

# SPECIFICATION FOR APPROVAL

## 承认试样书

### Schottky Barrier Rectifiers

制品品名 (P/N): GD MBRF10200CT

SUZHOU GOOD-ARK ELECTRONICS CO.,LTD.

贵公司承认栏 (CONFIRMATION)

承认章 (STAMP)

CHECK BY	EXAMINED BY	APPROVED BY



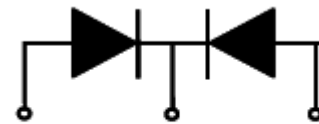
变更履历  
(CHANGE RECORD)

NO.	变更内容 (Change Item)	变更原因 The reason of Change	确认人 Confirmation	日期 Date

## Product Specification

GOODARK Type  
**MBRF10200CT**

Construction : Schottky Barrier Rectifier  
Application : For General Purpose  
(Manufacturer) :  
Suzhou Goodark Electronics Co.,Ltd  
Prepared on Mar. 28<sup>th</sup>, 2012  
Prepared: R & D Department  
Approval: QRA Department



1. Anode 2. Cathode 3. Anode

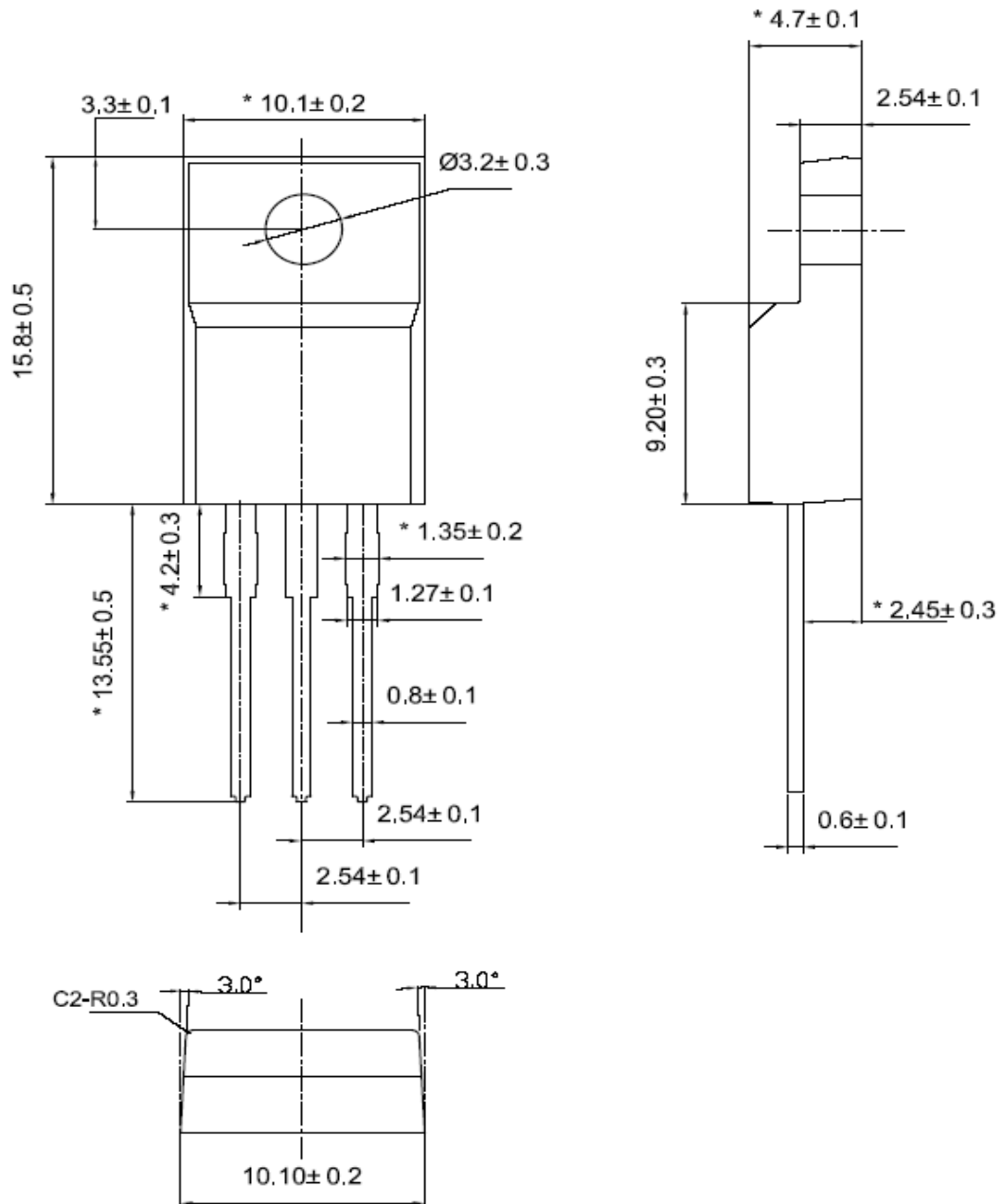
**SCHOTTKY BARRIER RECTIFIER**  
**10 AMPERES**  
**200 VOLTS**

### CONTENTS

1. Package Outline
2. Marking
3. Features& Mechanical Characteristics
4. Maximum Ratings and Electrical Characteristics
5. Rating and characteristic Curves
6. Packing Specification PACKAGING SPECIFICATION
7. Description of Box Label

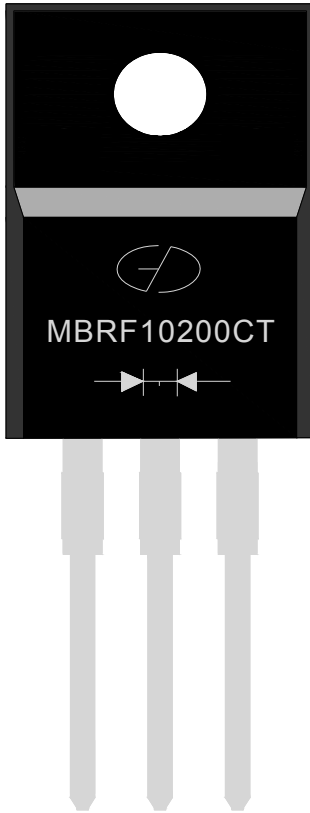
### 1. Package Outline (TO220F-AB)

UNIT:mm



Lead Frame Material : Copper    Plating: Pure Tin Plating  
Plating Thickness :  $8\mu\text{m}$  to  $25.4\mu\text{m}$

## 2.MARKING

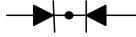


1. Part Name : MBRF10200CT

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	MBRF10200CT	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			IF(AV)	10 5	A	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load per diode			IFSM	125	A	
Peak repetitive reverse current per leg at tp=2.0us , 1KHz			IRRM	0.5	A	
Voltage rate of change (rated VR)			DV/dt	10000	V/us	
Operating junction temperature range			TJ	-55 to+150	°C	
Storage temperature range			TSTG	-55 to+150	°C	
Isolation voltage (TO220F-AB only) from terminal to heatsink t = 1 sec			VAC	1500	V	
Maximum instantaneous forward voltage per leg	IF=5A IF=5A	TC=25°C TC=125°C	VF	0.92 0.82	V	
Maximum reverse current per leg at working peak Reverse voltage			TJ=25°C TJ=100°C	IR	300 15	uA mA

#### Thermal Characteristics Ta=25°C 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:

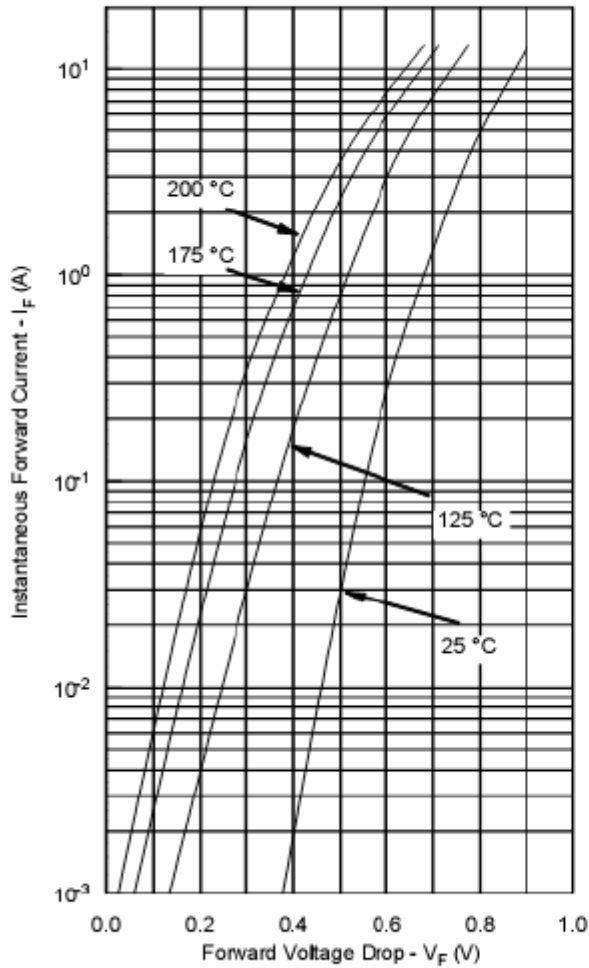
1. Screw mounting with 4-40 screw, where washer diameteris≤4.9mm(0.19 " )
2. Pulse test:300us pulse width,1% duty cycle



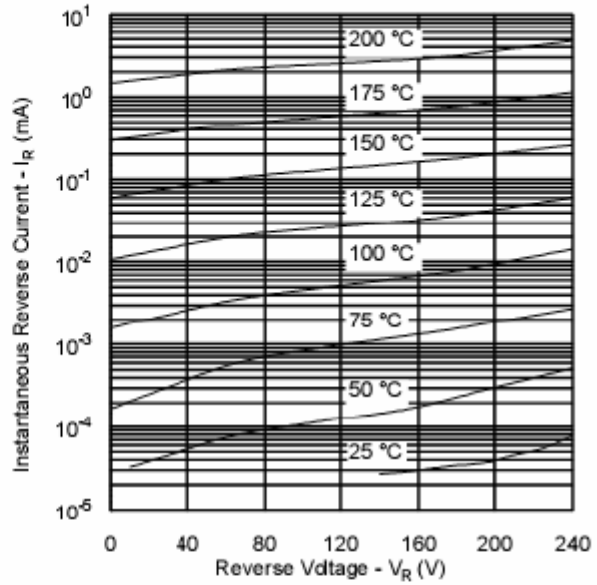
### 5. Rating and Characteristic Curves

(Tc=25°C Unless otherwise noted)

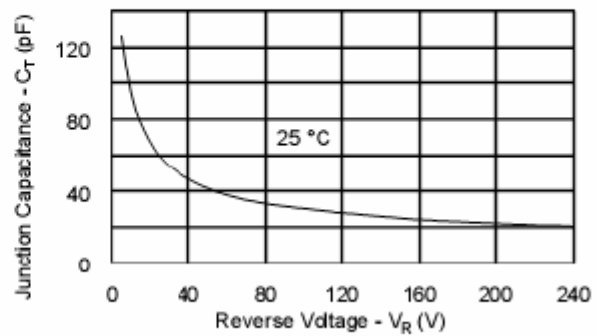
Typical Forward Characteristics






Typical Reverse Characteristics





Typical Junction Capacitance



## 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>