Product Specification

GOODARK Type

MBR1060CTG/MBRF1060CTG

Construction : Schottky Barrier Rectifier

Application : For General Purpose

（Manufacturer）:

Suzhou Goodark Electronics Co.,Ltd

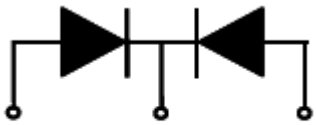
Prepared on Sep. 17th, 2008

Prepared: R & D Department

Approval：QRA Department







1. Anode 2.Cathode 3. Anode

SCHOTTKY BARRIER RECTIFIER

10 AMPERES

60VOLTS

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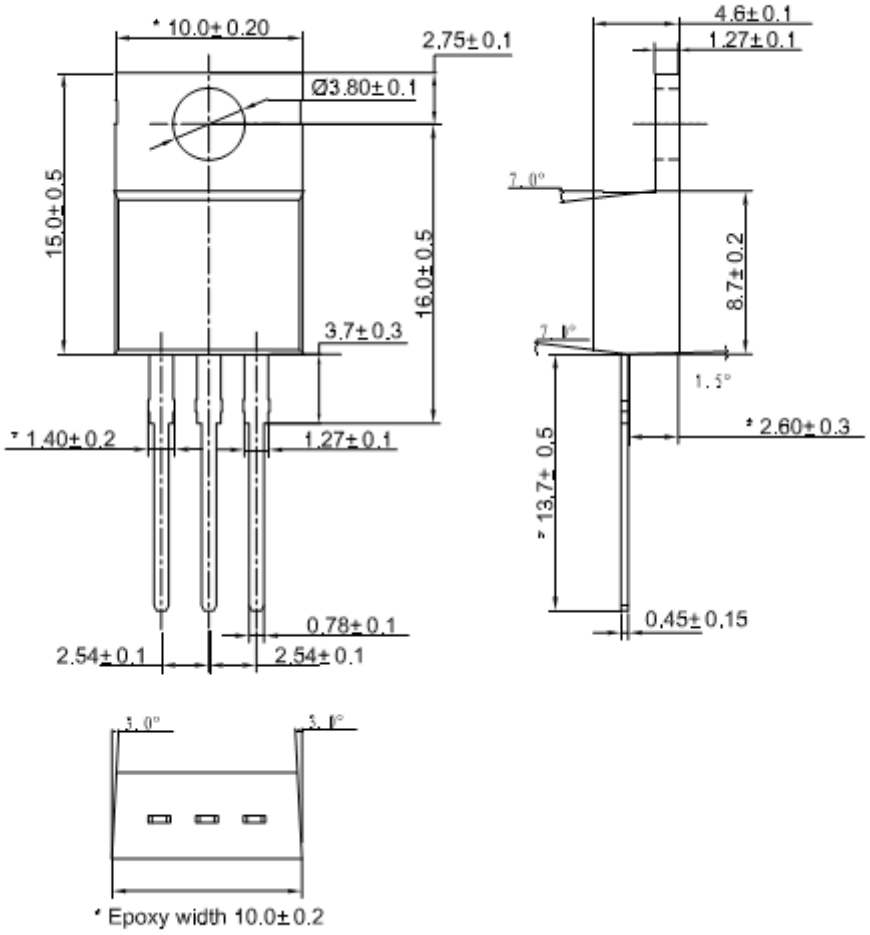
1. Package Outline (TO220-AB)

UNIT:mm



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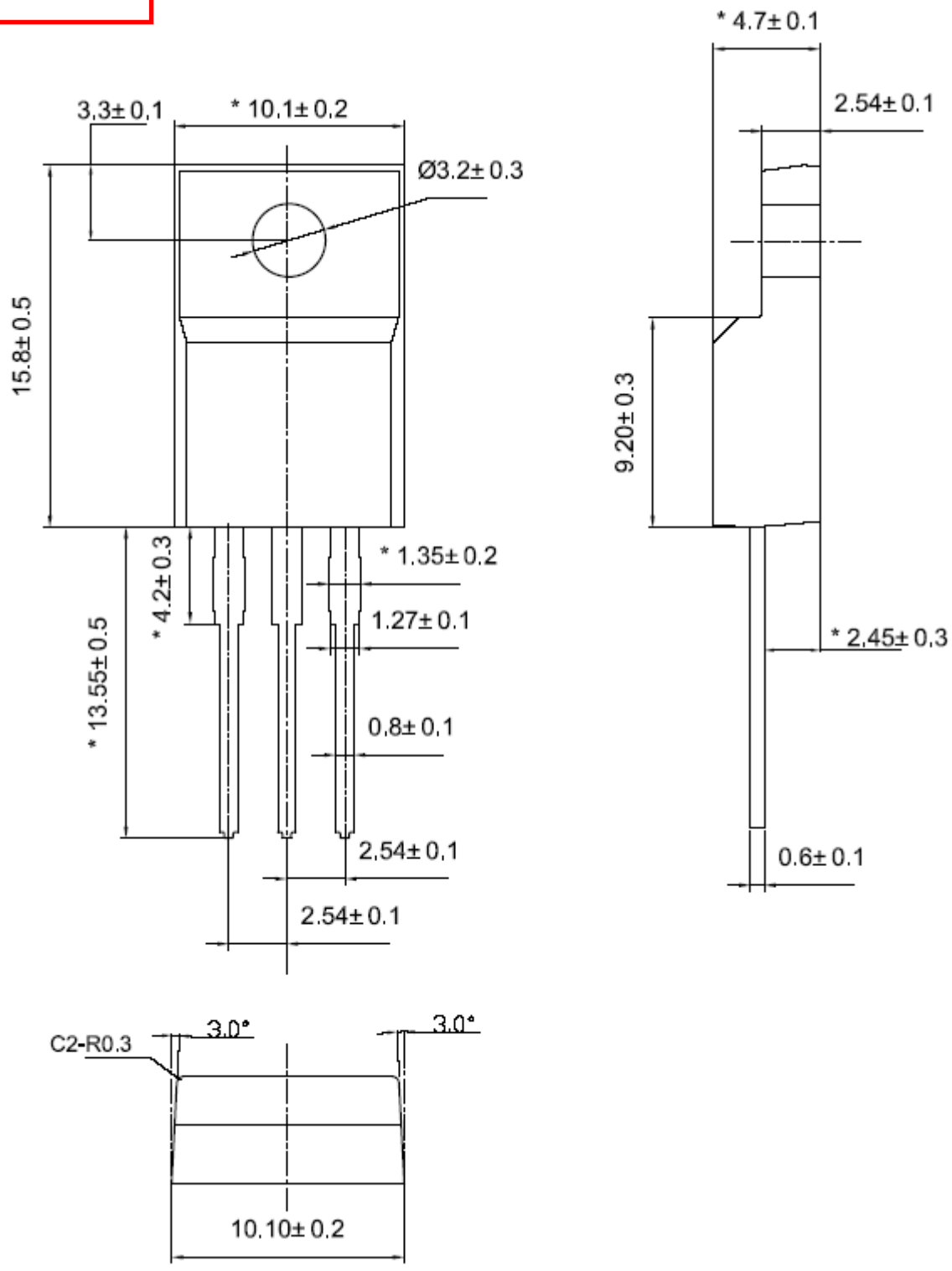
Package Outline (TO220F-AB)



Lead Frame Material : Copper Plating: Pure Tin Plating

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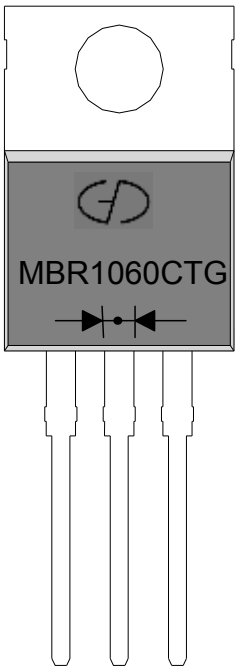
2.MARKING



1. Part Name : MBR1060CTG(TO220AB)
   MBRF1060CTG(TO220F-AB)
2. Logo Mark:
3. Polarity :

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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**	**MBR(F)1060CT**	**UNIT**
Maximum repetitive peak reverse voltage			V_{RRM}	60	V
Working peak reverse voltage			V_{RWM}	60	V
Maximum DC blocking voltage			V_{DC}	60	V
Maximum average forward rectified current at Tc=105°C total device per diode			$I_{F(AV)}$	5 10	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load per diode			I_{FSM}	150	A
Peak repetitive reverse current per leg at tp=2.0us ， 1KHz			I_{RRM}	0.5	A
Voltage rate of change（rated VR）			DV/dt	10000	V/us
Operating junction temperature range			T_J	—55 to+150	°C
Isolation voltage (ITO-220AB only) from terminal to heatsink t = 1 sec			VAC	1500	V
Storage temperature range			T_{STG}	—55 to+150	°C
Maximum instantaneous forward voltage per leg	IF=5A IF=10A	TC=25℃ TC=25℃	VF	0.80 0.90	V
Maximum reverse current per leg at working peak Reverse voltage		TJ=25℃ TJ=100°C	IR	200 10	uA mA

Thermal Characteristics Ta=25℃ unless otherwise noted

Symbol	**Parameter**	**Type（TO220）**	**Type（TO220F）**	**Unit**
$R_{\theta JC}$	Thermal Resistance，Junction to Case per Leg	2.0	4.0	°C /W
$R_{\theta JA}$	Thermal Resistance，Junction to Ambient per Leg	62.5	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

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5. Rating and Characteristic Curves

(TA = 25 °C unless otherwise noted)

Rating and Characteristic Curves

(Tc=25℃ unless otherwise noted)

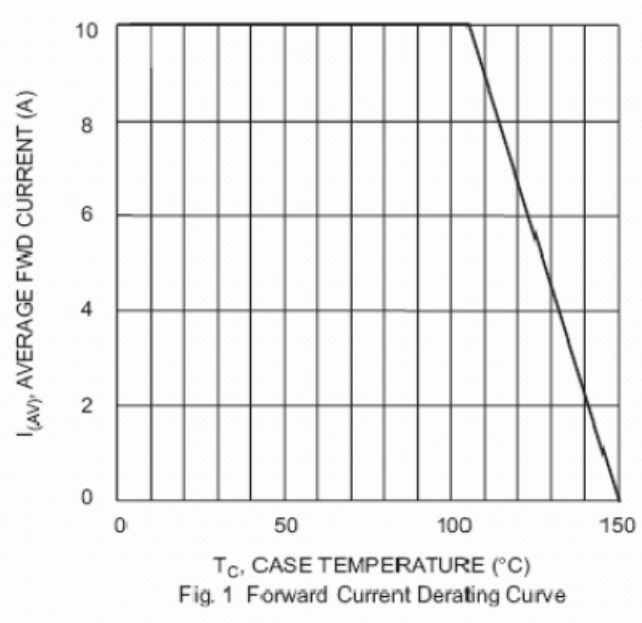


Fig. 1 Forward Current Derating Curve

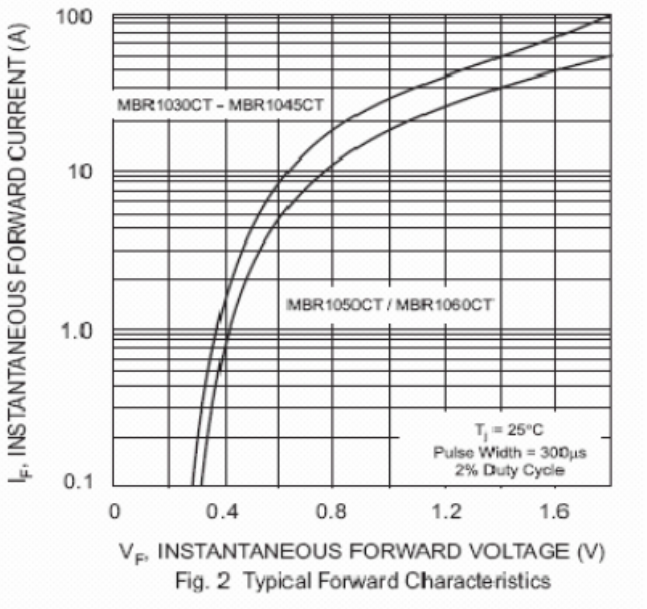


Fig. 2 Typical Forward Characteristics

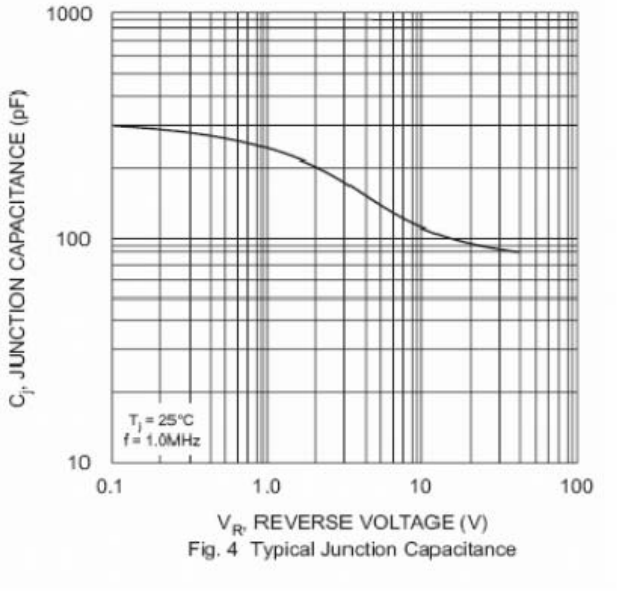
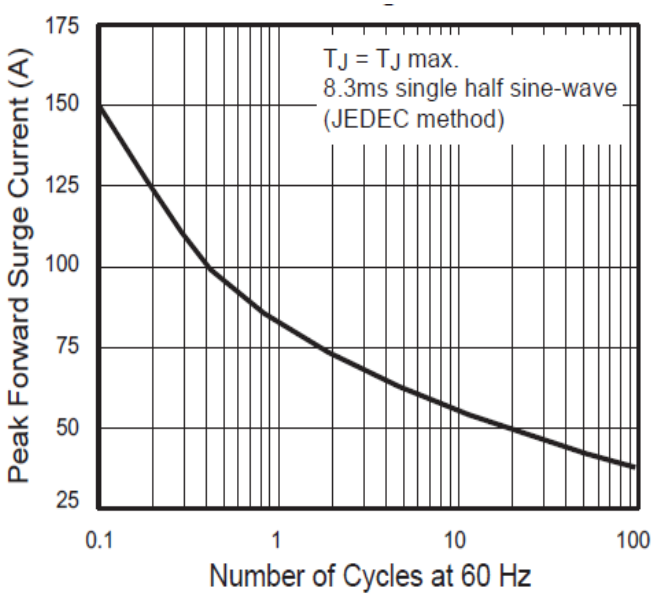


Fig. 4 Typical Junction Capacitance



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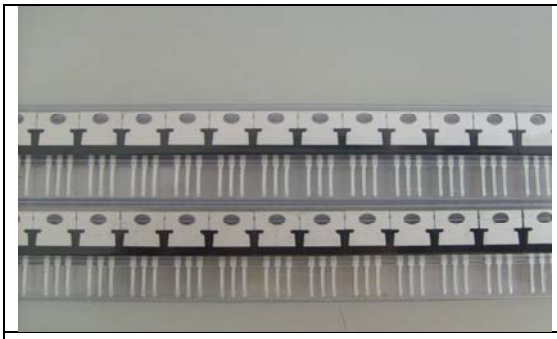
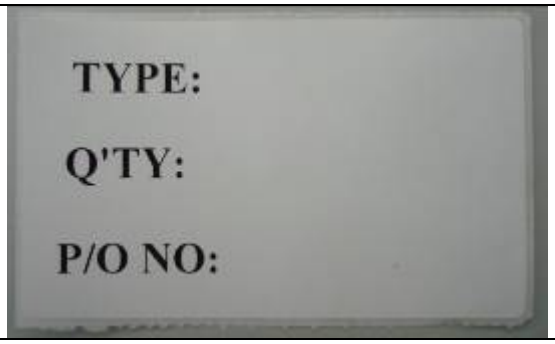
6. Packing Specification

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

7. DESCRIPTION of BOX LABEL

	
1） Inner Box Label	2）Inner Box Label
	
3）Outer Box Label	4）Outer Box Label

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