

# MUR1620CT

## GLASS PASSIVATED HIGH EFFICIENCY RECTIFIER

TO-220

Reverse Voltage – 50 to 1000 Volts

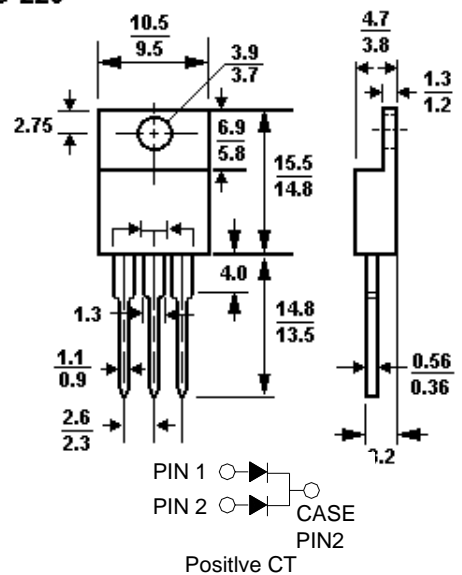
Forward Current – 16.0 Amperes

### Features

- Low forward voltage, High current capability
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- High surge capacity
- Low power loss, high efficiency
- Ultra fast recovery times, high voltage

### Mechanical Data

- Case: Molded plastic, TO-220
- Terminals: leads solderable per MIL-STD-202, method 208 guaranteed
- Polarity: As marked
- Mounting Position: Any



### Absolute Maximum Ratings and Characteristics

Dimensions in mm

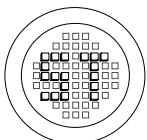
Ratings at 25° ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

	Symbols	Value	Units
Maximum recurrent peak reverse voltage	$V_{RRM}$	200	Volts
Maximum RMS voltage	$V_{RMS}$	140	Volts
Maximum DC blocking voltage	$V_{DC}$	200	Volts
Maximum average forward Rectified current at $T_C = 100$ ?	$I_{F(AV)}$	16.0	Amps
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	125	Amps
Maximum forward voltage at 8.0A and $T_A = 25$ ?	$V_F$	1.0	Volts
Typical junction Capacitance (Note1)	$C_J$	80	pF
Maximum reverse recovery time (Note 2)	$T_{RR}$	50	nS
Typical thermal resistance (Note3)	$R_{\theta JC}$	3.0	? /W
Maximum reverse current at rated DC blocking voltage	@ $T_A = 25$ ?	10	$\mu$ Amps
	@ $T_C = 125$ ?	500	$\mu$ Amps
Operating and storage temperature range	$T_J, T_s$	-55 to +150	?

Notes :1. Measured at 1 MHz and applied reverse voltage of 4.0 VDC.

2. Reverse recovery test conditions:  $I_F = 0.5A$ ,  $I_R = 1A$ ,  $I_{RR} = 0.25A$

3. Thermal resistance from junction to case per leg mounted on heatsink.

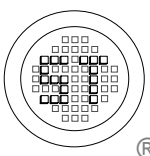
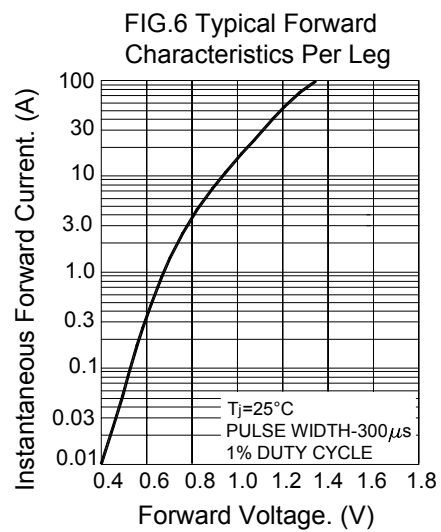
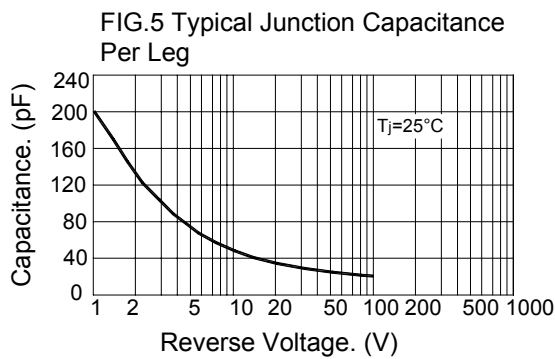
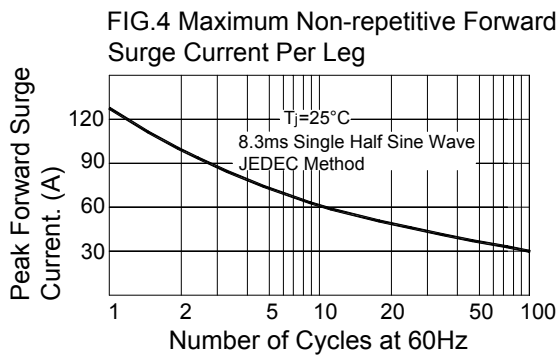
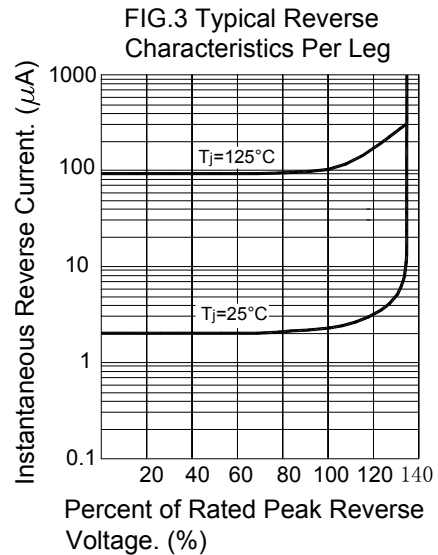
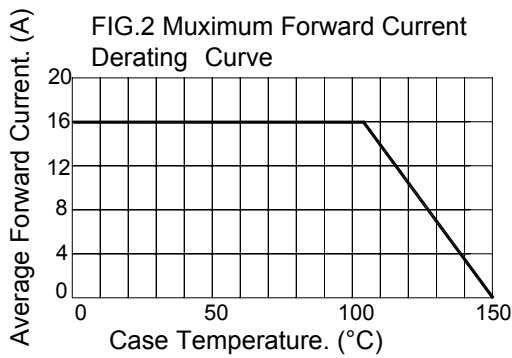
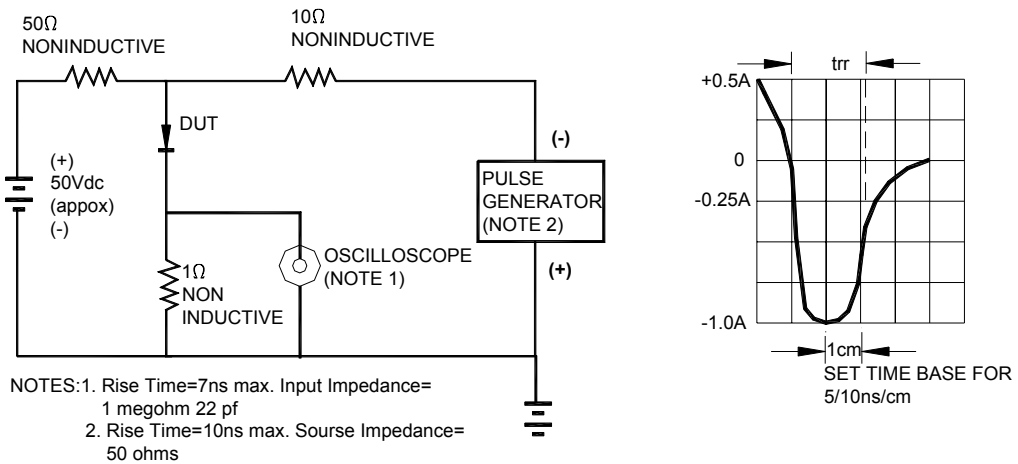


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FIG.1 Reverse Recovery Time Characteristic and Test Circuit Diagram



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