

## Product Specification

GOODARK Type  
**MUR1620FCT**

Construction : Ultra Fast Recover diode

Application : For power switch

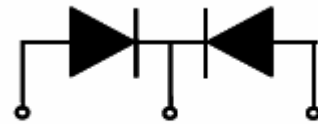
( Manufacturer ) :

Suzhou Goodark Electronics Co.,Ltd

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

Prepared: R & D Department

Approval :



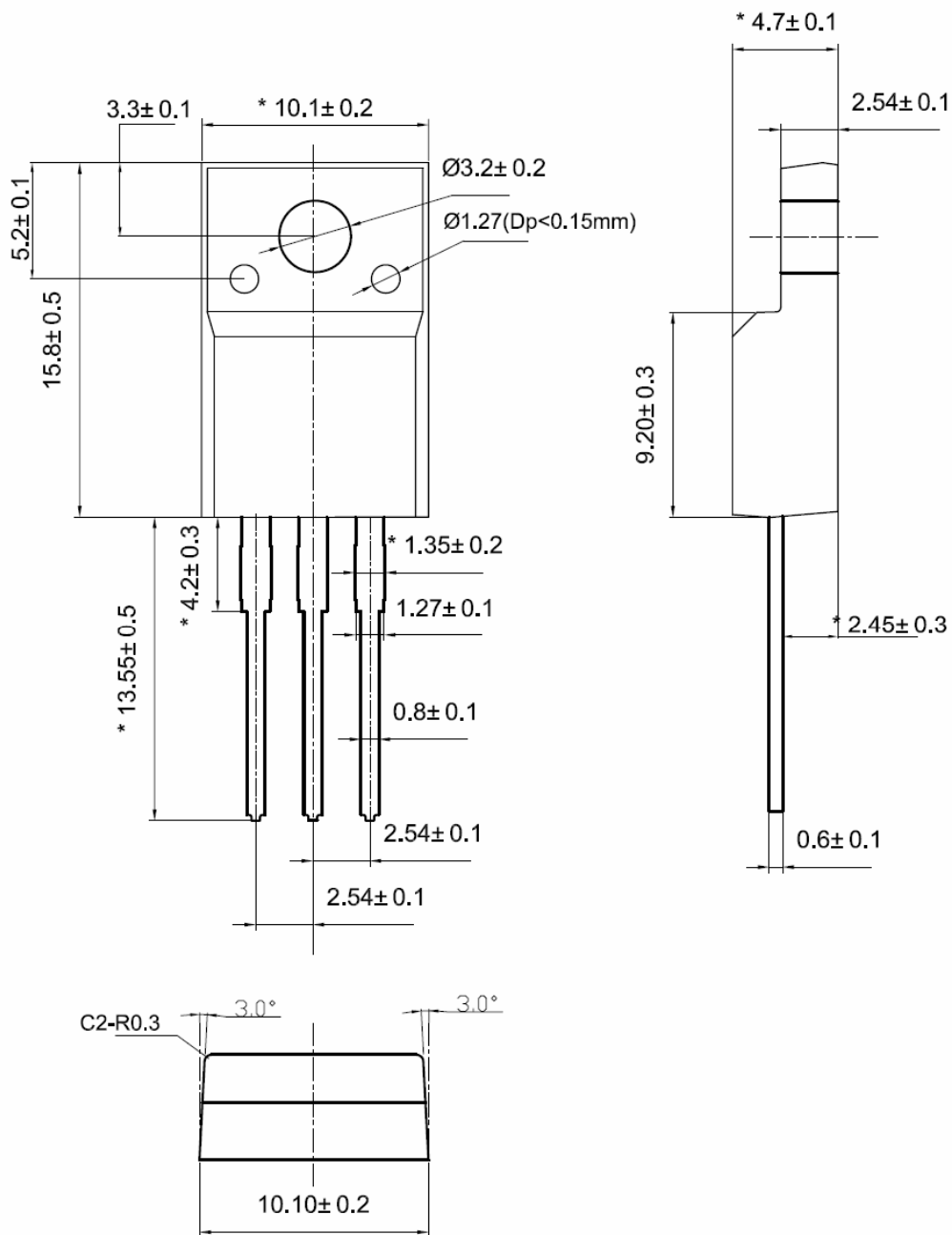
1. Anode 2. Cathode 3. Anode

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### 1. Package Outline (ITO220-AB)

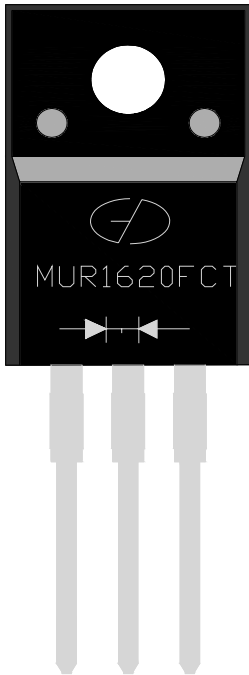
UNIT:mm



Lead Frame Material : Copper      Plating: Pure Tin Plating

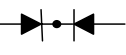
Plating Thickness :  $8\mu\text{m}$  to  $25.4\mu\text{m}$

## 2. MARKING



1. Part Name : MUR1620FCT

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	MUR1620FCT	UNIT
Maximum repetitive peak reverse voltage			VRRM	200	V
Working peak reverse voltage			VRWM	200	V
Maximum DC blocking voltage			VDC	200	V
Maximum average forward rectified current at Tc=150°C total device per diode	Per Leg Per device		IF(AV)	8 16	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load per diode			IFSM	100	A
Operating junction temperature range			TJ	-55 to+150	°C
Isolation voltage (ITO-220AB only) from terminal to heatsink t = 1 min			VAC	1500	V
Storage temperature range			TSTG	-55 to+150	°C
Maximum instantaneous forward voltage per leg	IF=8A IF=8A	TC=25 TC=125	VF	0.975 0.895	V
Maximum reverse current per leg at working peak Reverse voltage			IR	20 250	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	4.0	°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

#### RATINGS AND CHARACTERISTIC CURVES (MUR1620CT THRU MUR1660CT)

FIG.1- CURRENT DERATING, CASE, PER LEG

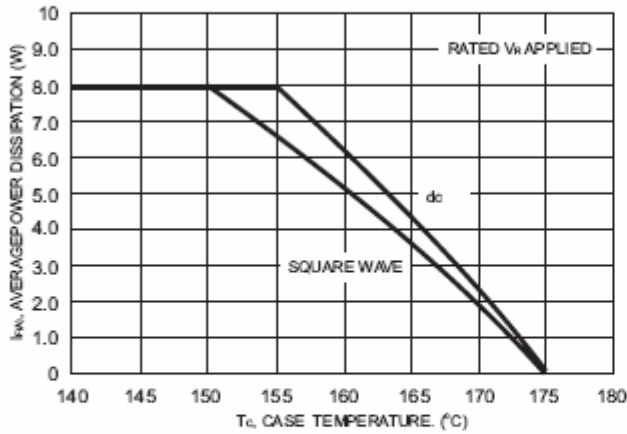


FIG.3- TYPICAL FORWARD VOLTAGE, PER LEG

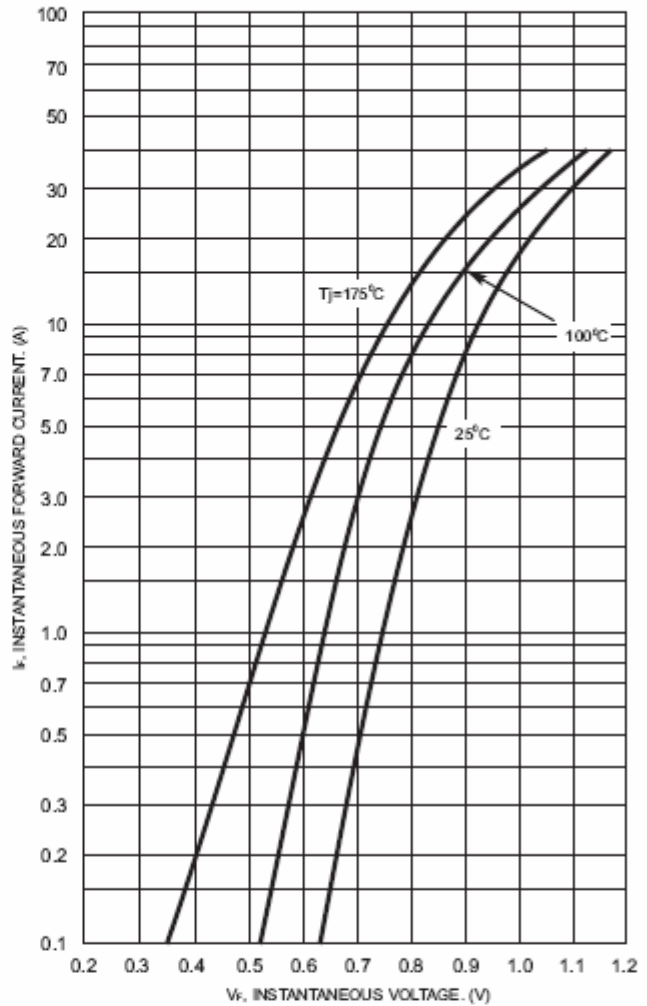
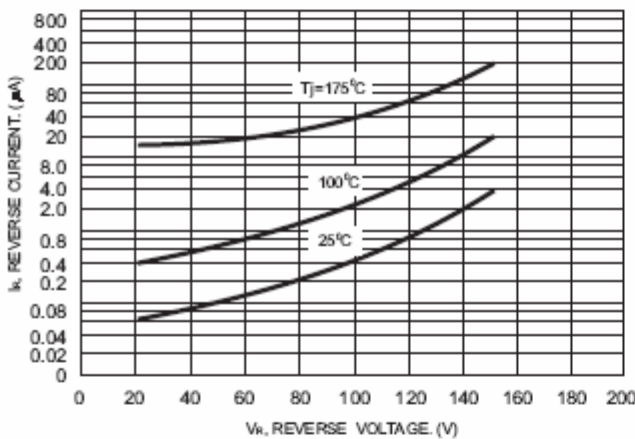


FIG.2- TYPICAL REVERSE CURRENT, PER LEG



\*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

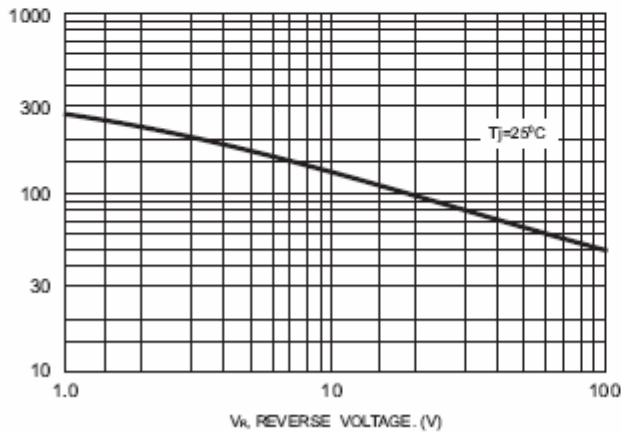
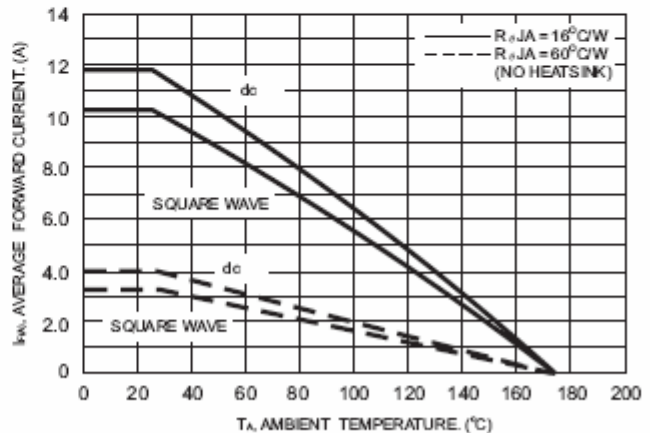


FIG.5- CURRENT DERATING, AMBIENT, PER LEG



## 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>