

Product Specification

GOODARK Type

MUR520,MUR520F

Construction : Ultra Fast Recover diode

Application : For power switch

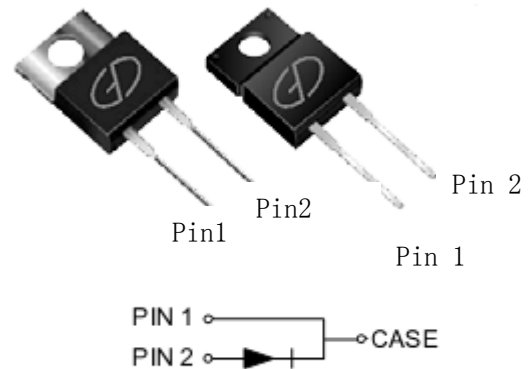
(Manufacturer) :

Suzhou Goodark Electronics Co.,Ltd

Prepared on Sep. 17th, 2008

Prepared: R & D Department

Approval:

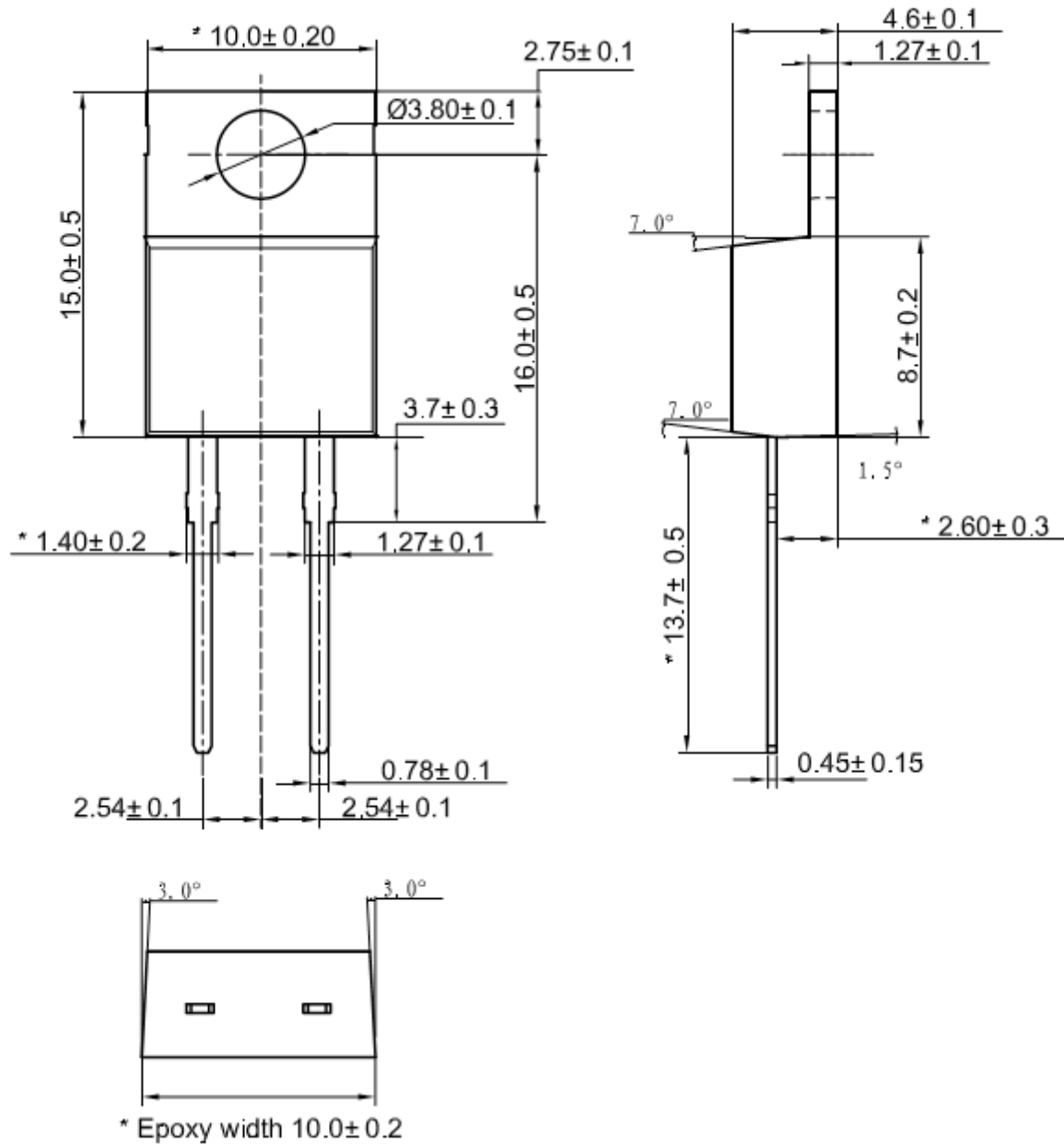


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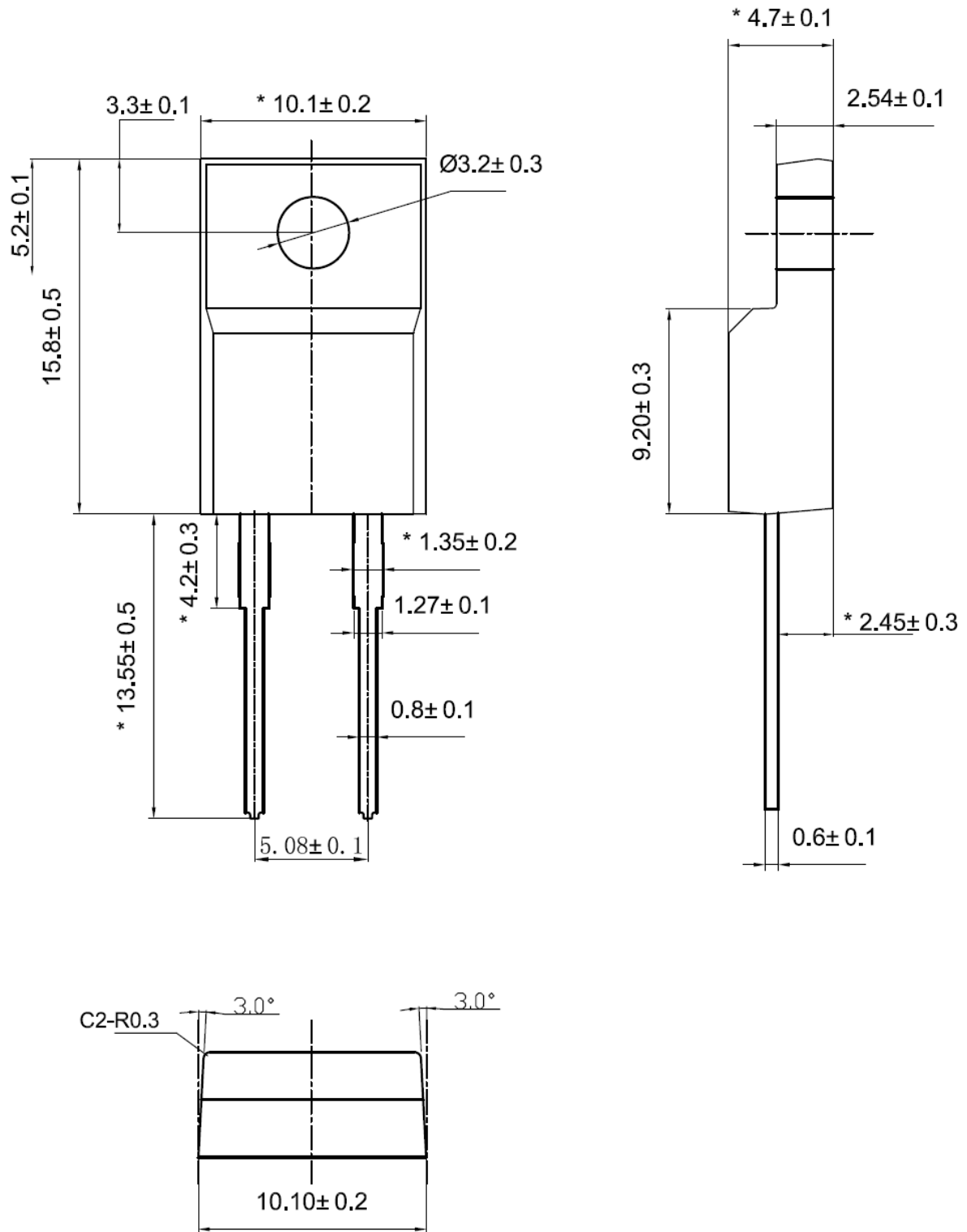
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1. Package Outline (TO220-AC)

UNIT:mm

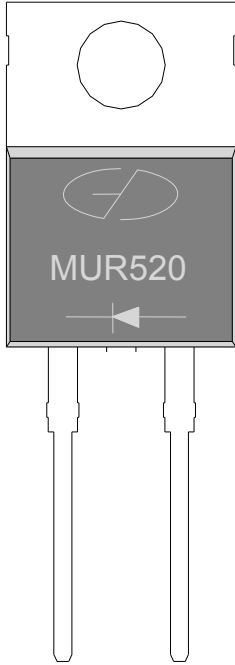


Package Outline (TO220F-AC)



Lead Frame Material : Copper Plating: Pure Tin Plating

2. MARKING



1. Part Name : MUR520(TO220-AC)
MUR520F(ITO220-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: 1.8grams (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

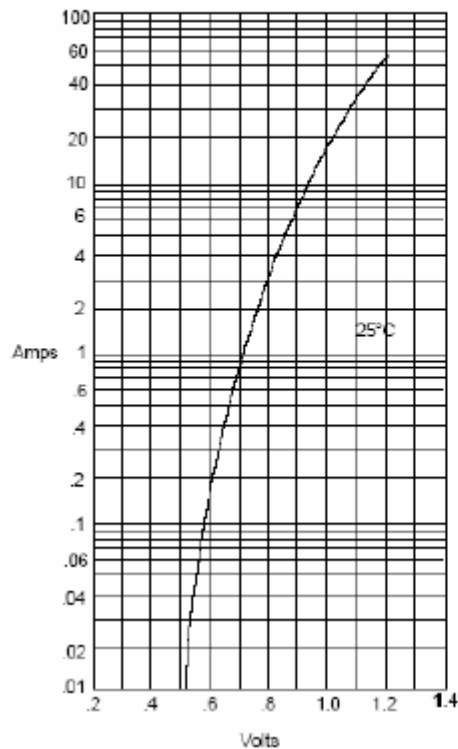
MAXIMUM RATINGS and ELECTRICAL CHARACTERISTICS(TC=25°C unless otherwise moted)					
PARAMETER	TEST CONDITIONS		SYMBOL	MUR520F	UNIT
Maximum repetitive peak reverse voltage			VRRM	200	V
Working peak reverse voltage			VRWM	200	V
Maximum DC blocking voltage			VDC	200	V
Maximum average forward rectified current at Tc=100°C total device per diode			IF(AV)	5	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load per diode			IFSM	30	A
Operating junction temperature range			TJ	—65 to+150	°C
Storage temperature range			TSTG	—65 to+150	°C
Maximum instantaneous forward voltage per leg	IF=5A IF=5A	TC=25°C TC=125°C	VF	0.96 0.88	V
Maximum reverse current per leg at working peak Reverse voltage		TJ=25°C TJ=100°C	IR	50 500	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

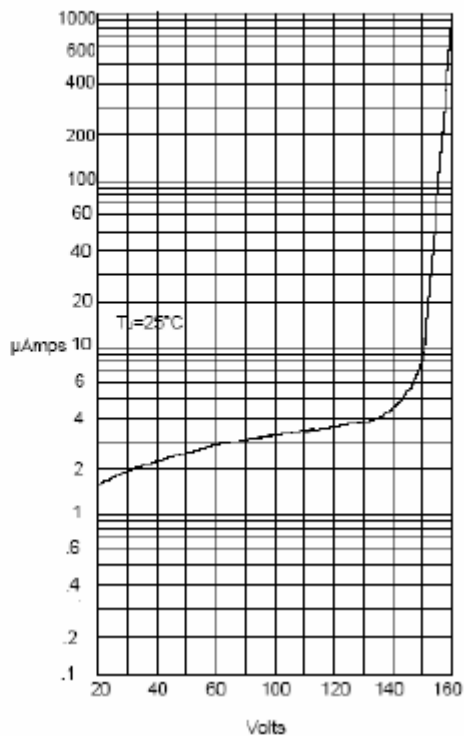
5. Rating and Characteristic Curves

Figure 1
Typical Forward Characteristics



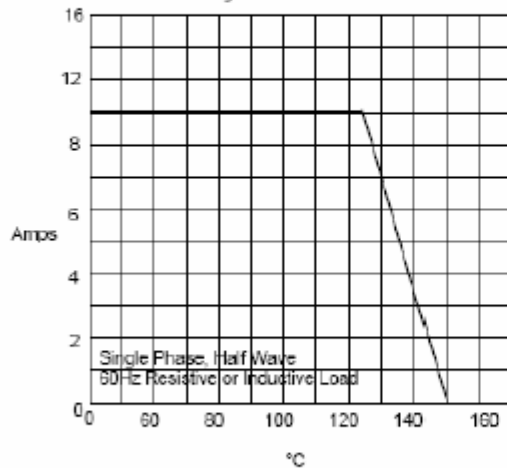
Instantaneous Forward Current - Amperes versus
Instantaneous Forward Voltage - Volts

Figure 2
Typical Reverse Characteristics



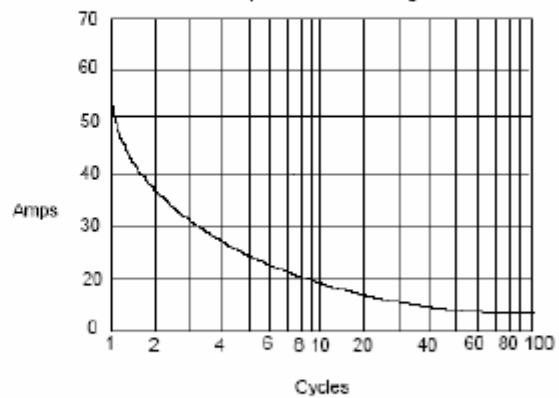
Instantaneous Reverse Leakage Current - MicroAmperes versus
Percent Of Rated Peak Reverse Voltage - Volts

Figure 3
Forward Derating Curve



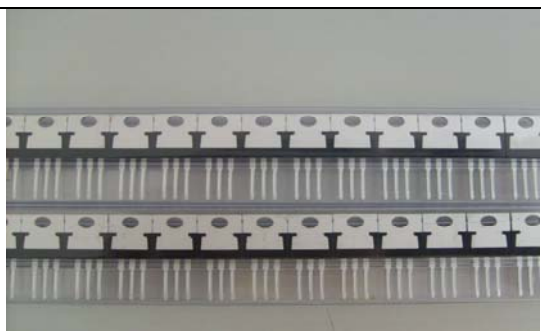
Average Forward Rectified Current - Amperes versus
Case Temperature - °C

Figure 4
Maximum Non-Repetitive Forward Surge Current

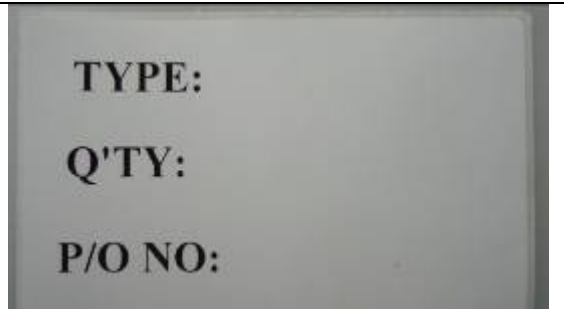


Peak Forward Surge Current - Amperes versus
Number Of Cycles At 60Hz - Cycles

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