

MUR1605C-MUR1660C

Ultra Fast Rectifiers

VOLTAGE RANGE: 50-600V

CURRENT: 16A

TO-220AB

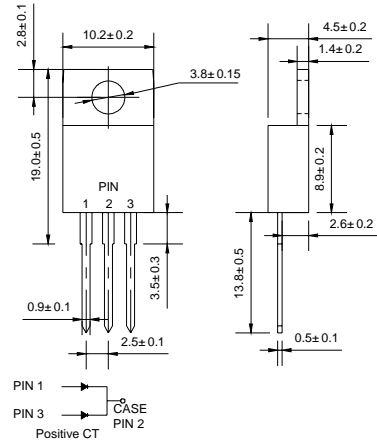


Features

- Low cost
- Diffused junction
- 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: Color band denotes cathode
- Weight: 0.071ounce, 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 1605C	MUR 1610C	MUR 1615C	MUR 1620C	MUR 1640C	MUR 1660C	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 @ $T_C=150$	$I_{(AV)}$	8.0 16						A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	I_{FSM}	100						A
Maximum instantaneous forward voltage @8.0A, $T_J=25$	V_F	0.975				1.30	1.50	V
Maximum instantaneous forward voltage @8.0A, $T_J=150$		0.895				1.00	1.20	
Maximum reverse current at rated DC blocking voltage @ $T_C=25$	I_R	5.0				10		μA
Maximum reverse current at rated DC blocking voltage @ $T_C=150$		250				500		
Maximum reverse recovery time (Note2)	t_{rr}	25				50		ns
Typical thermal resistance junction to case	$R_{\theta JC}$	3.0				2.0		/W
Operating junction temperature range	T_J	- 55 ---- + 175						
Storage temperature range	T_{STG}	- 55 ---- + 175						

NOTE: 1. Pulse test: pulse width=300 μs , duty cycle 2.0%.
2. Measured with $I_F=0.5A$, $I_R=1.0A$, $I_{rr}=0.25A$.

Ratings AND Characteristic Curves

FIG.1 –TYPICAL FORWARD CHARACTERISTIC

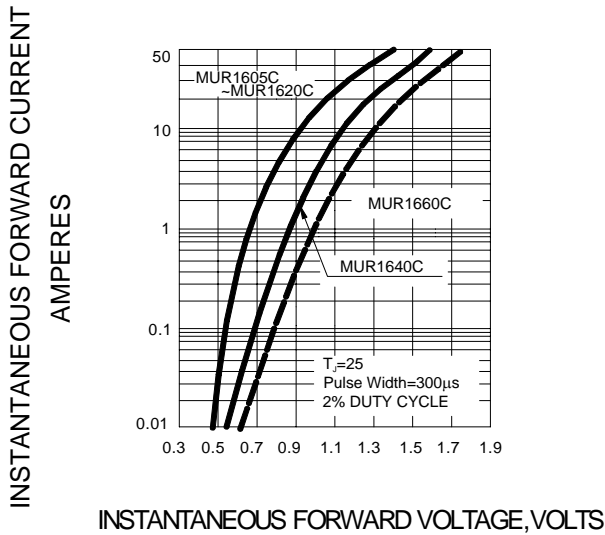


FIG.2–TYPICAL REVERSE CHARACTERISTICS

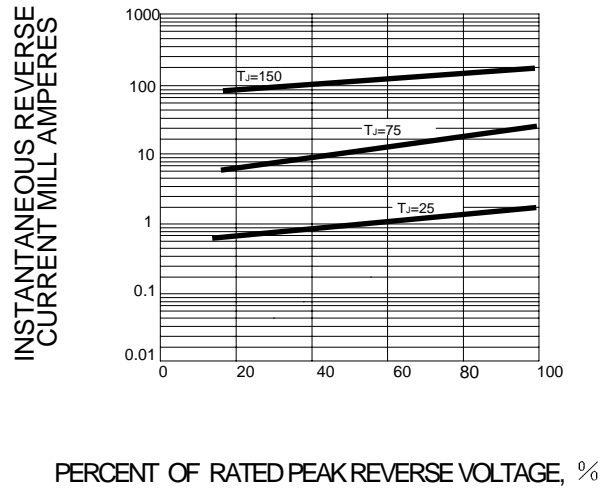


FIG.3 – PEAK FORWARD SURGE CURRENT

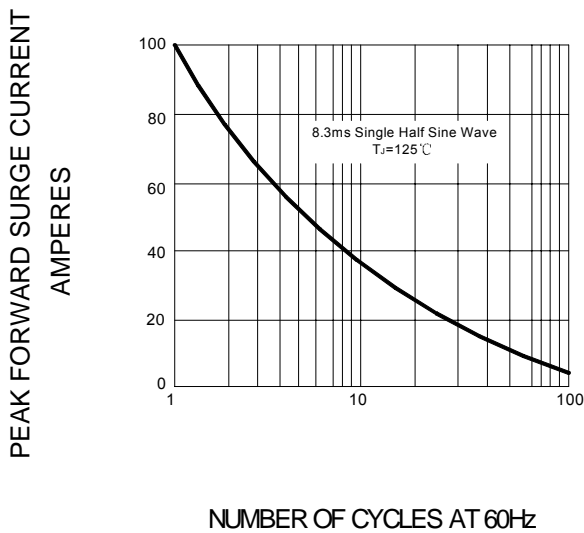


FIG.4 – FORWARD DERATING CURVE

