

Pb Free Plating Product

# MUR1605 thru MUR1660



16.0 Ampere Glass Passivated Junction Ultrafast Recovery Rectifiers

**Features**

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

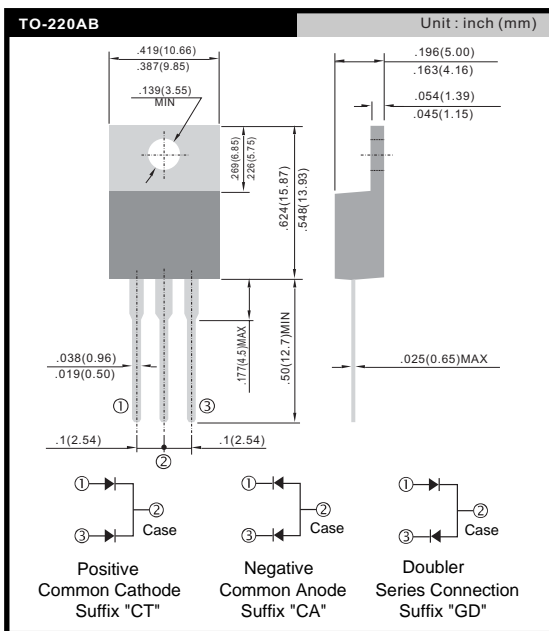
**Application**

- \* Automotive Environment|DC Motor Control
- \* Plating Power Supply|UPS
- \* Amplifier and Sound Device System etc..

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**Mechanical Data**

- \* Case: Molded plastic 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: 2.03 grams



## 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	MUR1605CT	MUR1610CT	MUR1620CT	MUR1630CT	MUR1640CT	MUR1660CT	UNIT
		MUR1605CA	MUR1610CA	MUR1620CA	MUR1630CA	MUR1640CA	MUR1660CA	
		MUR1605GD	MUR1610GD	MUR1620GD	MUR1630GD	MUR1640GD	MUR1660GD	
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	300	400	600	V
Maximum RMS Voltage	VRMS	35	70	140	210	280	420	V
Maximum DC Blocking Voltage	VDC	50	100	200	300	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 @Tj=25°C At Rated DC Blocking Voltage @Tj=125°C	IR				10.0			uA
					250			uA
Maximum Reverse Recovery Time (Note 1)	Trr				35			nS
Typical junction Capacitance (Note 2)	CJ				90			pF
Typical Thermal Resistance (Note 3)	RθJC				2.2			°CW
Operating Junction and Storage Temperature Range	TJ, TSTG	-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

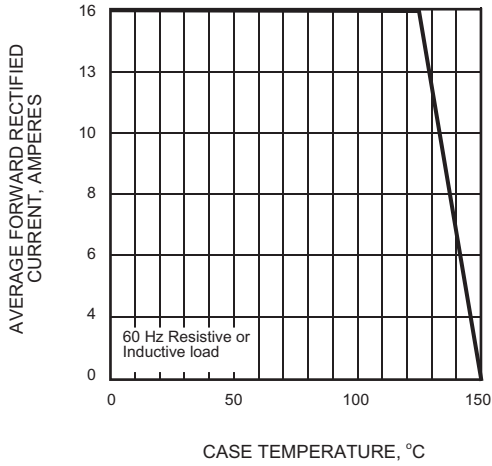


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

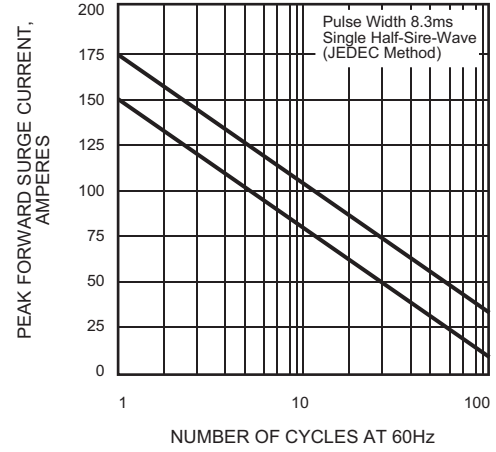


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

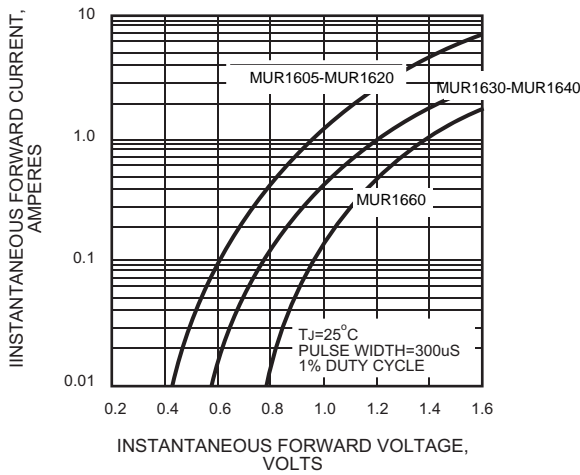


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

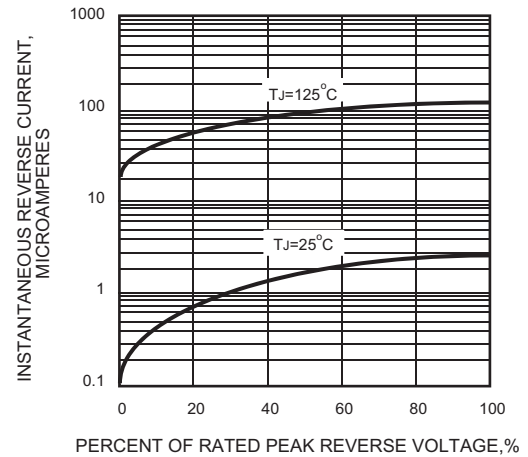


FIG.5 - TYPICAL JUNCTION CAPACITANCE

