

## Product Specification

GOODARK Type  
**MURB1020CT**

Construction : Ultra Fast Recover diode  
Application : For power switch

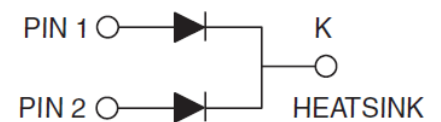
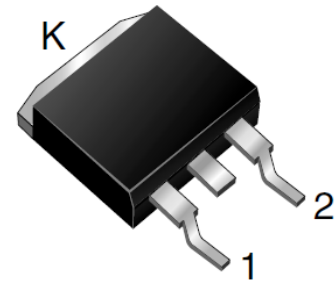
(Manufacturer) :

Suzhou Goodark Electronics Co.,Ltd

Prepared on May. 10<sup>th</sup>, 2011

Prepared: R & D Department

Approva: QRA Department



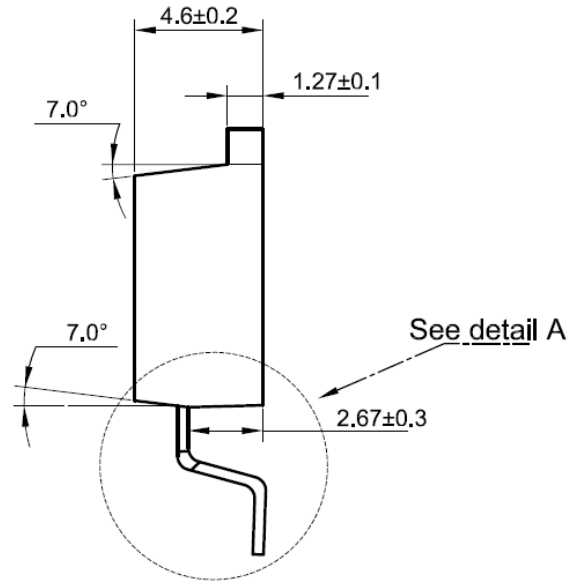
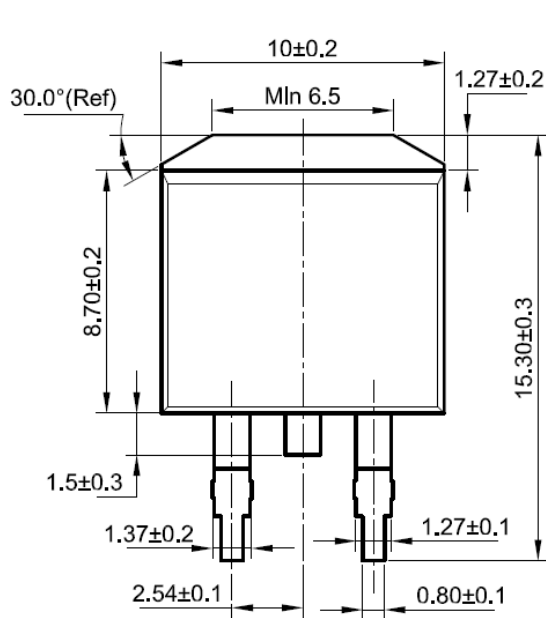
**ULTRA FAST RECOVER DIODE**  
**10 AMPERES**  
**200 VOLTS**

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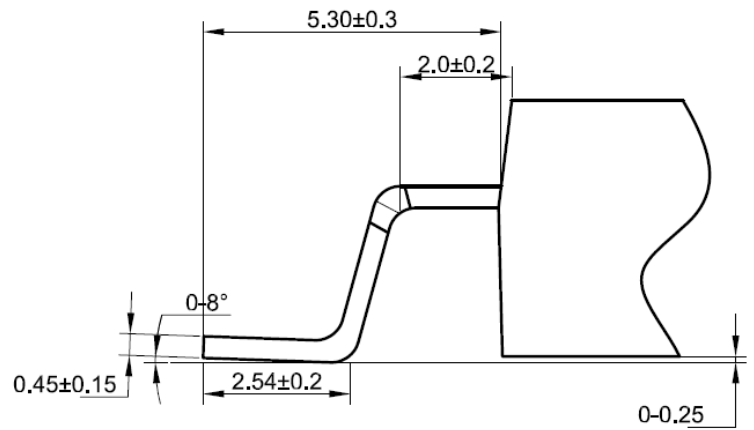
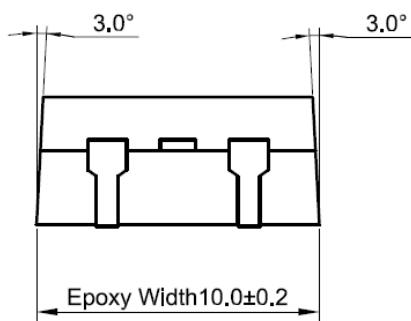
1. Package Outline
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### 1. Package Outline (TO263)

UNIT:mm

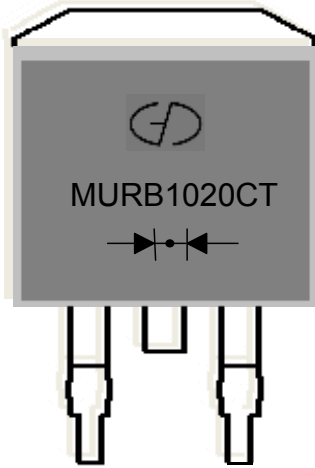


#### Detail A



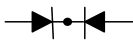
Lead Frame Material : Copper    Plating: Pure Tin Plating

## 2.MARKING



1. Part Name : MURB1020CT

2. Logo Mark: 

3. Polarity: 



### 3.Features& Mechanical Characteristics

#### Features

- Plastic package has underwriters Laboratory Flammability Classification 94V-0
- For surface mounted application
- 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: 1.4grams (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 or tape reel packing 800/reel

### 4.Maximum Ratings and Electrical Characteristics

MAXIMUM RATINGS and ELECTRICAL CHARACTERISTICS(TC=25°C unless otherwise moted)					
PARAMETER	TEST CONDITIONS		SYMBOL	MURB1020CT	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=105°C total device per diode	Per Leg Per device		IF(AV)	5 10	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load per diode			IFSM	90	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=5A	TC=25°C	VF	0.92	V
	IF=5A	TC=125°C		0.83	
Maximum reverse current per leg at working peak Reverse voltage			TJ=25°C TJ=100°C	10 500	uA uA
Maximum Reverse Recover Time (If=0.5Amp, IR=1.0Amp,Irec=0.25Amp)	Trr		Trr	50	ns

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

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

#### Note:

1. Pulse test:300us pulse width, duty cycle=2%



## 5. Rating and Characteristic Curves

(Tc=25°C Unless otherwise noted)

Typical Forward Characteristics

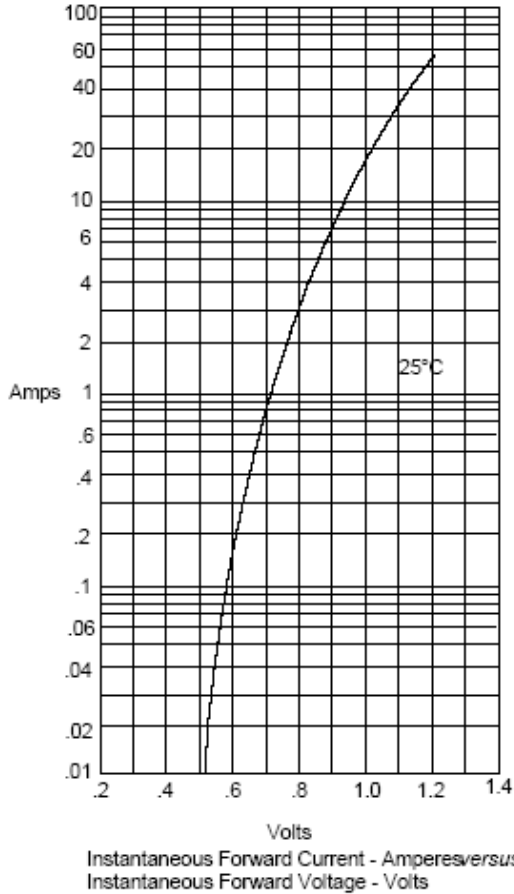


Figure 2  
 Typical Reverse Characteristics

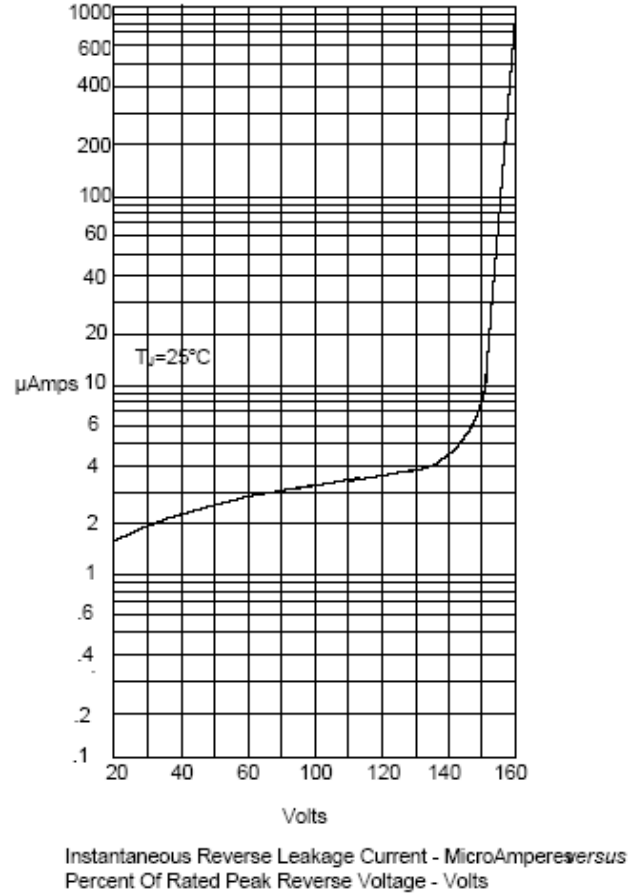


Figure 3  
 Forward Derating Curve

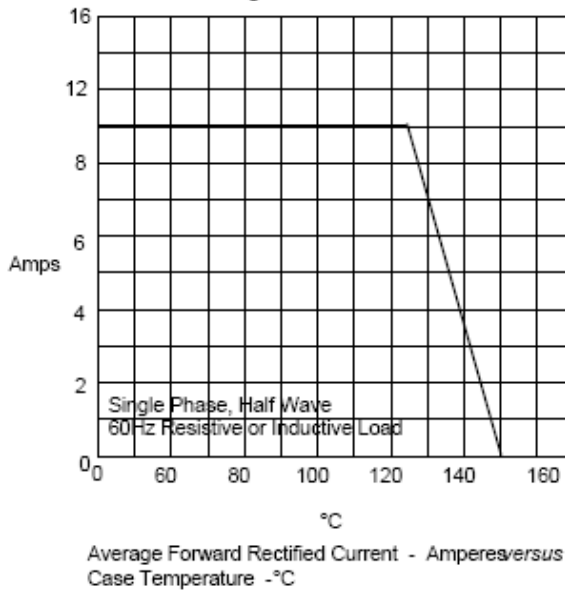
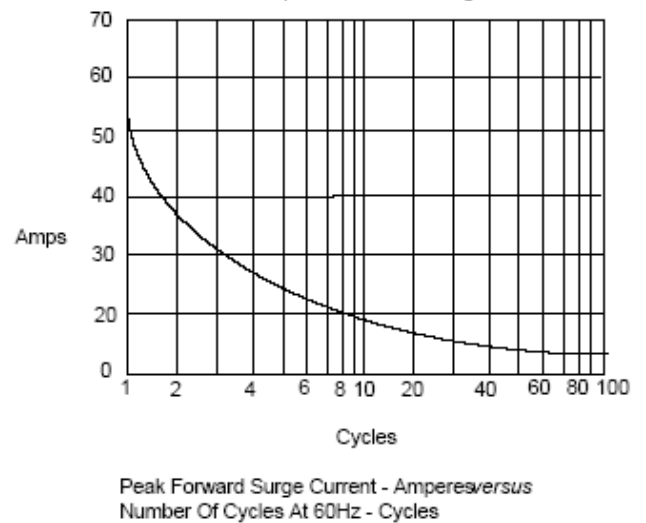
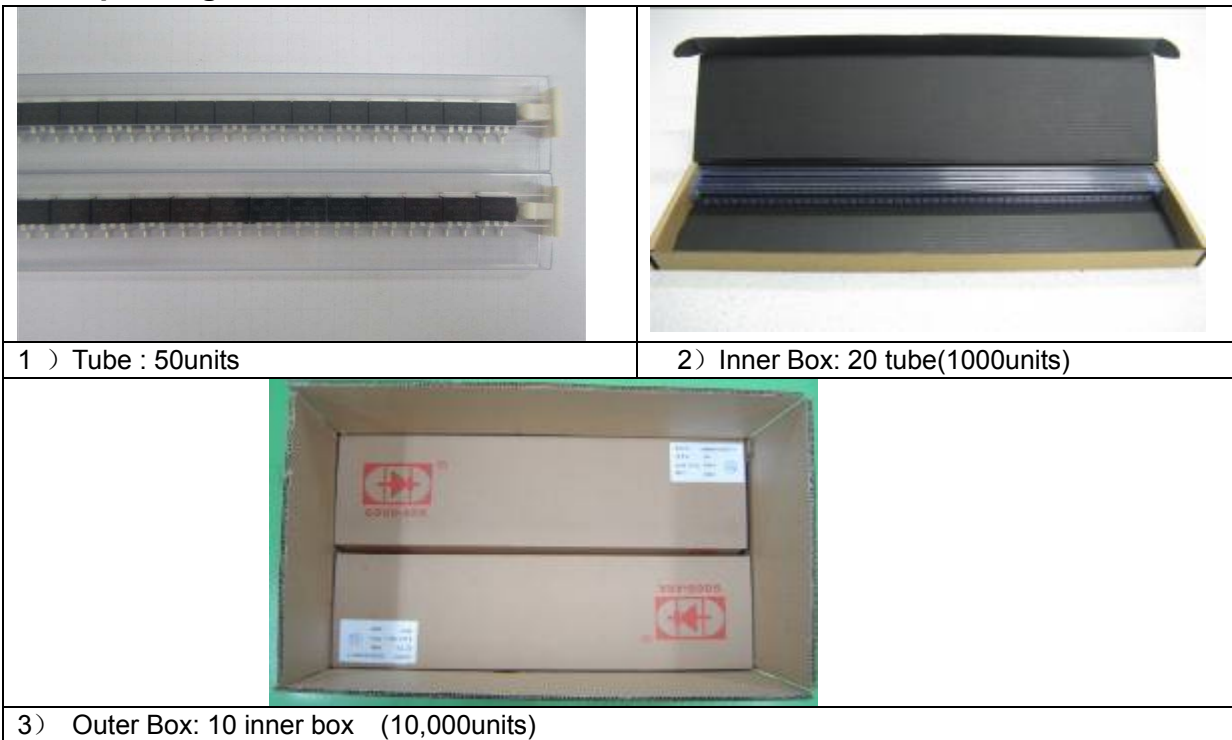


Figure 4  
 Maximum Non-Repetitive Forward Surge Current



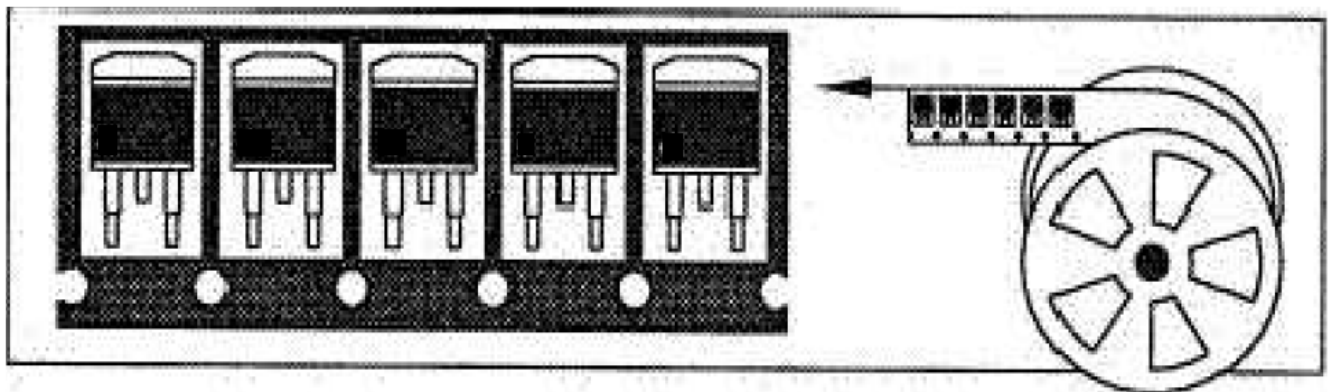
## 6. Packing Specification

### 6.1 Tube packing



### 6.2 Tape&reel packing

Packing size:800 /reel( 13' reel)



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>