



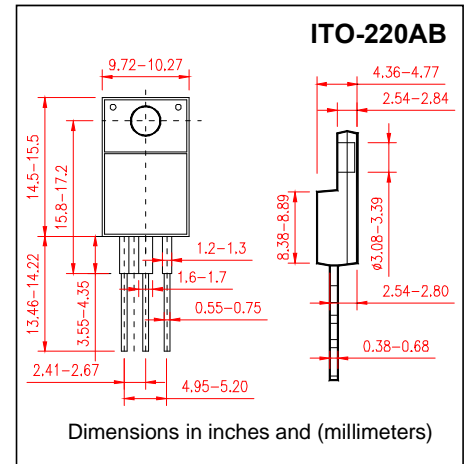
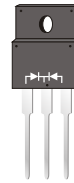
## GLASS PASSIVATED SUPER FAST RECTIFIER

### MURF1220CT - MURF1260CT

Reverse Voltage:200 to 600 V  
Forward Current:12 A

#### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Fast switching for high efficiency
- Low forward voltage drop
- Single rectifier construction
- High surge capability
- For use in low voltage, high frequency inverters , free wheeling and polarity protection applications
- High temperature soldering guaranteed:260 C/10 seconds, 0.25”(6.35mm)from case
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC



#### MECHANICAL DATA

- Case: JEDEC ITO-220AB molded plastic body
- Terminals: Lead solderable per MIL-STD-750 method 2026
- Polarity: As marked
- Mounting Position: Any

#### MAXIMUM RATING AND ELECTRICAL CHARACTERISTICS

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

		Symbols	MUR 1220CT	MUR 1240CT	MUR 1260CT	Units
Maximum repetitive peak reverse voltage		V <sub>RRM</sub>	200	400	600	Volts
Maximum RMS voltage		V <sub>RMS</sub>	140	280	420	Volts
Maximum DC blocking voltage		V <sub>DC</sub>	200	400	600	Volts
Maximum average forward rectified current(Fig.1)	Per leg	I <sub>(AV)</sub>	6.0			Amps
	Total Device		12.0			
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load(JEDEC method)		I <sub>FSM</sub>	125			Amps
Maximum instantaneous forward voltage at 12.0 A(Note1)		V <sub>F</sub>	0.975	1.3	1.7	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note1)	Ta =25 °C	I <sub>R</sub>	5	10		uA
	Ta=125 °C		500			
Maximum Reverse Recovery Time(Note 2)		T <sub>rr</sub>	35			ns
Typical thermal resistance(Note 3)		R <sub>θ</sub> JC	2.0			°C/W
Operating junction temperature range		T <sub>J</sub>	-40 to +150			°C
Storage temperature range		T <sub>STG</sub>	-40 to +150			°C

Notes:

1. Pulse test:300  $\mu$ s pulse width,1% duty cycle.
2. Reverse recovery test conditions IF=0.5A,IR=1.0A,Irr=0.5A
3. Thermal resistance from junction to case



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### RATING AND CHARACTERISTIC CURVES MURF1220CT - MURF1260CT

FIG.1-FORWARD CURRENT DERATING CURVE

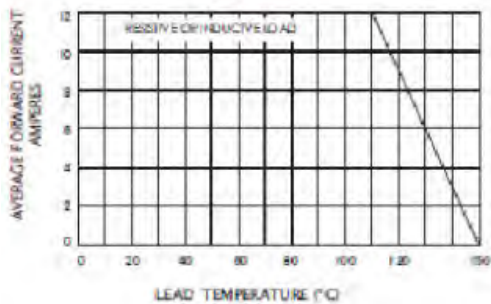


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

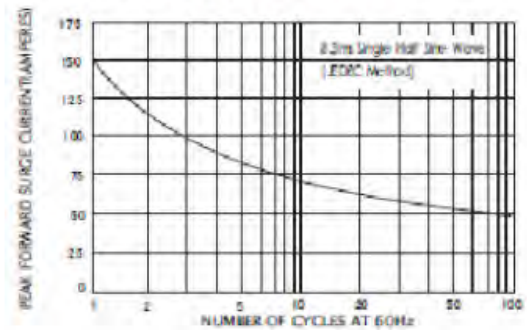


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

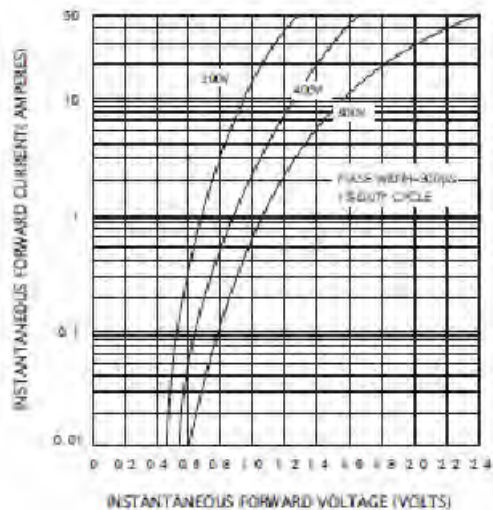


FIG.4-TYPICAL REVERSE CHARACTERISTICS

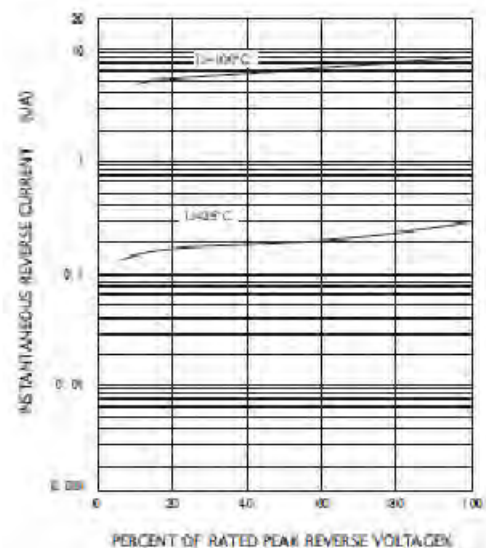


FIG.5-TYPICAL JUNCTION CAPACITANCE

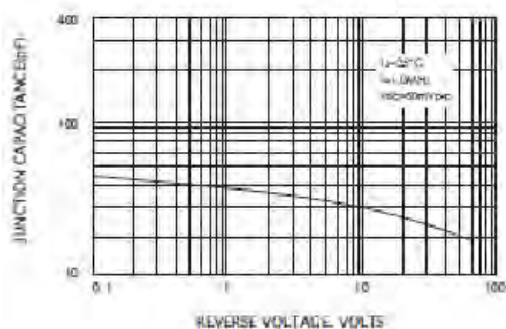


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

