

Product Specification

GOODARK Type

MUR1020,MUR1020F

Construction : Ultra Fast Recover diode

Application : For power switch

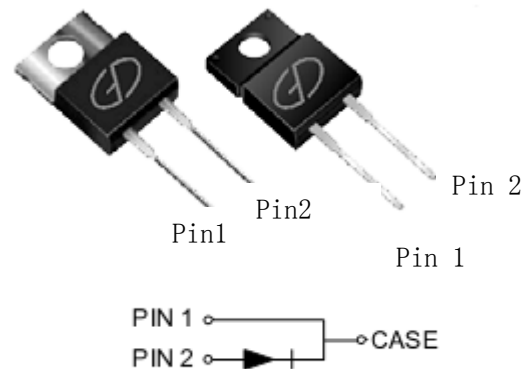
(Manufacturer) :

Suzhou Goodark Electronics Co.,Ltd

Prepared on Sep. 17th, 2008

Prepared: R & D Department

Approval:

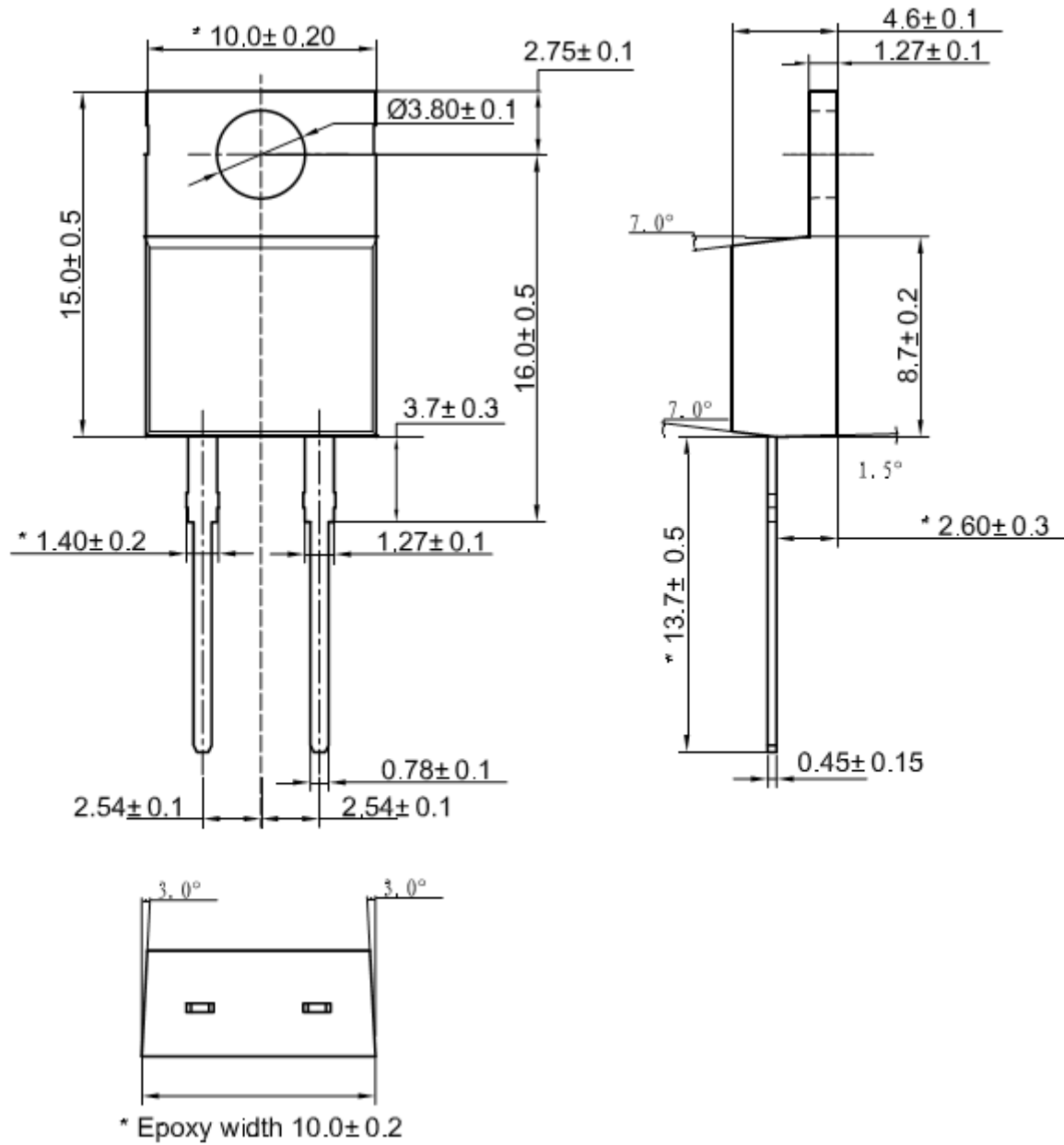


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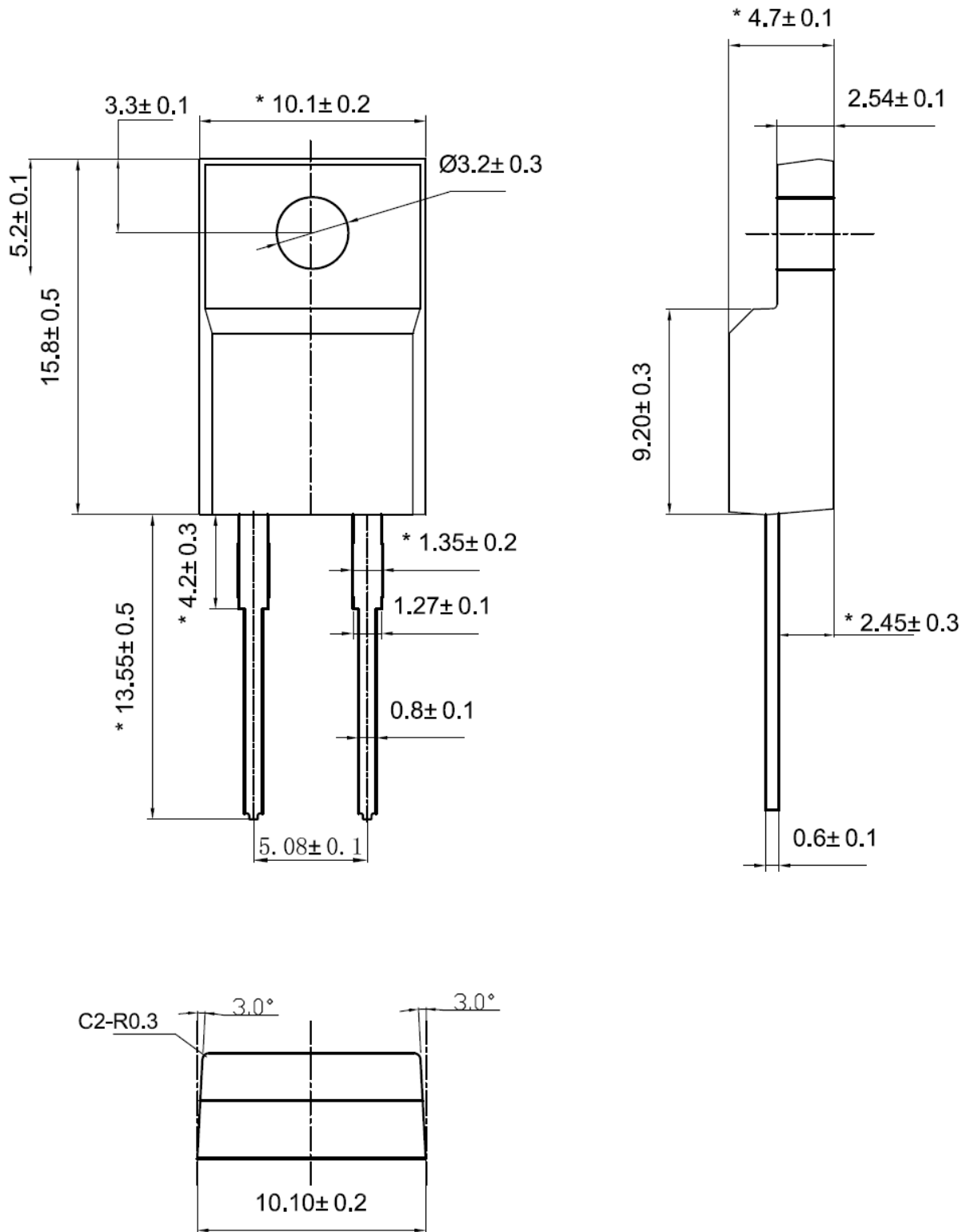
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1. Package Outline (TO220-AC)

UNIT:mm

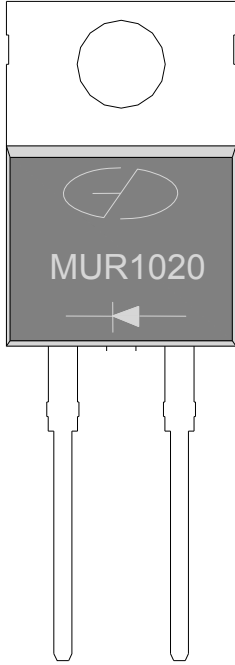


Package Outline (TO220F-AC)



Lead Frame Material : Copper Plating: Pure Tin Plating

2. MARKING



1. Part Name : MUR1020(TO220-AC)
MUR1020F(TO220F-AC)
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	MUR1020(F)	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=100°C total device per diode			IF(AV)	10	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 (ITO220 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=10A IF=10A	TC=25°C TC=125°C	VF	1.0 0.9	V
Maximum reverse current per leg at working peak Reverse voltage		TJ=25°C TJ=100°C	IR	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 (TO220AC)	Max (ITO220AC)	Unit
RθJC	Thermal Resistance, Junction to Case per Leg	2.0	4.0	°C /W
RθJA	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



5. Rating and Characteristic Curves

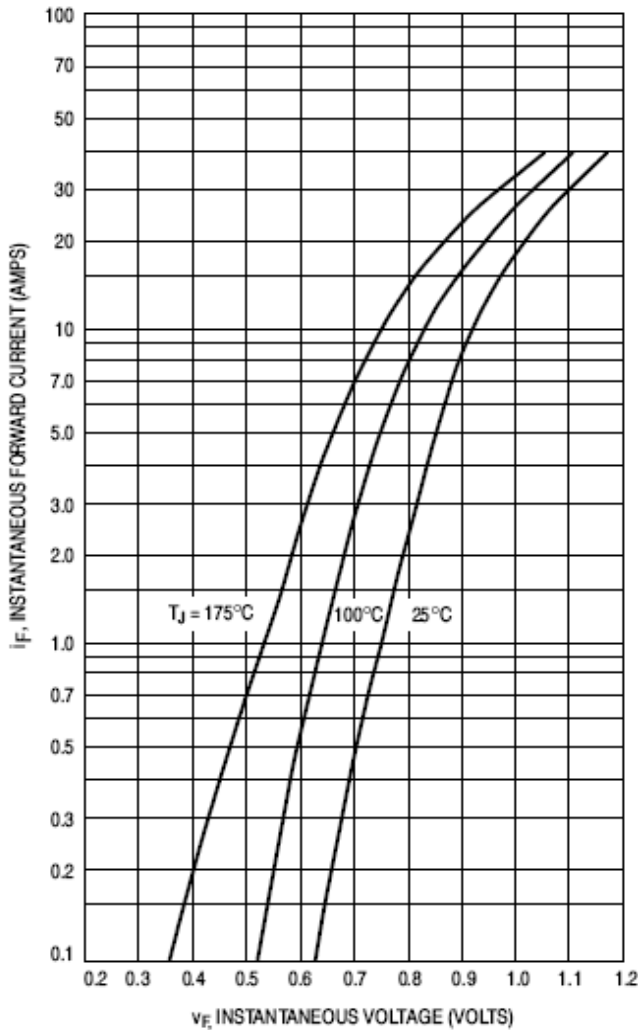


Figure 1. Typical Forward Voltage

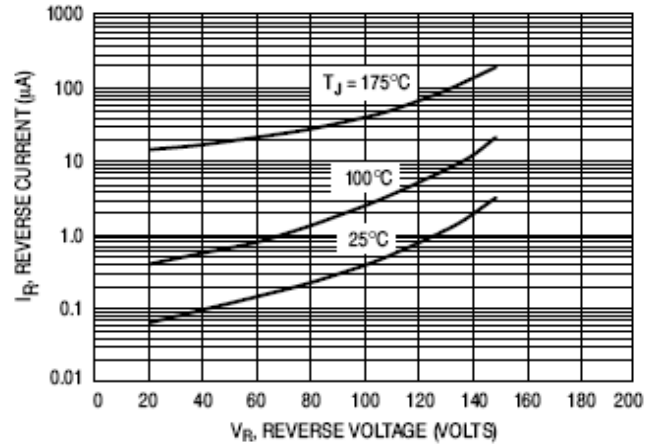


Figure 2. Typical Reverse Current*

* The curves shown are typical for the highest voltage device in the grouping. Typical reverse current for lower voltage selections can be estimated from these same curves if V_R is sufficiently below rated V_R .

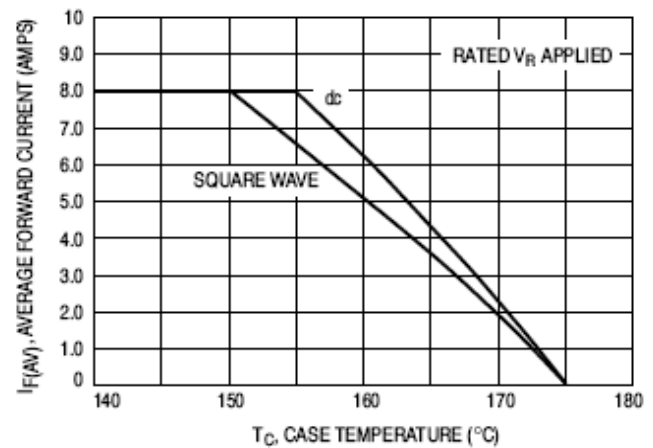


Figure 3. Current Derating, Case

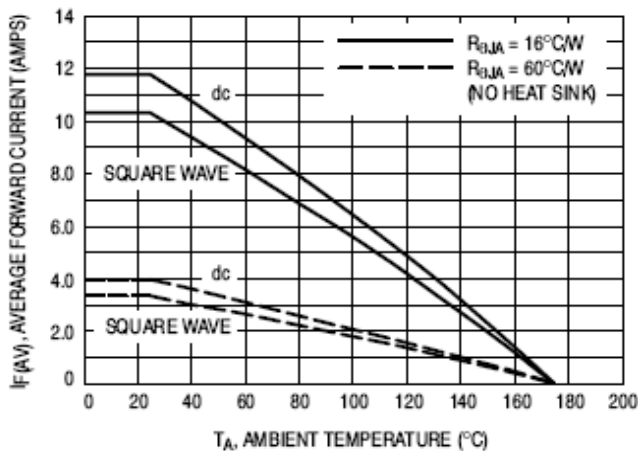


Figure 4. Current Derating, Ambient

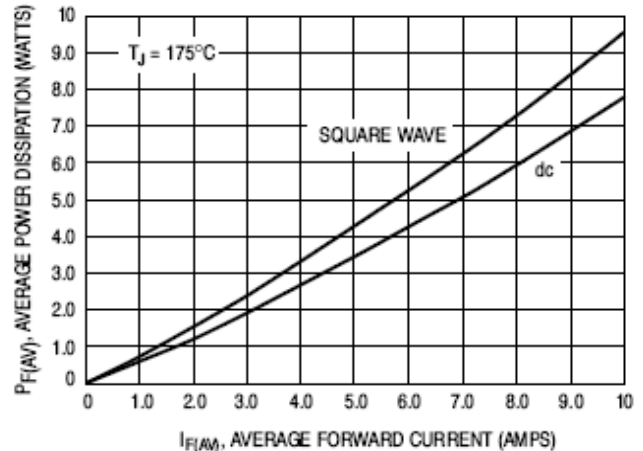
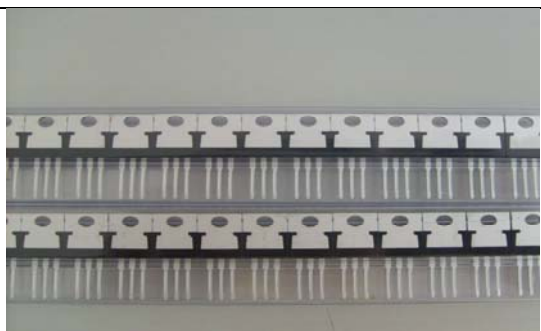
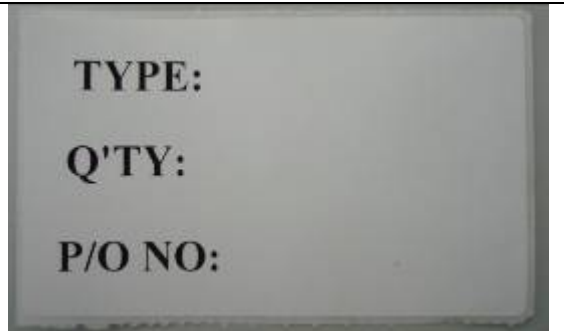


Figure 5. Power Dissipation

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