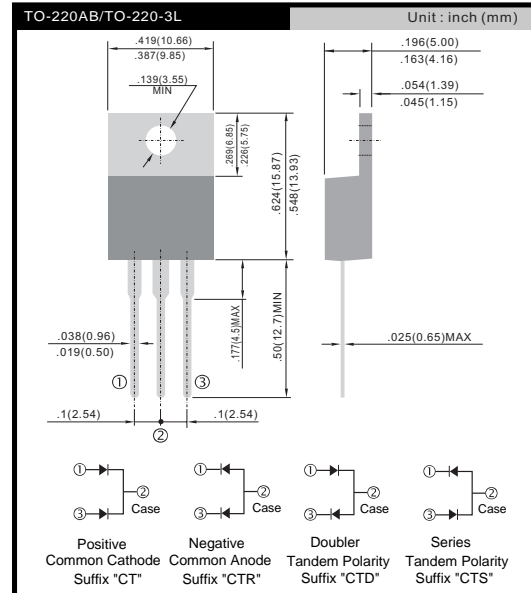


**Pb Free Plating Product**
**MUR1620CTR/MUR1640CTR/MUR1660CTR**

**16.0 Ampere Heatsink Common Anode Ultra Fast Recovery Rectifiers**

<b>Features</b> <ul style="list-style-type: none"> <li>* Fast switching for high efficiency</li> <li>* Low forward voltage drop</li> <li>* High current capability</li> <li>* Low reverse leakage current</li> <li>* High surge current capability</li> </ul> <b>Application</b> <ul style="list-style-type: none"> <li>* Automotive Inverters and Solar Inverters</li> <li>* Plating Power Supply, SMPS and UPS</li> <li>* Car Audio Amplifiers and Sound Device Systems</li> </ul>
<b>Mechanical Data</b> <ul style="list-style-type: none"> <li>* Case: Heatsink TO-220AB open package</li> <li>* Epoxy: UL 94V-0 rate flame retardant</li> <li>* Terminals: Solderable per MIL-STD-202 method 208</li> <li>* Polarity: As marked on diode body</li> <li>* Mounting position: Any</li> <li>* Weight: 2.2 gram approximately</li> </ul>


**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	MUR1620CTR	MUR1640CTR	MUR1660CTR	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 (Total Device 2x8A=16A)	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 (Per Diode/Per Leg)	VF	0.98	1.3	1.7	V
Maximum DC Reverse Current @Tj=25°C At Rated DC Blocking Voltage @Tj=125°C	IR		5.0 100		µA µA
Maximum Reverse Recovery Time (Note 1)	Trr		35		nS
Typical junction Capacitance (Note 2)	Cj		90		pF
Typical Thermal Resistance (Note 3)	RθJC		2.0		°C/W
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

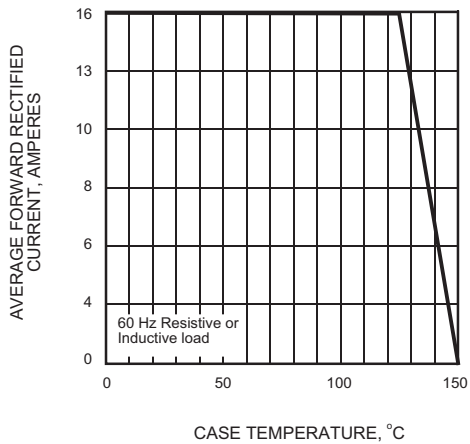


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

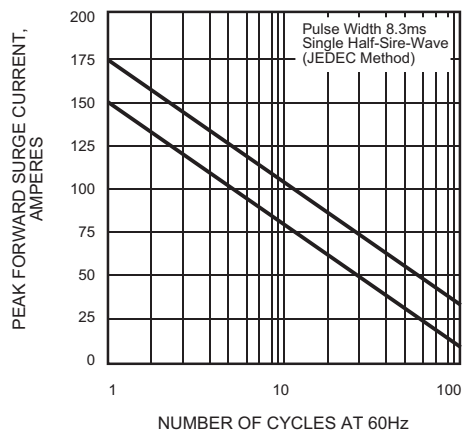


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

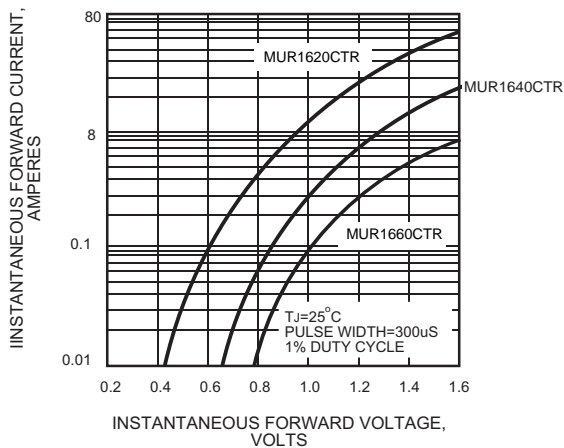


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

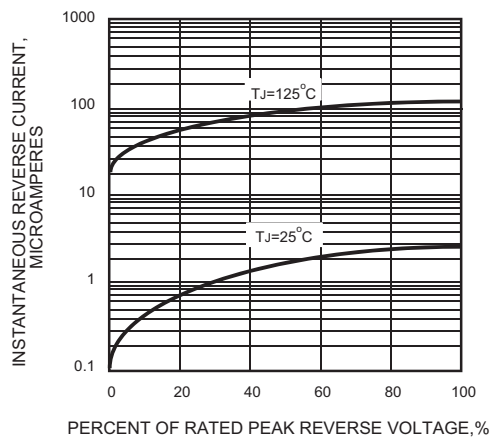


FIG.5 - TYPICAL JUNCTION CAPACITANCE

