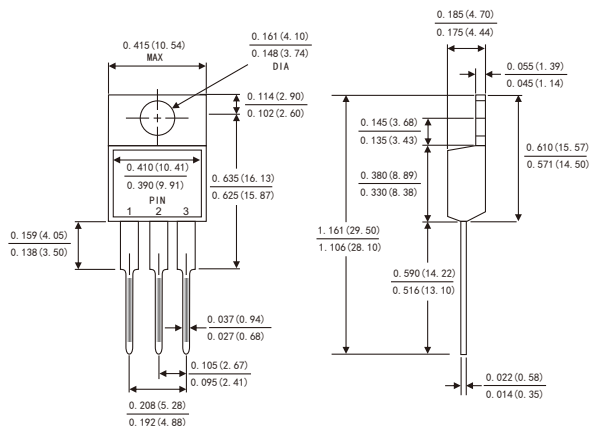


FEATURES

- 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 2011/65/EU



TO-220AB



Dimensions in inches and (millimeters)

MECHANICAL DATA

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

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	MUR 2030CT				Units
Maximum repetitive peak reverse voltage		V _{RRM}	300				Volts
Maximum RMS voltage		V _{RMS}	210				Volts
Maximum DC blocking voltage		V _{DC}	300				Volts
Maximum average forward rectified current(see Fig.1)	Per leg	I(AV)	10.0				Amps
	Total device		20.0				
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)	T _A =25°C	V _F	1.2				Volts
	T _A =125°C		0.95				
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	T _A =25°C	I _R	5				µA
	T _A =125°C		TYP.	20	MAX.	50	
Maximum Reverse Recovery Time (Note 2)		T _{rr}	35				ns
Typical thermal resistance (Note 3)		R _θ JC	2.5				°C/W
Operating junction temperature range		T _J	-55 to+175				°C
Storage temperature range		T _{STG}	-55 to+175				°C

- Notes:**
1. Pulse test: 300μ s pulse width,1% duty cycle
 2. Reverse recovery test conditions $I_F=0.5A, I_R=1.0A, I_{rr}=0.25A$
 3. Thermal resistance from junction to case

RATINGS AND CHARACTERISTIC CURVES OF MUR2030CT

FIG.1-FORWARD CURRENT DERATING CURVE

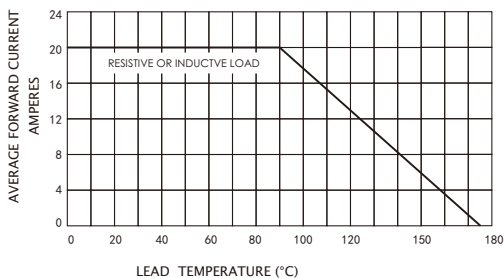


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

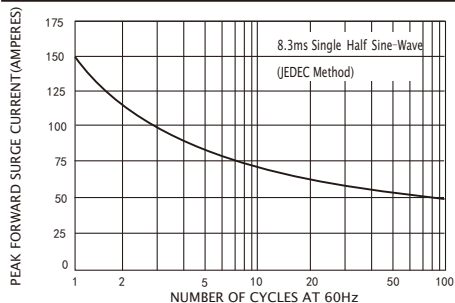


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

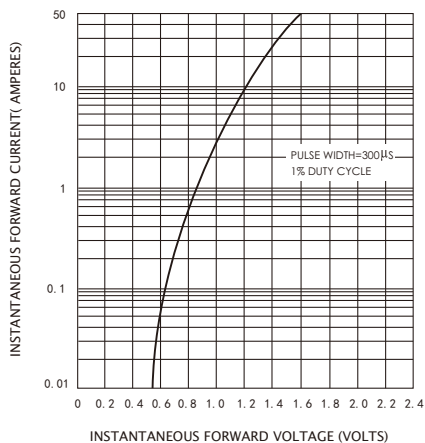


FIG.4-TYPICAL REVERSE CHARACTERISTICS

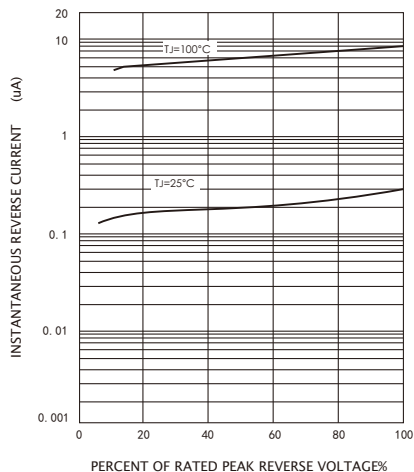


FIG.5-TYPICAL JUNCTION CAPACITANCE

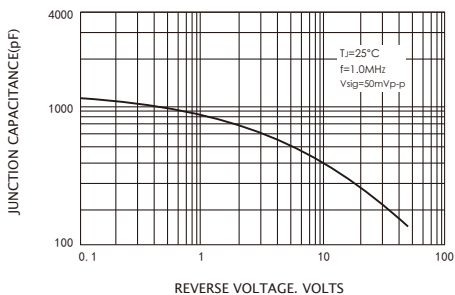


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

