING CURVE
