MURF2020CT THRU MURF2060CT

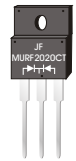
GLASS PASSIVATED SUPER FAST RECTIFIER

Reverse Voltage - 200 -600 Volts
Forward Current - 20.0Amperes

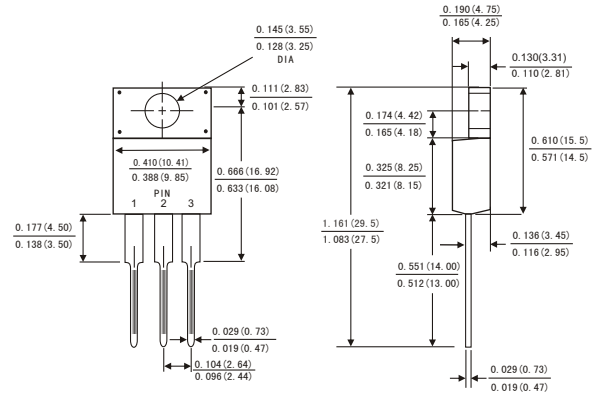
SEMICONDUCTOR

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



ITO-220AB



Dimensions in inches and (millimeters)

MECHANICAL DATA

- *Case*: JEDEC ITO-220AB molded plastic body
- *Terminals*: Lead solderable per MIL-STD-750,method 2026
- *Polarity*: As marked.
- *Mounting Position*: Any
- *Weight*: 0.08ounce, 2.24 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	Symbols	MURF 2020CT	MURF 2040CT	MURF 2060CT	Units
Maximum repetitive peak reverse voltage	V_{RRM}	200	400	600	Volts
Maximum RMS voltage	V_{RMS}	140	280	420	Volts
Maximum DC blocking voltage	V_{DC}	200	400	600	Volts
Maximum average forward rectified current(see Fig.1) Per leg	$I_{(AV)}$	10.0			Amps
Maximum average forward rectified current(see Fig.1) Total device	$I_{(AV)}$	20.0			Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	150			Amps
Maximum instantaneous forward voltage at 10.0 A(Note 1)	V_F	0.975	1.3	1.5	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1) T_A=25℃	I_R	5	10		uA
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1) T_A=125℃	I_R	500			uA
Maximum Reverse Recovery Time (Note 2)	Trr	35			ns
Typical thermal resistance (Note 3)	$R_{\theta JC}$	2.5			℃/W
Operating junction temperature range	T_J	-65 to+150			℃
Storage temperature range	T_{STG}	-65 to+175			℃

Notes: 1. Pulse test: 300μs pulse width,1% duty cycle

2. Reverse recovery test conditions I_F=0.5A,I_R=1.0A, Irr=0.5A

3. Thermal resistance from junction to case

FIG.1-FORWARD CURRENT DERATING CURVE

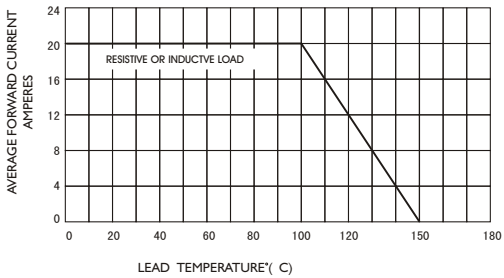


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

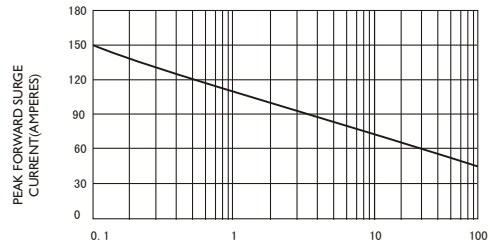


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

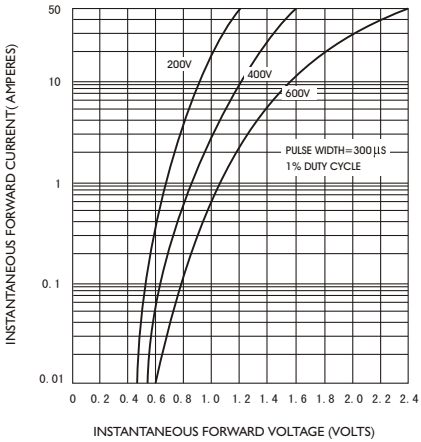


FIG.4-TYPICAL REVERSE CHARACTERISTICS

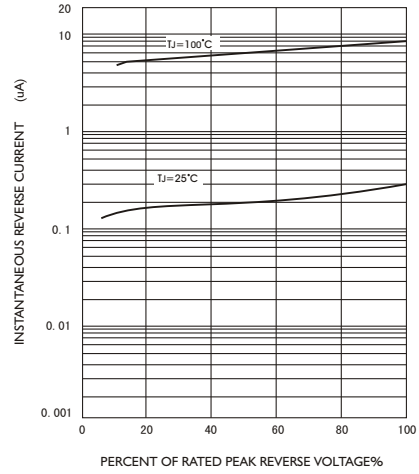


FIG.5-TYPICAL JUNCTION CAPACITANCE

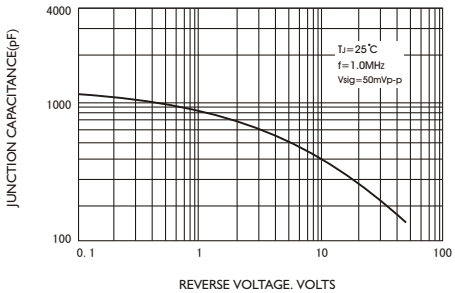


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE