

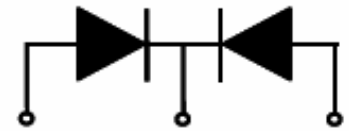
Product Specification

Semitel Type

MUR2020CT

Construction : Ultra Fast Recover diode

Application : For power switch



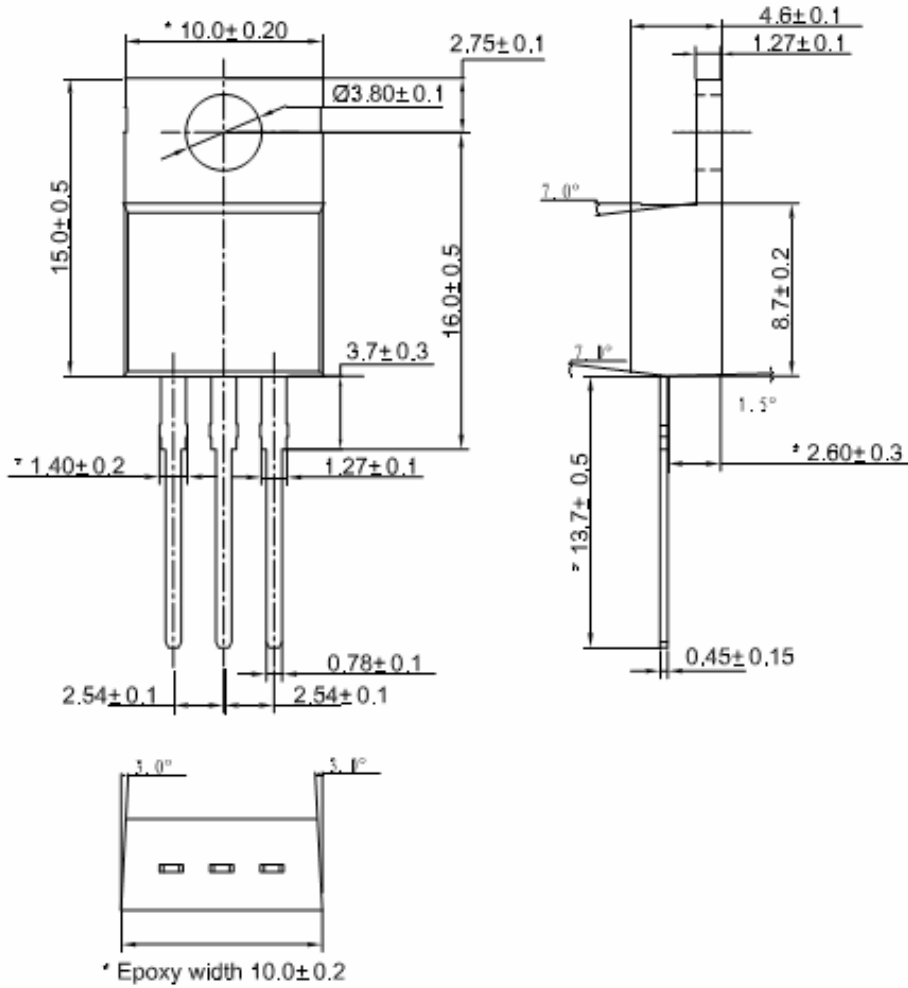
1. Anode 2. Cathode 3. Anode

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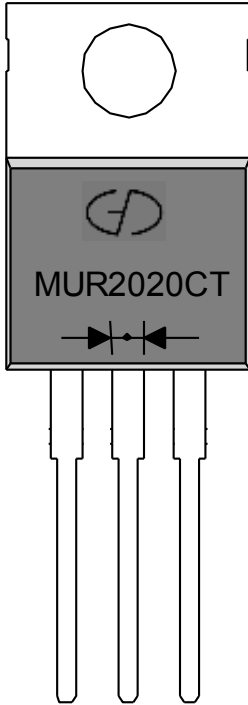
1. Package Outline (TO220-AB)

UNIT:mm




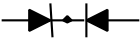
Lead Frame Material : Copper Plating: Pure Tin Plating
Plating Thickness : 8 μ m to 25.4 μ m

2. MARKING



1. Part Name : MUR2020CT

2. Logo Mark: 

3. Polarity: 

3.Features& Mechanical Characteristics

Features

- Plastic package has underwriters Laboratory Flammability Classification 94V-0
- Dual rectifier construction,positive center tap
- Metal of silicon rectifier,majority carrier conduction
- Low forward voltage,high efficiency
- Guarding for over voltage protection
- For use in low voltage,high frequency inverters,
- Free wheeling,and polarity protection applications

Mechanical Characteristics

- Case:Epoxy,Molded
- Weight: 1.9grams(approximately)
- Finish:All External Surfaces Corrosion Resistant and Terminal Leads are Readily Solderable
- Lead Temperature for Soldering Purposes:260°C Max.for10 sec
- Shipped 50 units per plastic tube

4.Maximum Ratings and Electrical Characteristics

MAXIMUM RATINGS and ELECTRICAL CHARACTERISTICS(TC=25°C unless otherwise moted)					
PARAMETER	TEST CONDITIONS		SYMBOL	MUR2020CT	UNIT
Maximum repetitive peak reverse voltage			V _{RRM}	200	V
Working peak reverse voltage			V _{RWM}	200	V
Maximum DC blocking voltage			V _{DC}	200	V
Maximum average forward rectified current at Tc=150°C total device per diode	Per Leg Per device		I _{F(AV)}	10 20	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load per diode			I _{FSM}	100	A
Operating junction temperature range			T _J	-55 to+150	°C
Storage temperature range			T _{STG}	-55 to+150	°C
Maximum instantaneous forward voltage per leg	I _F =10A I _F =10A	TC=25°C TC=125°C	V _F	1.0 0.9	V
Maximum reverse current per leg at working peak Reverse voltage		T _J =25°C T _J =100°C	I _R	20 250	uA uA
Maximum Reverse Recover Time (I _f =0.5Amp, I _R =1.0Amp,I _{rec} =0.25Amp)	T _{rr}		T _{rr}	35	ns

Thermal Characteristics Ta=25°C unless otherwise noted

Symbol	Parameter	Max	Unit
R _{θJC}	Thermal Resistance,Ju nction to Case per Leg	2.0	°C /W
R _{θJA}	Thermal Resistance,Ju nction to Ambient per Leg	62.5	°C /W

Note:

1. Screw mounting with 4-40 screw,where washer diameteris≤4.9mm(0.19 ")
2. Pulse test:300us pulse width,1% duty cycle

5. Rating and Characteristic Curves

FIG.1- CURRENT DERATING, CASE, PER LEG

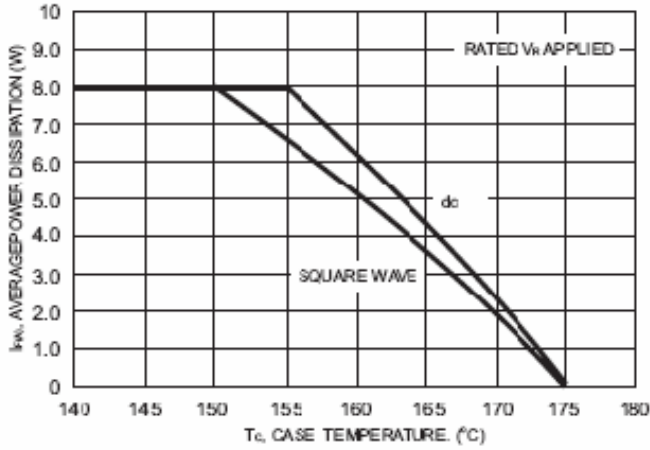
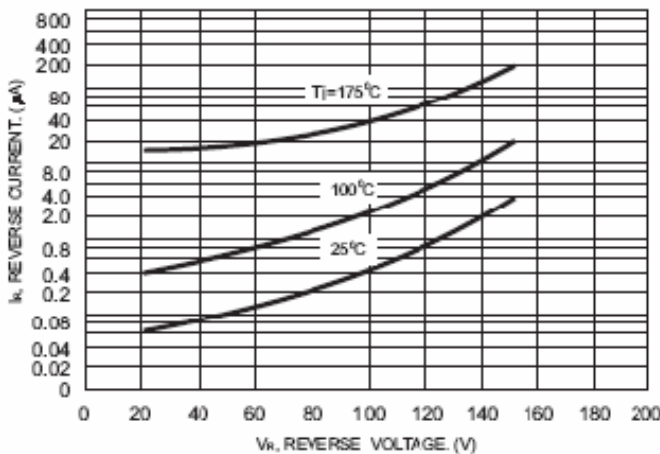


FIG.2- TYPICAL REVERSE CURRENT, PER LEG



*The curves shown are typical for highest voltage device in the voltage grouping. Typical reverse current for lower voltage selections can be estimated from these same curves if Vr is sufficiently below rated Vr.

FIG.4- TYPICAL CAPACITANCE, PER LEG

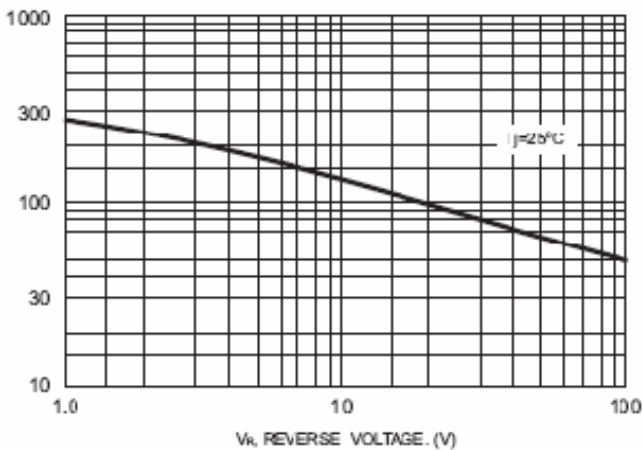


FIG.3- TYPICAL FORWARD VOLTAGE, PER LEG

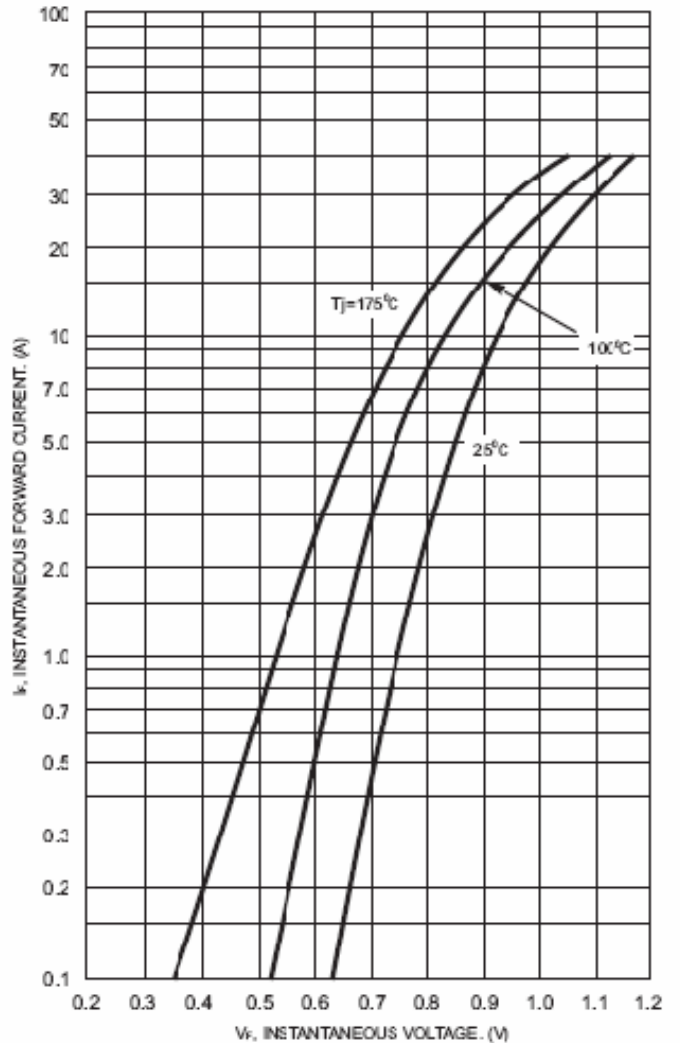
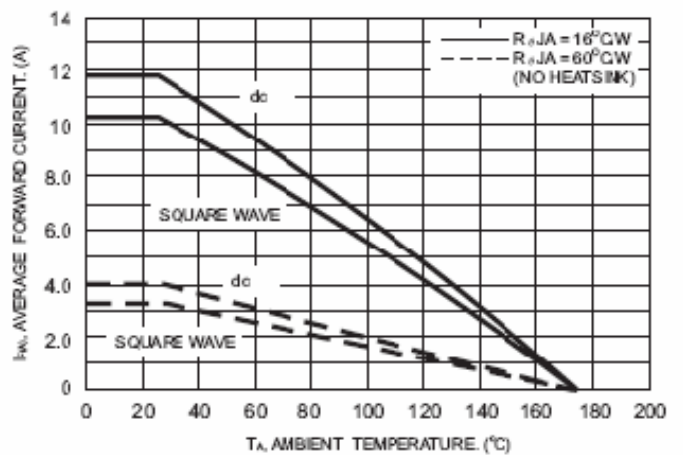
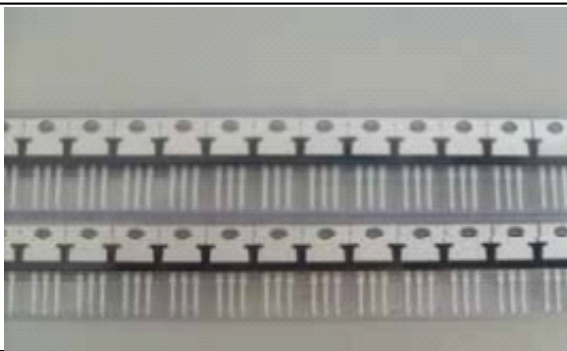





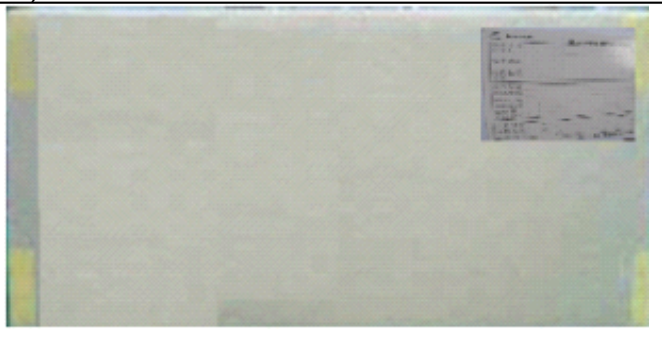
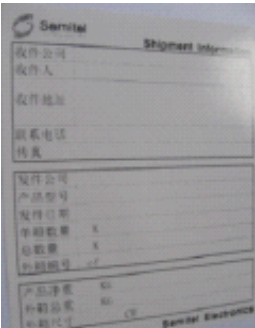
FIG.5- CURRENT DERATING, AMBIENT, PER LEG



6. Packing Specification

	
<p>1) Tube : 50units</p>	<p>2) Inner Box: 20 tube(1000units)</p>
	
<p>3) Outer Box: 10 inner box (10,000units)</p>	

7. DESCRIPTION of BOX LABEL

	
<p>1) Inner Box Label</p>	<p>2) Inner Box Label</p>
	
<p>3) Outer Box Label</p>	<p>4) Outer Box Label</p>