

Pb Free Plating Product

## MUR1620CT thru MUR1660CT



16.0 Ampere Unipolar/Common Cathode Ultra Fast Recovery Rectifier

**Features**

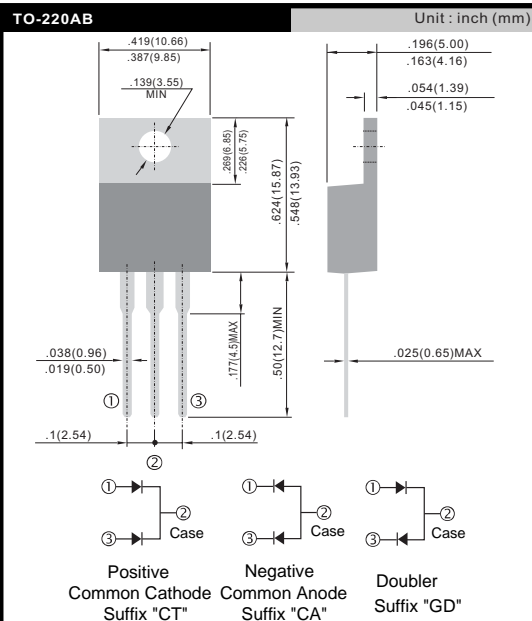
- \* Fast switching for high efficiency
- \* Low forward voltage drop
- \* High current capability
- \* Low reverse leakage current
- \* High surge current capability

**Application**

- \* Automotive Environment(Inverters/Converters)
- \* Plating Power Supply, SMPS and UPS
- \* Car Audio Amplifier and Sound Device System

**Mechanical Data**

- \* Case: TO-220AB Heatsink
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Terminals: Solderable per MIL-STD-202 method 208
- \* Polarity: As marked on diode body
- \* Mounting position: Any
- \* Weight: 2.2 gram approximately

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

	SYMBOL	MUR1620CT MUR1620CA MUR1620GD	MUR1640CT MUR1640CA MUR1640GD	MUR1660CT MUR1660CA MUR1660GD	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	200	400	600	V
Maximum RMS Voltage	VRMS	140	280	420	V
Maximum DC Blocking Voltage	VDC	200	400	600	V
Maximum Average Forward Rectified Current Tc=100°C	IF(AV)	16.0			A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method)	IFSM	175	150		A
Maximum Instantaneous Forward Voltage @ 8.0 A	VF	0.98	1.3	1.7	V
Maximum DC Reverse Current @T <sub>J</sub> =25°C At Rated DC Blocking Voltage @T <sub>J</sub> =125°C	IR		10.0		uA
			250		uA
Maximum Reverse Recovery Time (Note 1)	Trr		35		nS
Typical junction Capacitance (Note 2)	C <sub>J</sub>		90		pF
Typical Thermal Resistance (Note 3)	R <sub>θJC</sub>		2.2		°CW
Operating Junction and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>		-55 to + 150		°C

NOTES : (1) Reverse recovery test conditions IF = 0.5A, R = 1.0A, Irr = 0.25A.

(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts DC.

(3) Thermal Resistance junction to case.

FIG.1 - FORWARD CURRENT DERATING CURVE

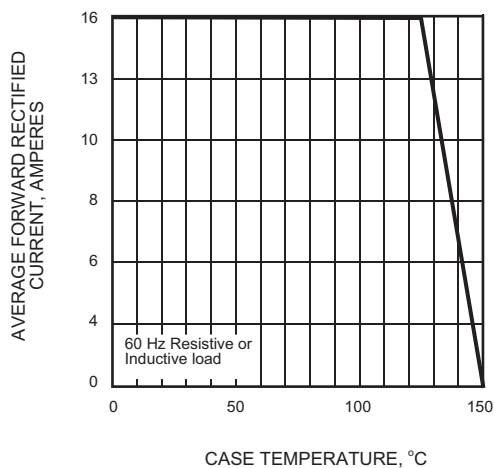


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

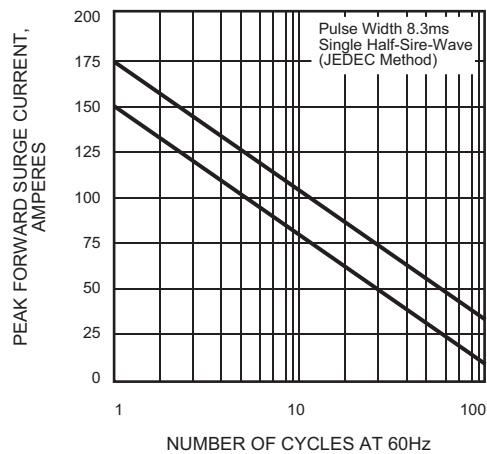


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

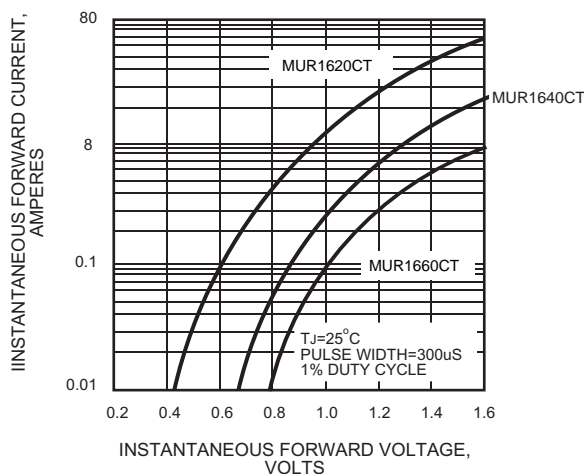


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

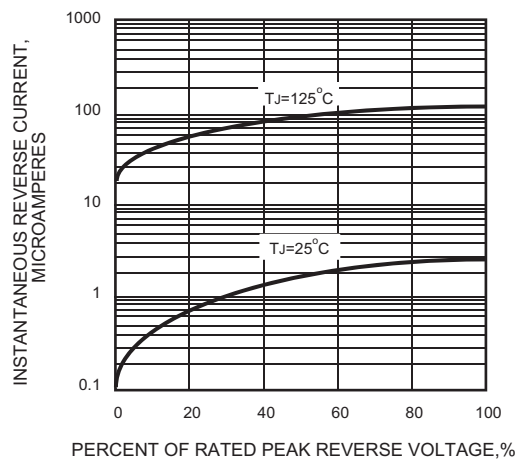


FIG.5 - TYPICAL JUNCTION CAPACITANCE

