Product Specification

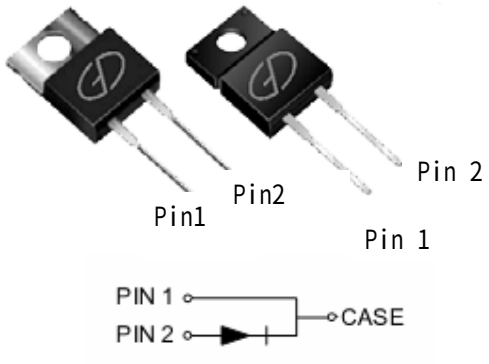
GOODARK Type

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：

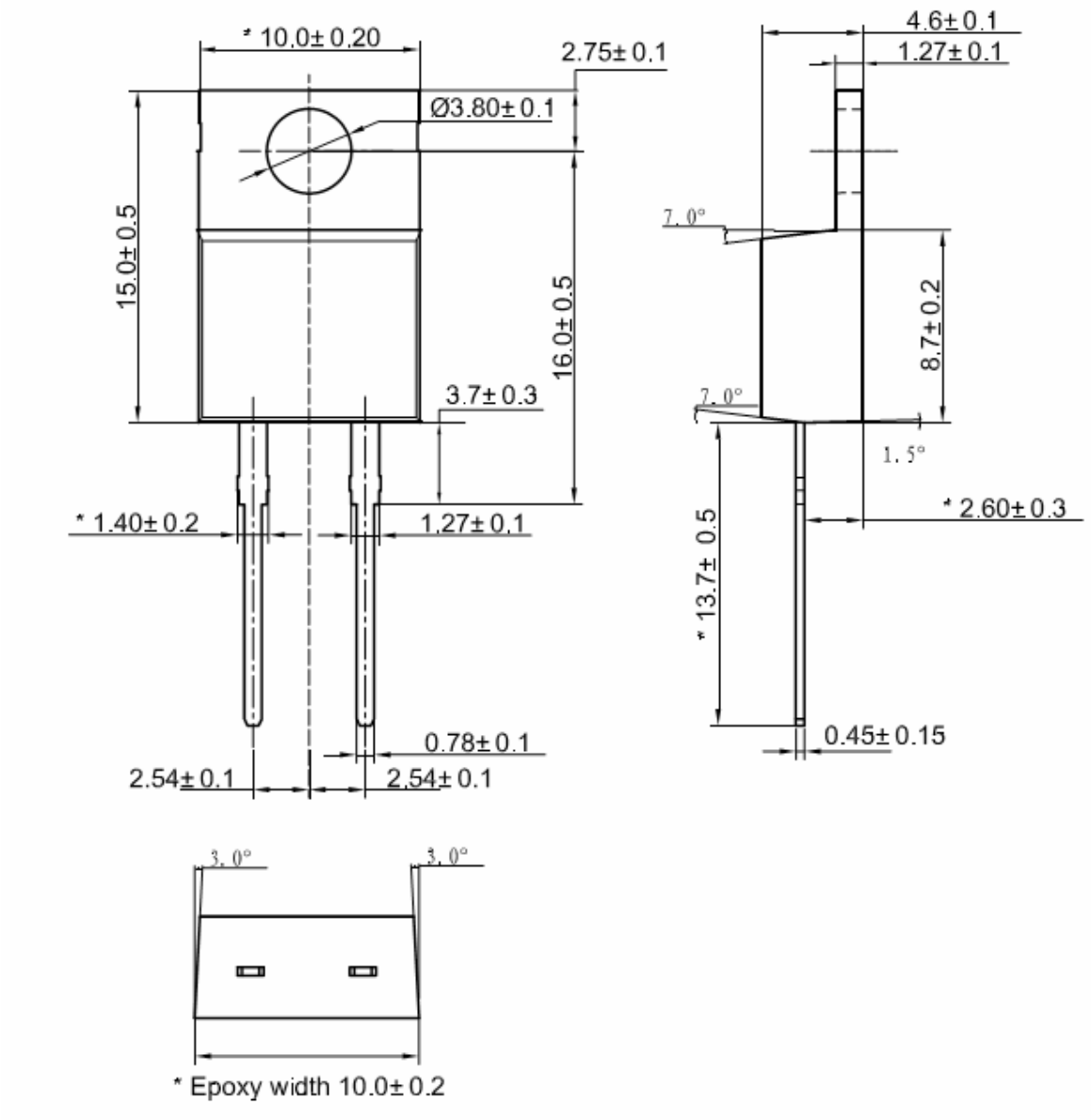


CONTENTS

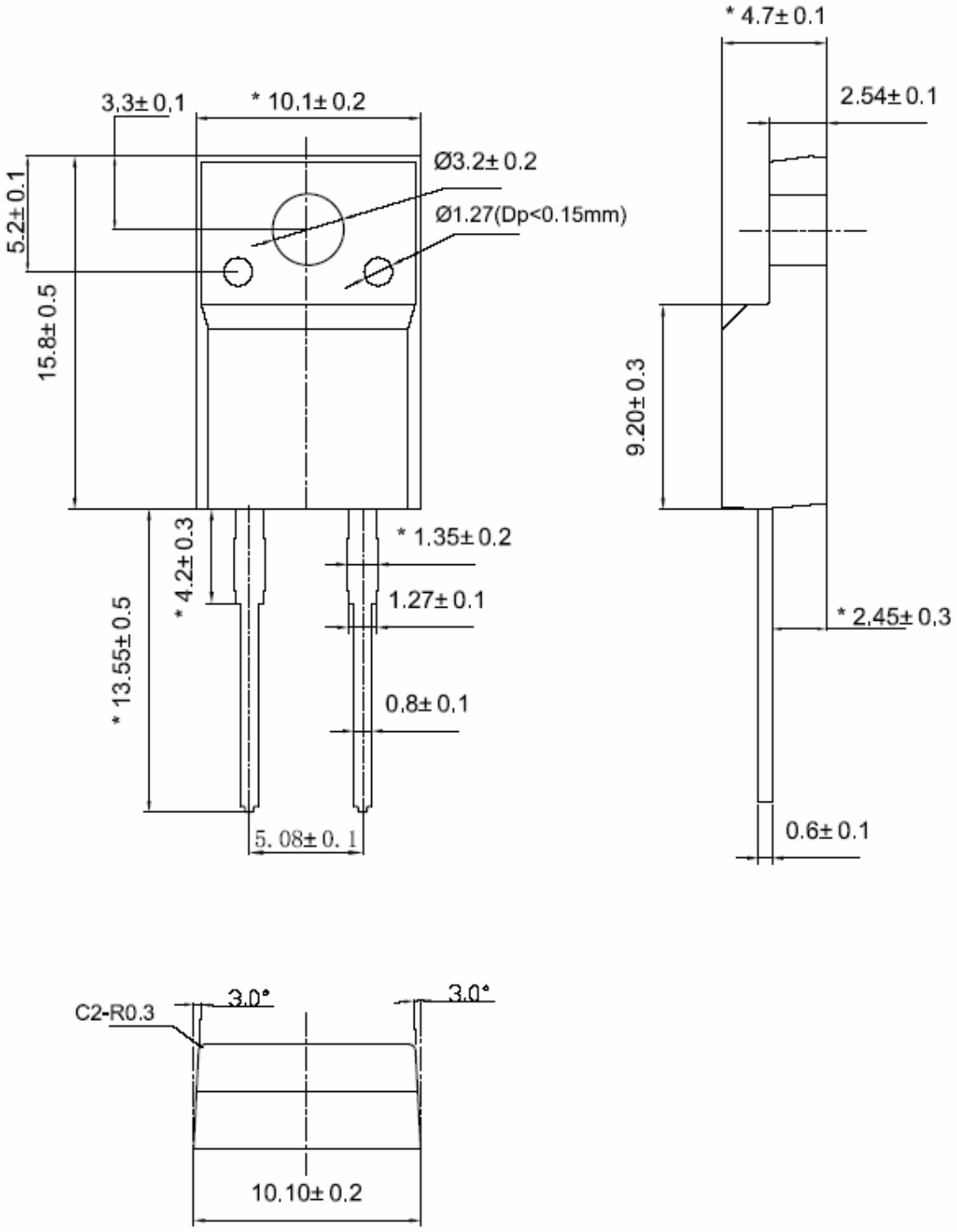
Pb-free Plating

1. Package Outline (TO220-AC)

UNIT:mm



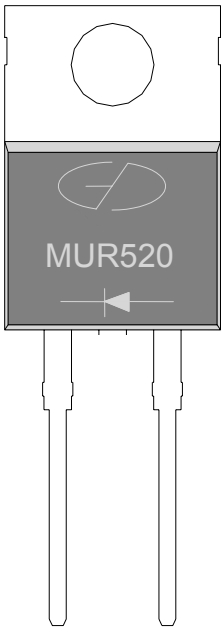
Package Outline (TO220F-AC)



Lead Frame Material : Copper Plating: Pure Tin Plating

Plating Thickness : 8μm to 25.4μm

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: 1.9grams（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

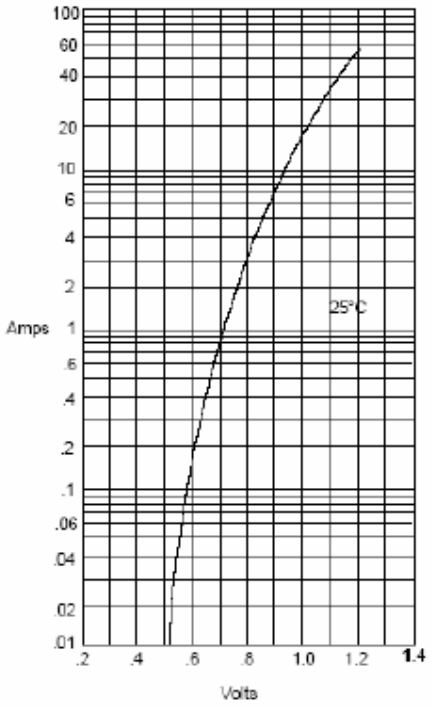
MAXIMUM RATINGS and ELECTRICAL CHARACTERISTICS(TC=25°C unless otherwise moted)					
PARAMETER	**TEST CONDITIONS**		**SYMBOL**	**MUR520F**	**UNIT**
Maximum repetitive peak reverse voltage			V_{RRM}	200	V
Working peak reverse voltage			V_{RWM}	200	V
Maximum DC blocking voltage			V_{DC}	200	V
Maximum average forward rectified current at Tc=100°C total device per diode			$I_{F(AV)}$	5	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load per diode			I_{FSM}	30	A
Operating junction temperature range			T_J	—65 to+150	°C
Storage temperature range			T_{STG}	—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	35	ns

Thermal Characteristics Ta=25°C unless otherwise noted

Symbol	**Parameter**	**Max （TO220AC）**	**Max （ITO220AC）**	**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

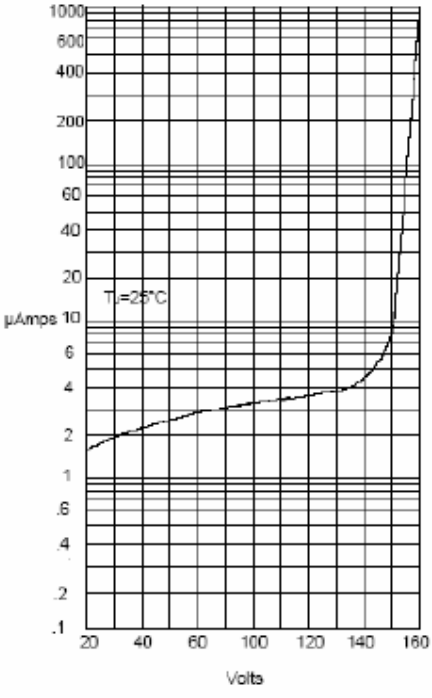
5.Rating and Characteristic Curves

Figure 1
Typical Forward Characteristics



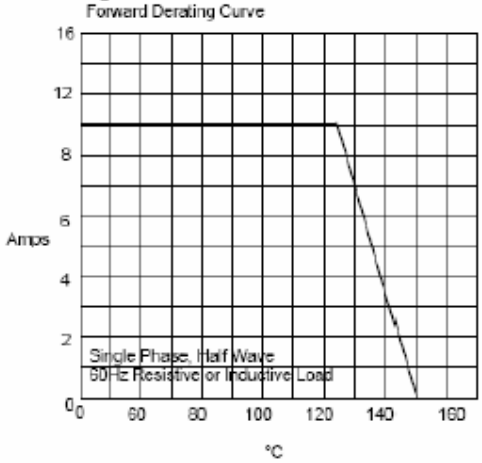
Instantaneous Forward Current - Amperesversus
Instantaneous Forward Voltage - Volts

Figure 2
Typical Reverse Characteristics



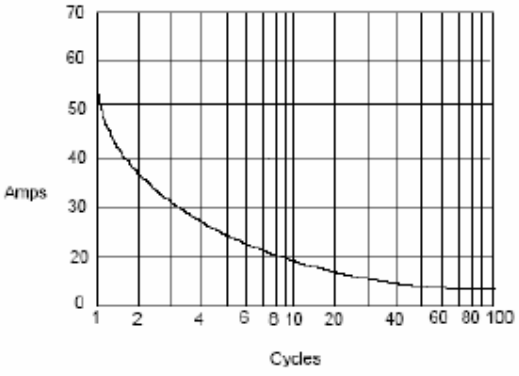
Instantaneous Reverse Leakage Current - MicroAmperesversus
Percent Of Rated Peak Reverse Voltage - Volts

Figure 3
Forward Derating Curve



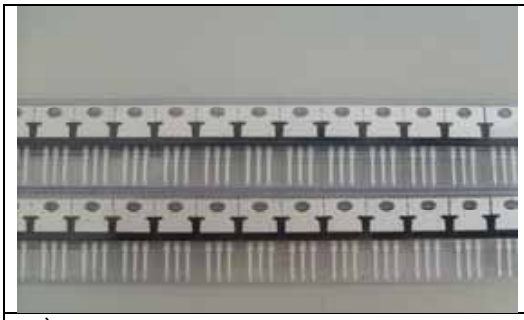
Average Forward Rectified Current - Amperesversus
Case Temperature - °C

Figure 4
Maximum Non-Repetitive Forward Surge Current



Peak Forward Surge Current - Amperesversus
Number Of Cycles At 60Hz - Cycles

6. Packing Specification



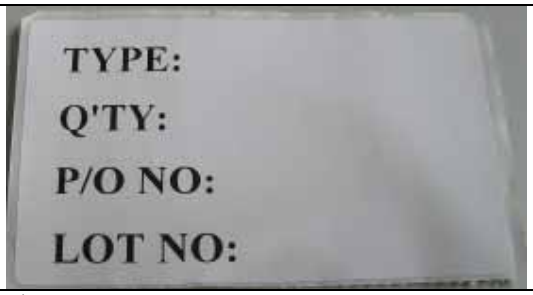
1 ） Tube : 50units

2） Inner Box: 20 tube(1000units)

3） Outer Box: 10 inner box （10,000units)

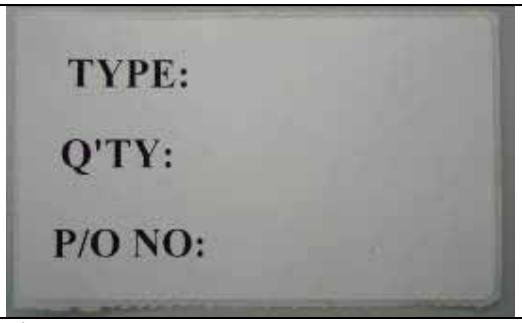
7．DESCRIPTION of BOX LABEL

1） Inner Box Label



2） Inner Box Label

3） Outer Box Label



4） Outer Box Label