

Pb Free Plating Product

## MURF1620CTD thru MURF1660CTD



## 16.0 Ampere Insulated Doubler Polarity Ultra Fast Recovery Rectifiers

Features	Mechanical Data	ITO-220AB
<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> <p>Application</p> <ul style="list-style-type: none"> <li>* Automotive Environment(Inverters/Converters)</li> <li>* Plating Power Supply, SMPS and UPS</li> <li>* Car Audio Amplifier and Sound Device System</li> </ul>	<ul style="list-style-type: none"> <li>* Case: Molded plastic Isolated/Insulated ITO-220AB</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: 2.03 grams</li> </ul>	<div style="text-align: right;">Unit : inch (mm)</div> <p>① → ② → ③ Case Positive Common Cathode Suffix "CT"</p> <p>① → ② → ③ Case Negative Common Anode Suffix "CTA"</p> <p>① → ② → ③ Case Doubler Suffix "CTD"</p>

**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	MURF1620CT MURF1620CTA MURF1620CTD	MURF1640CT MURF1640CTA MURF1640CTD	MURF1660CT MURF1660CTA MURF1660CTD	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 @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

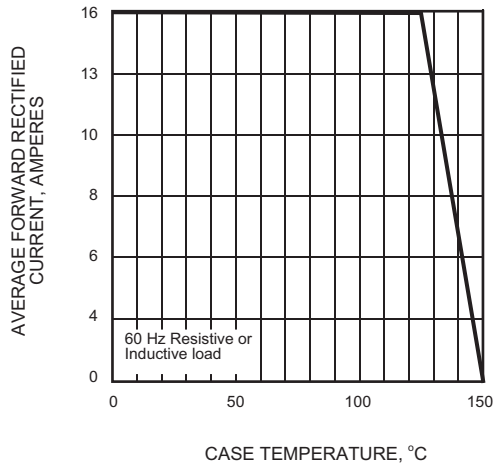


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

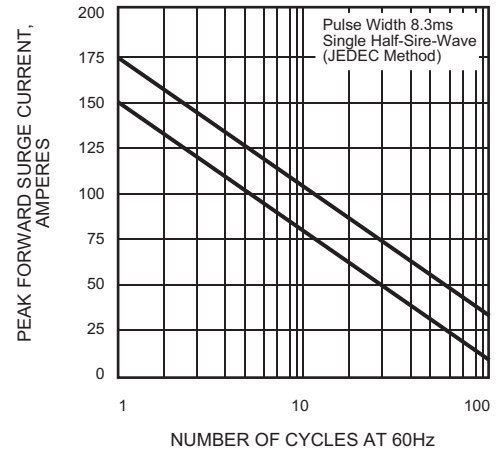


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

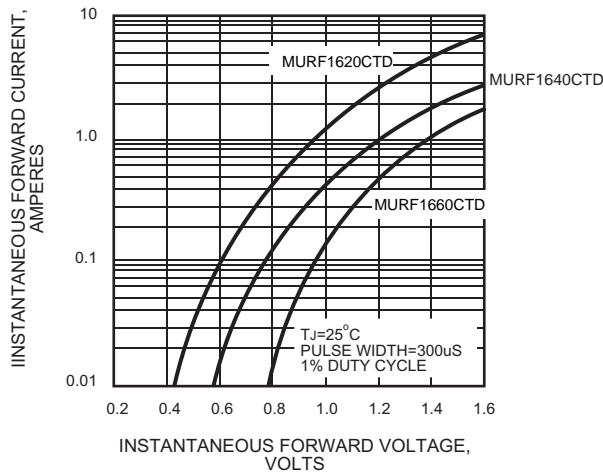


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

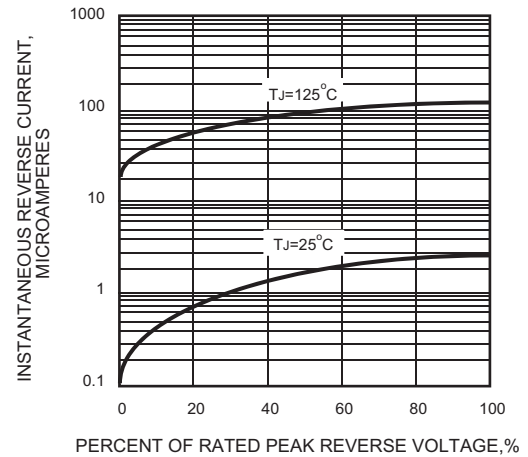


FIG.5 - TYPICAL JUNCTION CAPACITANCE

