

Product Specification

GOODARK Type
MUR2020FCT

Construction : Ultra Fast Recover diode

Application : For power switch

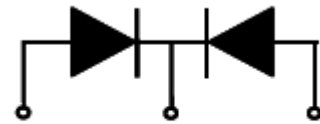
(Manufacturer) :

Suzhou Goodark Electronics Co.,Ltd

Prepared on Sep. 17th, 2008

Prepared: R & D Department

Approval:



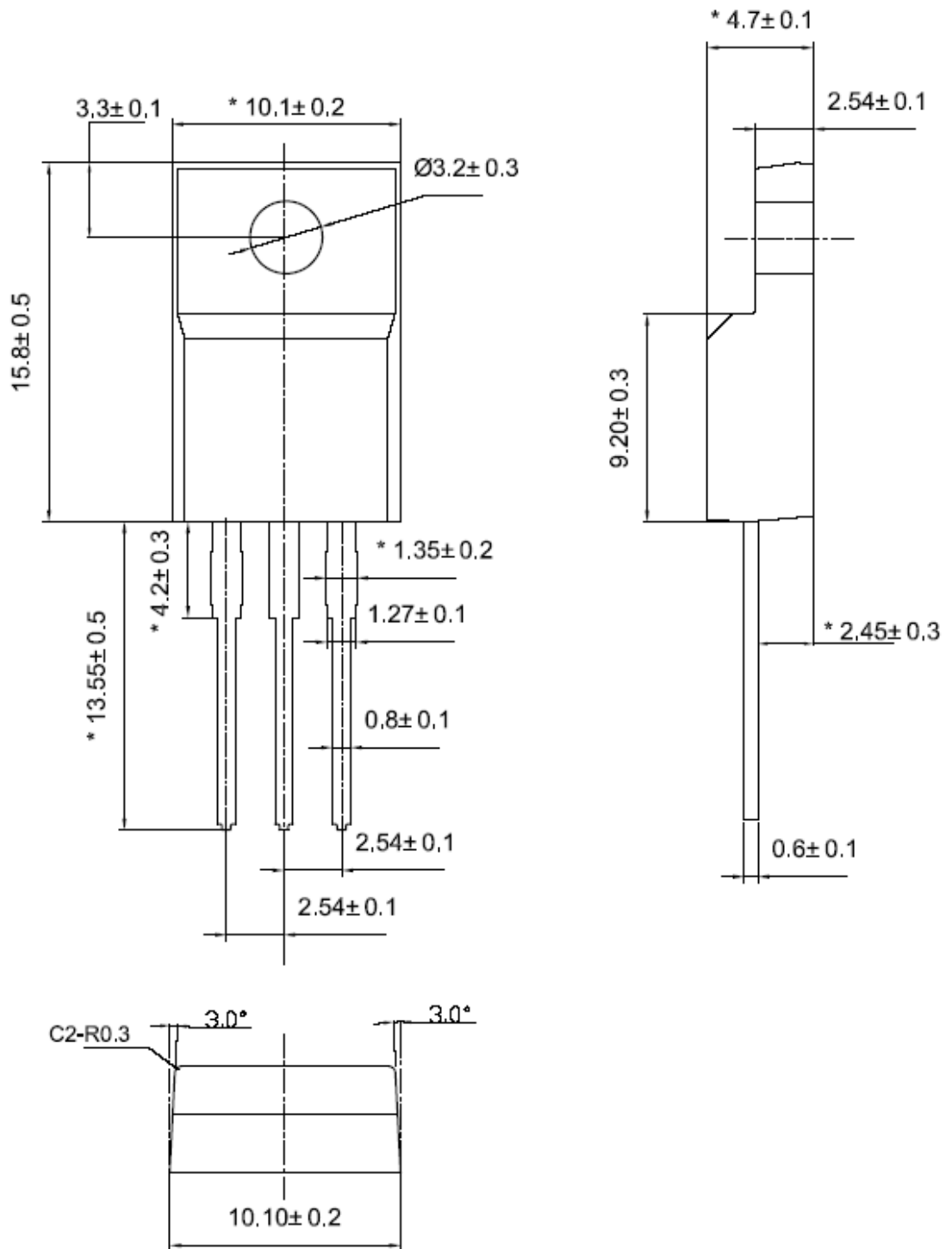
1. Anode 2. Cathode 3. Anode

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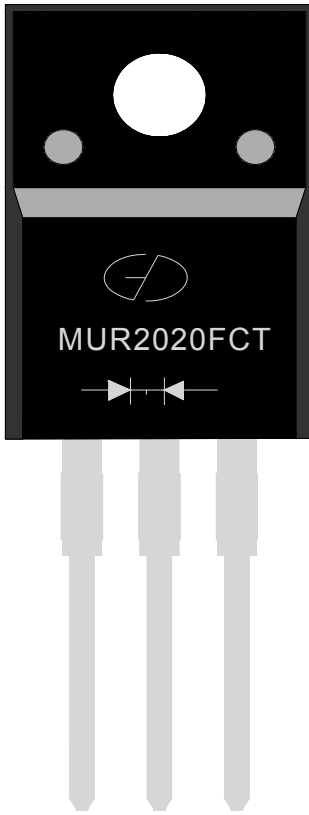
1. Package Outline (TO220F-AB)

UNIT:mm




Lead Frame Material : Copper Plating: Pure Tin Plating

2. MARKING



1. Part Name : MUR2020FCT

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	MUR2020FCT	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=150°C total device per diode	Per Leg Per device		IF(AV)	10 20	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 (TO-220F only) from terminal to heatsink t = 1 sec			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			IR	20 250	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	Unit
RθJC	Thermal Resistance, Junction to Case per Leg	4.0	°C /W
RθJA	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



5. Rating and Characteristic Curves

FIG.1- CURRENT DERATING, CASE, PER LEG

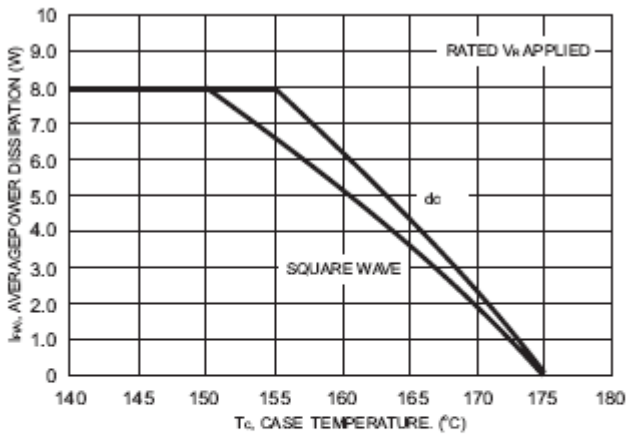
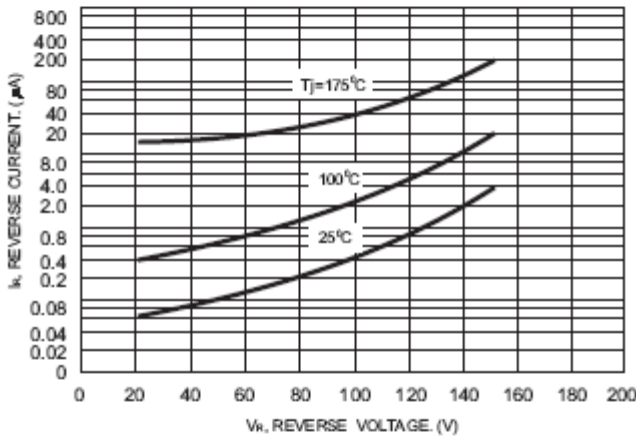


FIG.2- TYPICAL REVERSE CURRENT, PER LEG



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

FIG.4- TYPICAL CAPACITANCE, PER LEG

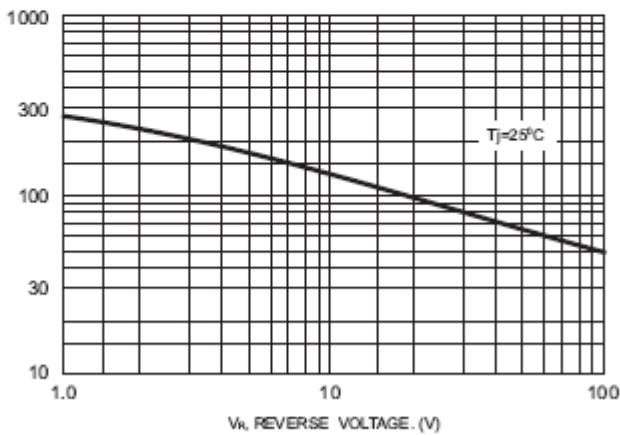


FIG.3- TYPICAL FORWARD VOLTAGE, PER LEG

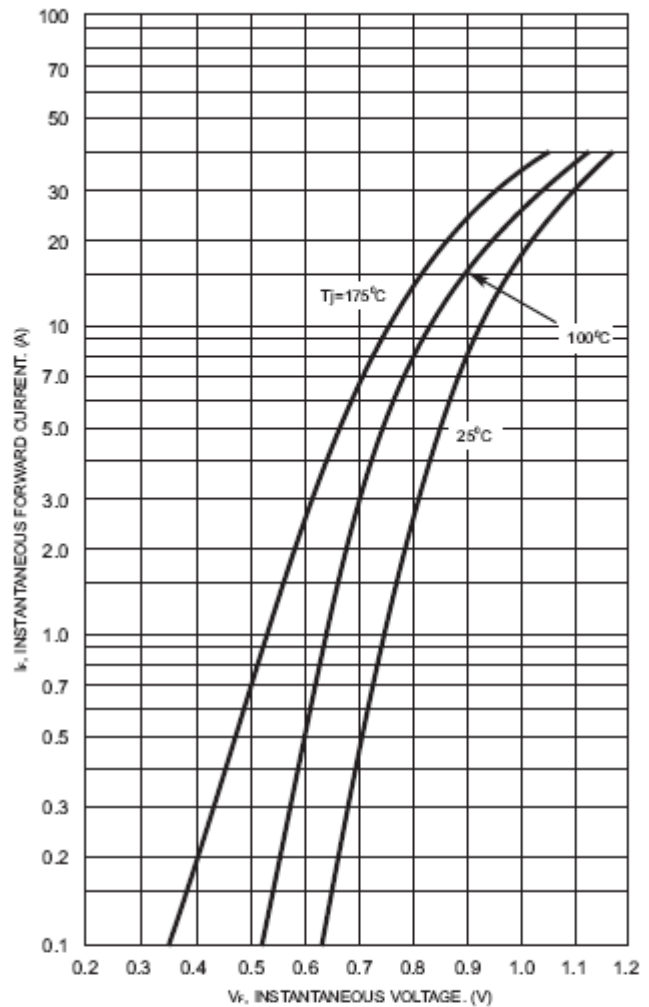
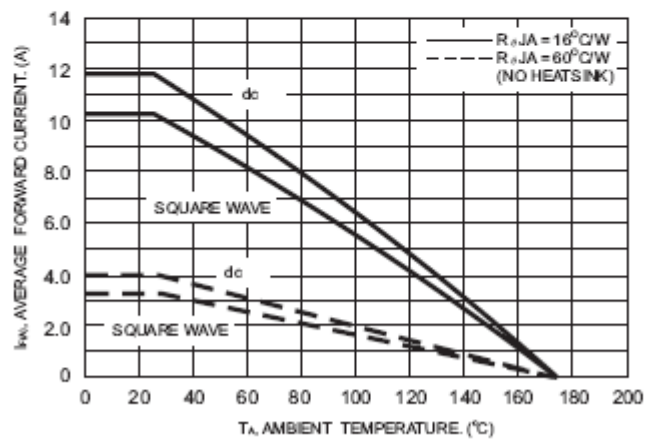
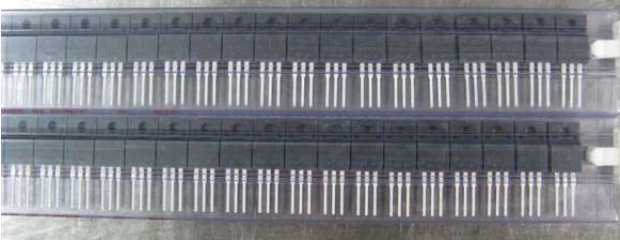






FIG.5- CURRENT DERATING, AMBIENT, PER LEG



6. Packing Specification

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

7. DESCRIPTION of BOX LABEL

	<p>TYPE: Q'TY: P/O NO: LOT NO:</p>
<p>1) Inner Box Label</p>	<p>2) Inner Box Label</p>
	<p>TYPE: Q'TY: P/O NO:</p>
<p>3) Outer Box Label</p>	<p>4) Outer Box Label</p>