

## Product Specification

GOODARK Type

**MUR2030CT**

Construction : Ultra Fast Recover diode

Application : For power switch

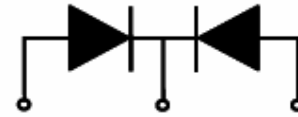
( Manufacturer ) :

Suzhou Goodark Electronics Co.,Ltd

Prepared on Sep. 17<sup>th</sup>, 2008

Prepared: R & D Department

Approval :



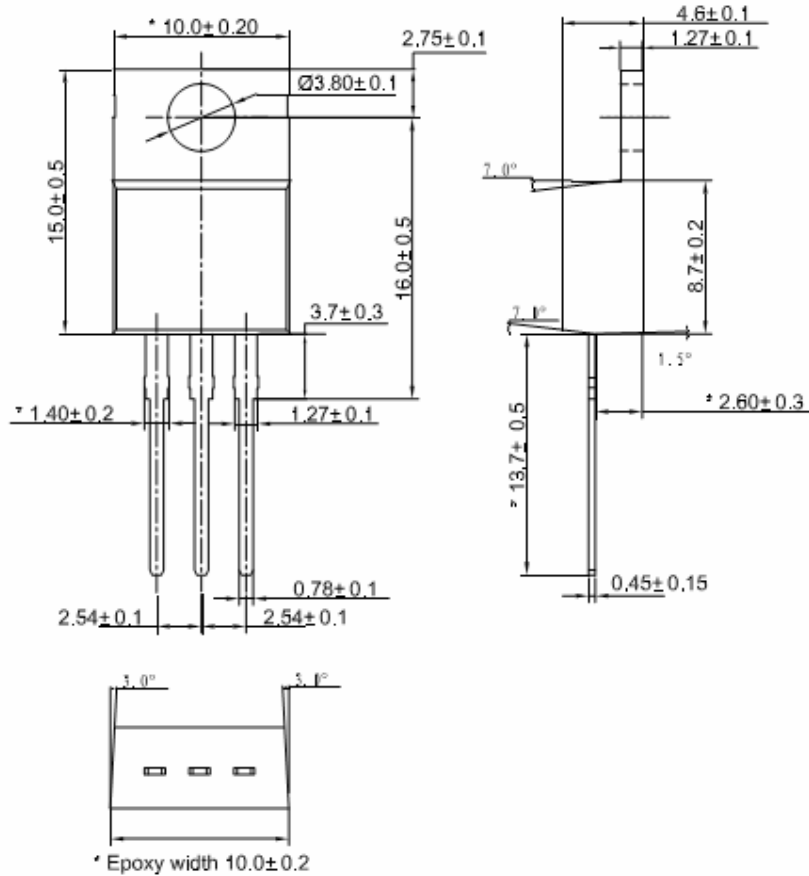
1. Anode 2. Cathode 3. Anode

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## 1. Package Outline (TO220-AB)

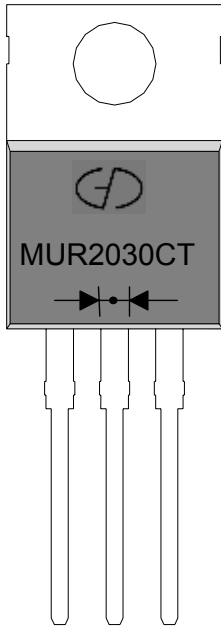
UNIT:mm



Lead Frame Material : Copper      Plating: Pure Tin Plating

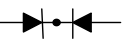
Plating Thickness :  $8\mu\text{m}$  to  $25.4\mu\text{m}$

## 2. MARKING



1. Part Name : MUR2030CT

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	MUR2030CT	UNIT
Maximum repetitive peak reverse voltage			VRRM	300	V
Working peak reverse voltage			VRWM	300	V
Maximum DC blocking voltage			VDC	300	V
Maximum average forward rectified current at Tc=150°C total device per diode	Per Leg Per device		IF(AV)	10 20	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load per diode			IFSM	125	A
Operating junction temperature range			TJ	—55 to+150	°C
Storage temperature range			TSTG	—55 to+150	°C
Maximum instantaneous forward voltage per leg	IF=10A IF=10A	TC=25 TC=125	VF	1.50 1.25	V
Maximum reverse current per leg at working peak Reverse voltage	TJ=25 TJ=100°C		IR	50 500	uA uA
Maximum Reverse Recover Time ( If=0.5Amp, IR=1.0Amp,Irec=0.25Amp )	Trr		Trr	35	ns

#### Thermal Characteristics Ta=25 unless otherwise noted

Symbol	Parameter	Max	Unit
RθJC	Thermal Resistance , Junction to Case per Leg	2.0	°C /W
RθJA	Thermal Resistance , Junction 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

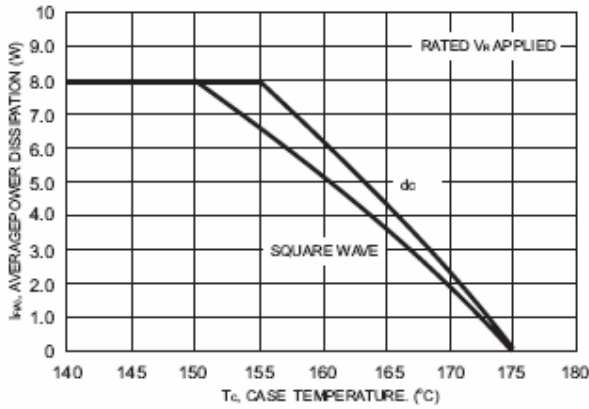
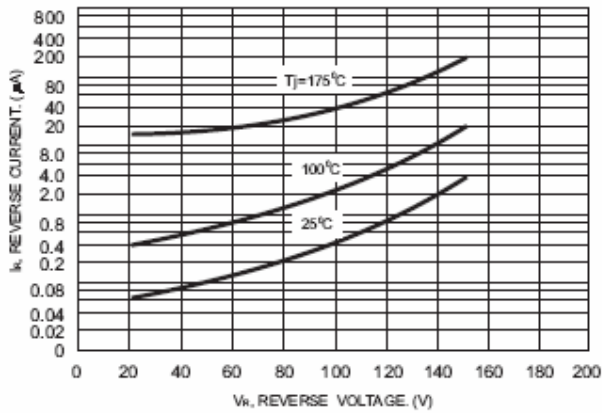


FIG.2- TYPICAL REVERSE CURRENT, PER LEG



\*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  $V_R$  is sufficiently below rated  $V_R$ .

FIG.4- TYPICAL CAPACITANCE, PER LEG

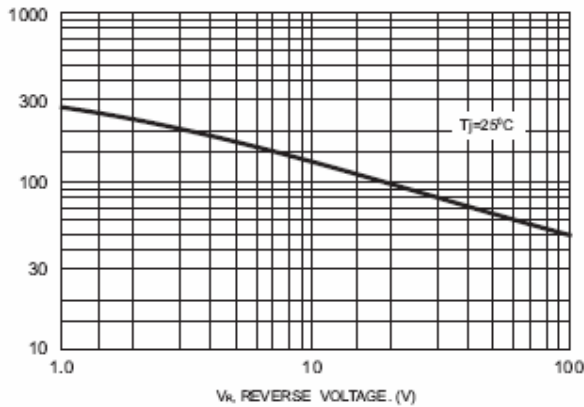


FIG.3- TYPICAL FORWARD VOLTAGE, PER LEG

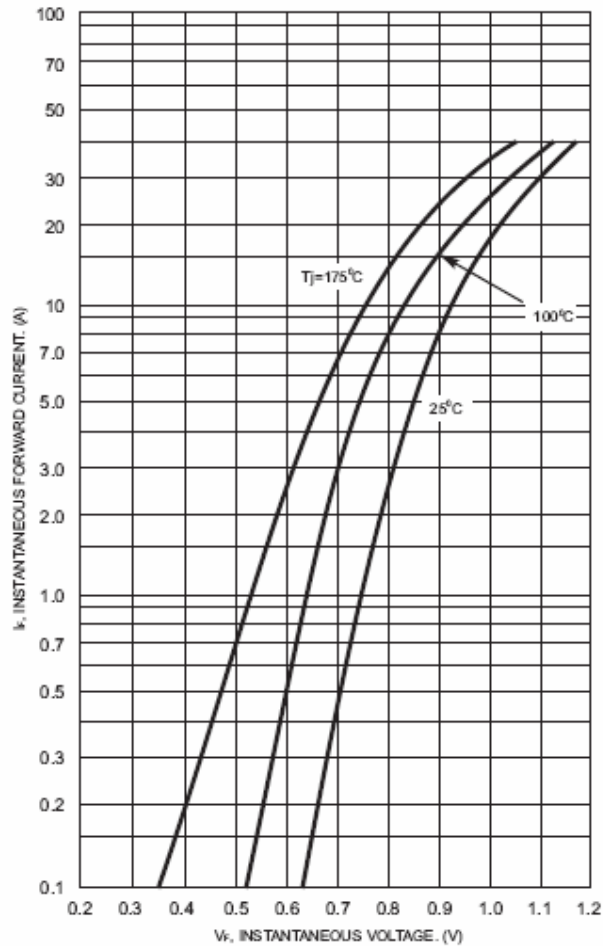
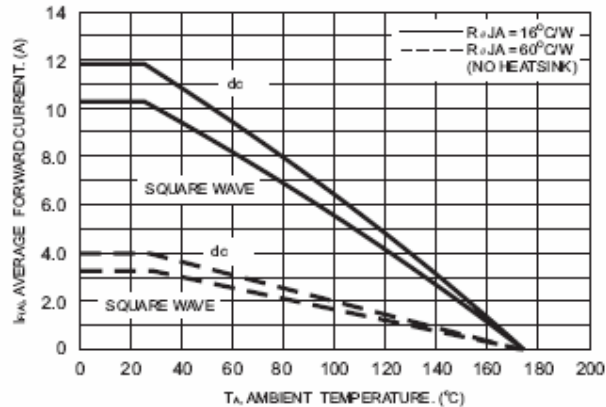



FIG.5- CURRENT DERATING, AMBIENT, PER LEG



## 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>TYPE:        Q'TY:        P/O NO:        LOT NO:</p>
<p>1 ) Inner Box Label</p>	<p>2 ) Inner Box Label</p>
	<p>TYPE:        Q'TY:        P/O NO:</p>
<p>3 ) Outer Box Label</p>	<p>4 ) Outer Box Label</p>