



## GLASS PASSIVATED SUPER FAST RECTIFIER

MURF1020CT - MURF1060CT

Reverse Voltage - 200 to 600 V  
Forward Current - 10 A

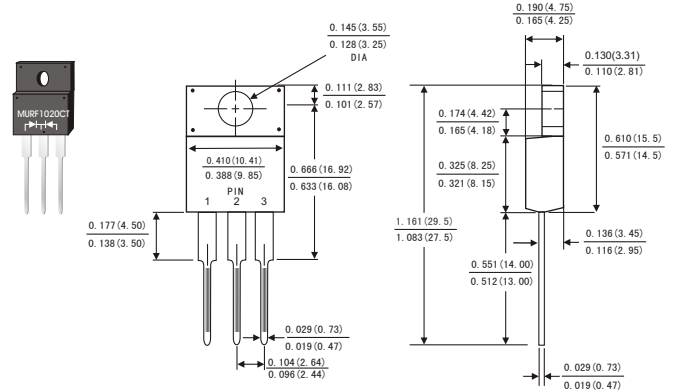
### FEATURES

- 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 ITO220AB molded plastic body
- Terminals:Lead solderable per MSTD-750,method 2026
- Polarity:As marked.
- Mounting Position:Any
- Weight:0.08ounce, 2.24 gram

### ITO-220AB



Dimensions in inches and (millimeters)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	Symbols	MURF 1020CT	MURF 1040CT	MURF 1060CT	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(see Fig.1)	Per leg	I <sub>(AV)</sub>	5.0		Amps
	Total device		10.0		
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	125		Amps	
Maximum instantaneous forward voltage at 10.0 A(Notes 1 )	V <sub>F</sub>	0.975	1.3	1.7	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Notes 1)	T <sub>a</sub> = 25 °C	5		10	µA
	T <sub>a</sub> = 125 °C	500			
Maximum Reverse Recovery Time (Note 2)	T <sub>rr</sub>	35		ns	
Typical thermal resistance (Note 3)	R <sub>θJC</sub>	3.0		°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 µs pulse width, 1% duty cycle

2 Reverse recovery test conditions: I<sub>F</sub> = 0.5A, I<sub>R</sub> = 1.0A, I<sub>rr</sub> = 0.5A

3. Thermal resistance from junction to case



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## RATING CHARACTERISTIC CURVES MURF1020CT - MURF1060CT

FIG.1-FORWARD CURRENT DERATING CURVE

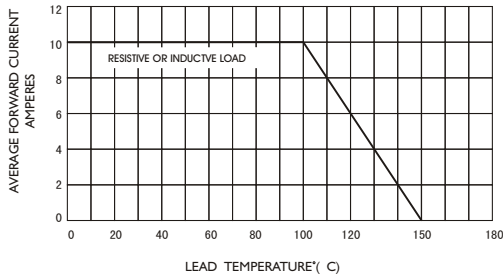


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

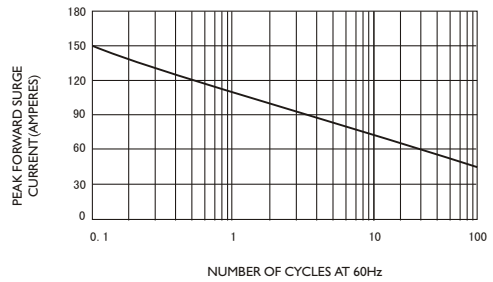


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

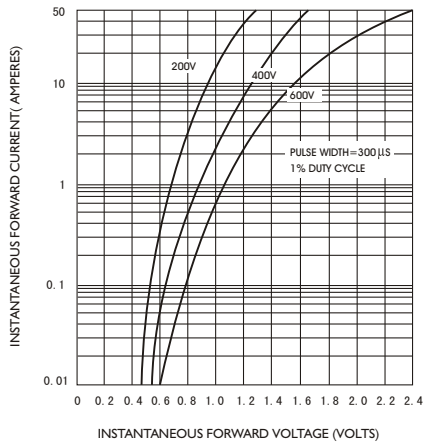


FIG.4-TYPICAL REVERSE CHARACTERISTICS

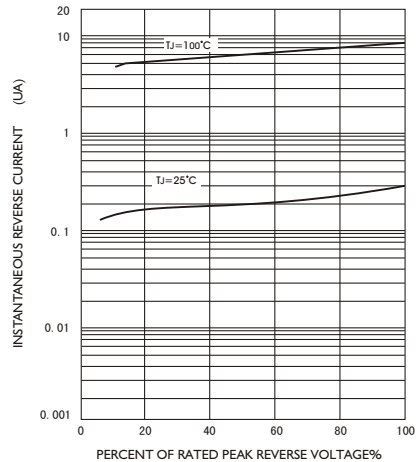


FIG.5-TYPICAL JUNCTION CAPACITANCE

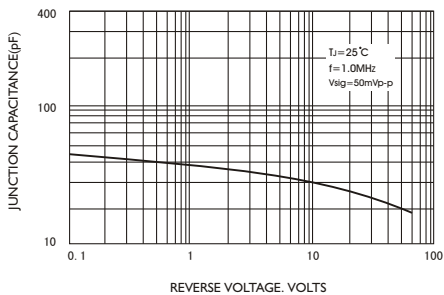


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

