Product Specification

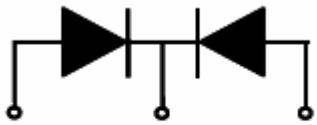
GOODARK Type

MUR1620FCT

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：



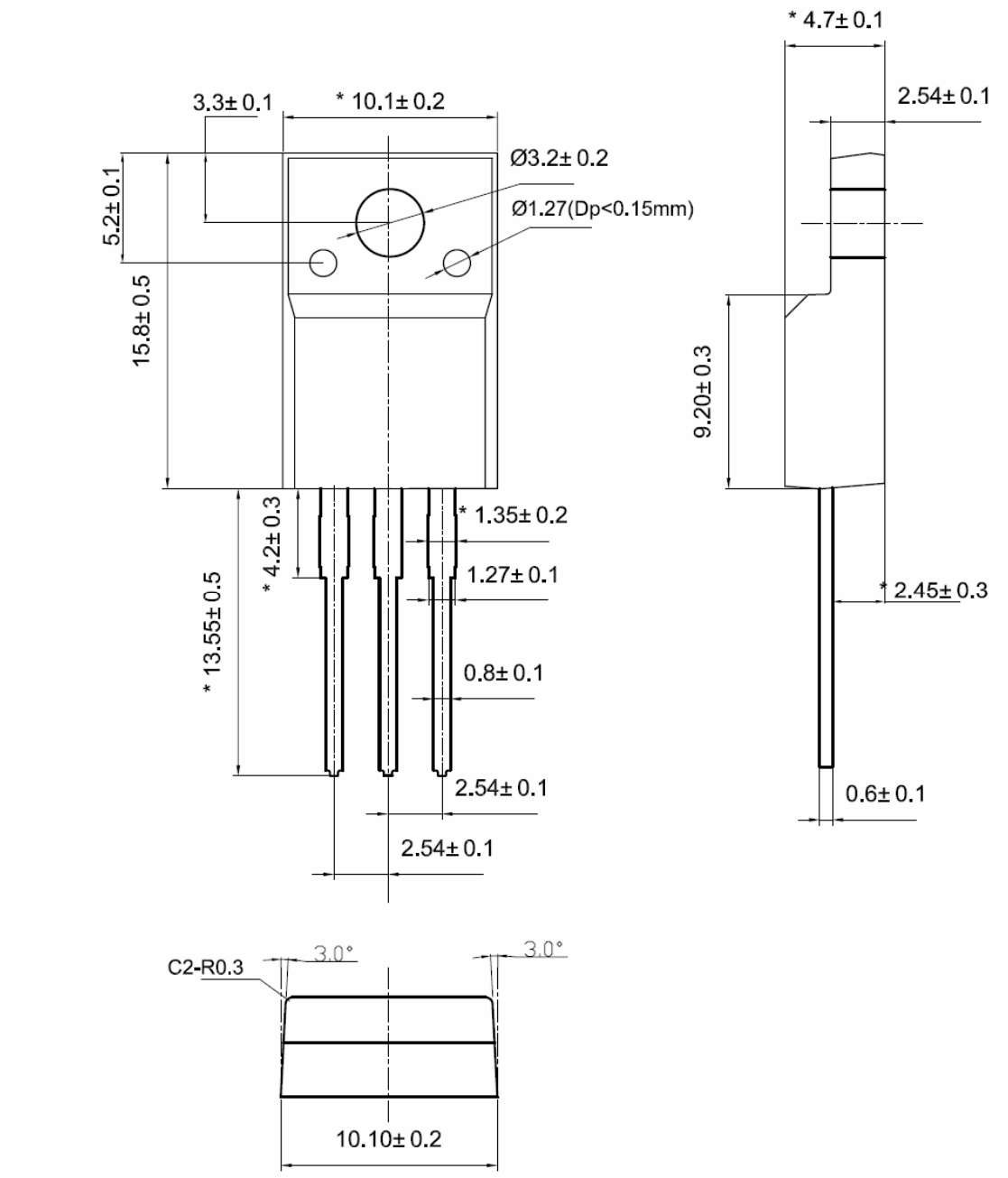
1. Anode 2.Cathode 3. Anode

CONTENTS

Pb-free Plating

1. Package Outline (ITO220-AB)

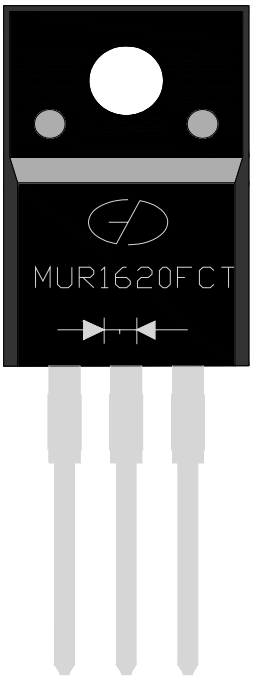
UNIT:mm



Lead Frame Material : Copper Plating: Pure Tin Plating

Plating Thickness : 8μm to 25.4μm

2. MARKING



1. Part Name : MUR1620FCT
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**	**MUR1620FCT**	**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=150°C total device per diode Per Leg / Per device			$I_{F(AV)}$	8 16	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load per diode			I_{FSM}	100	A
Operating junction temperature range			T_J	—55 to+150	°C
Isolation voltage (ITO-220AB only) from terminal to heatsink t = 1 min			VAC	1500	V
Storage temperature range			T_{STG}	—55 to+150	°C
Maximum instantaneous forward voltage per leg	IF=8A IF=8A	TC=25°C TC=125°C	VF	0.975 0.895	V
Maximum reverse current per leg at working peak Reverse voltage		TJ=25°C TJ=100°C	IR	20 250	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**	**Unit**
$R_{\theta JC}$	Thermal Resistance，Junction to Case per Leg	4.0	°C /W
$R_{\theta JA}$	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

Pb-free Plating

5.Rating and Characteristic Curves

RATINGS AND CHARACTERISTIC CURVES (MUR1620CT THRU MUR1660CT)

FIG.1- CURRENT DERATING, CASE, PER LEG

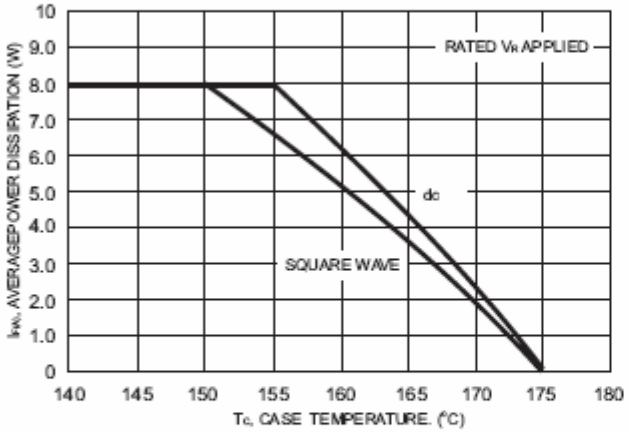
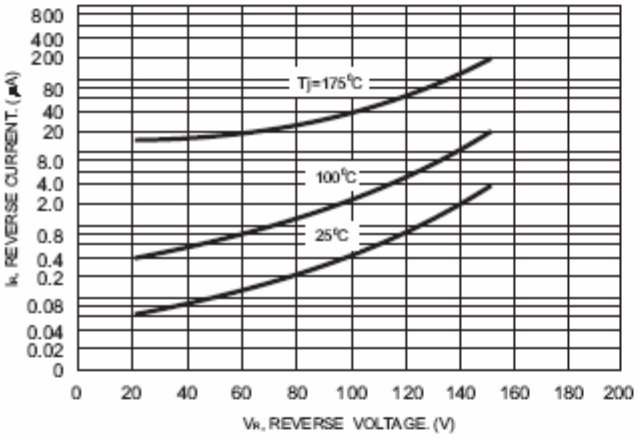


FIG.2- TYPICAL REVERSE CURRENT, PER LEG



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

FIG.3- TYPICAL FORWARD VOLTAGE, PER LEG

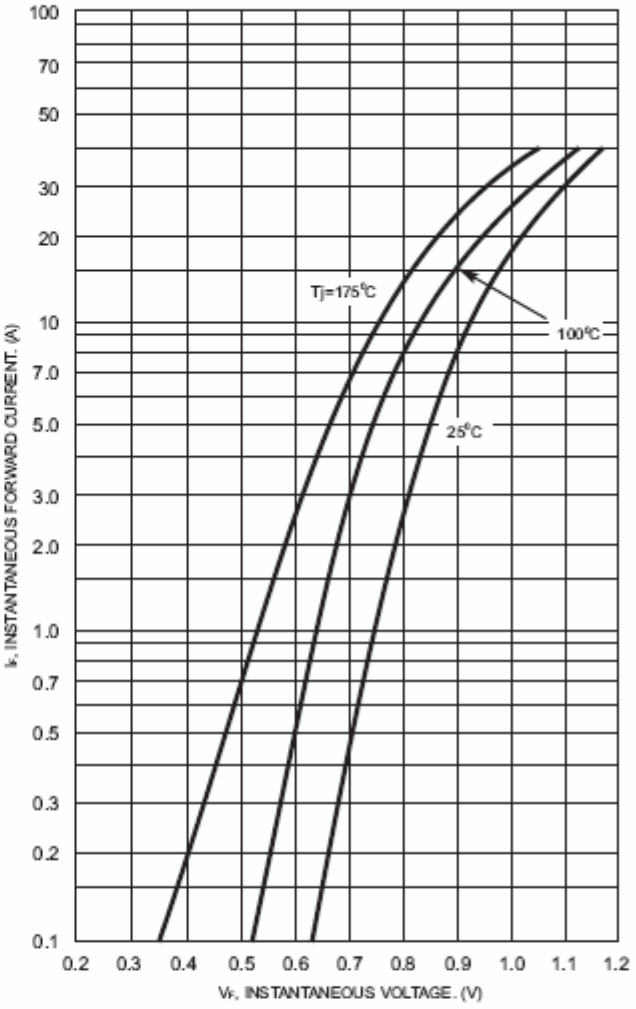


FIG.4- TYPICAL CAPACITANCE, PER LEG

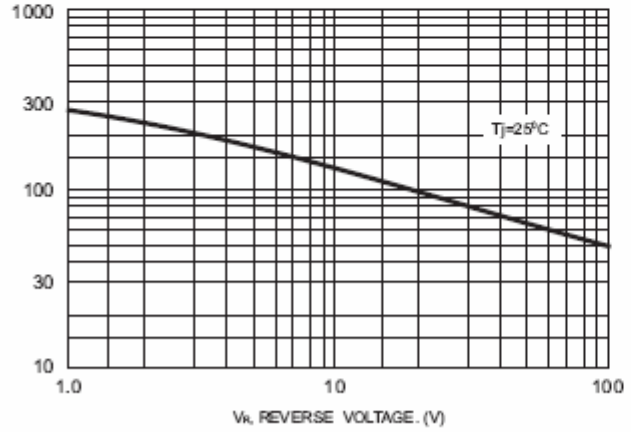
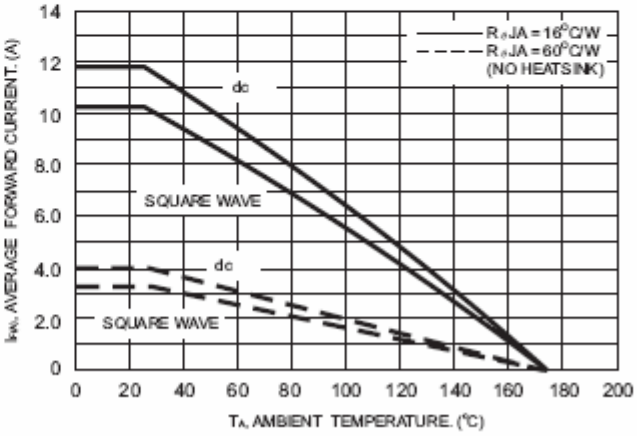
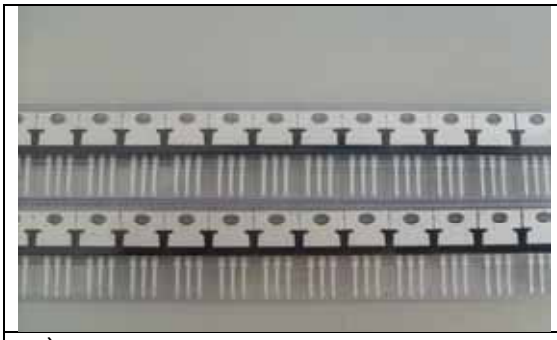


FIG.5- CURRENT DERATING, AMBIENT, PER LEG



6. Packing Specification

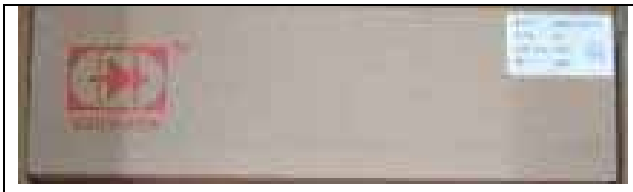


1 ） Tube : 50units

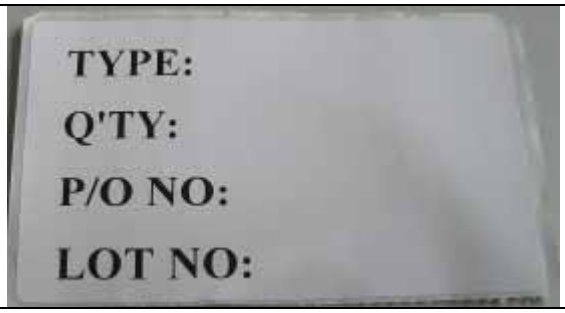
2） Inner Box: 20 tube(1000units)

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

7．DESCRIPTION of BOX LABEL

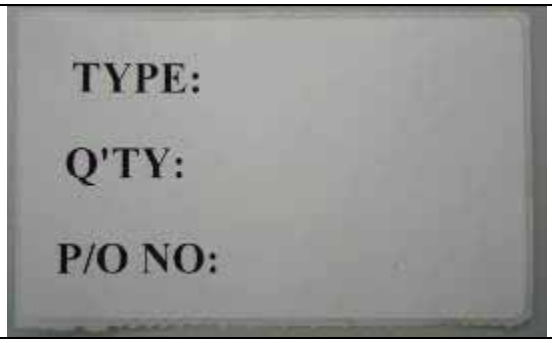


1） Inner Box Label



2） Inner Box Label

3） Outer Box Label



4） Outer Box Label