

Product Specification

GOODARK Type
MUR1220FCT

Construction : Ultra Fast Recover diode

Application : For power switch

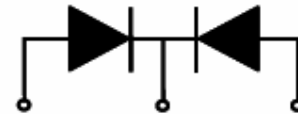
(Manufacturer) :

Suzhou Goodark Electronics Co.,Ltd

Prepared on Sep. 17th, 2008

Prepared: R & D Department

Approval :



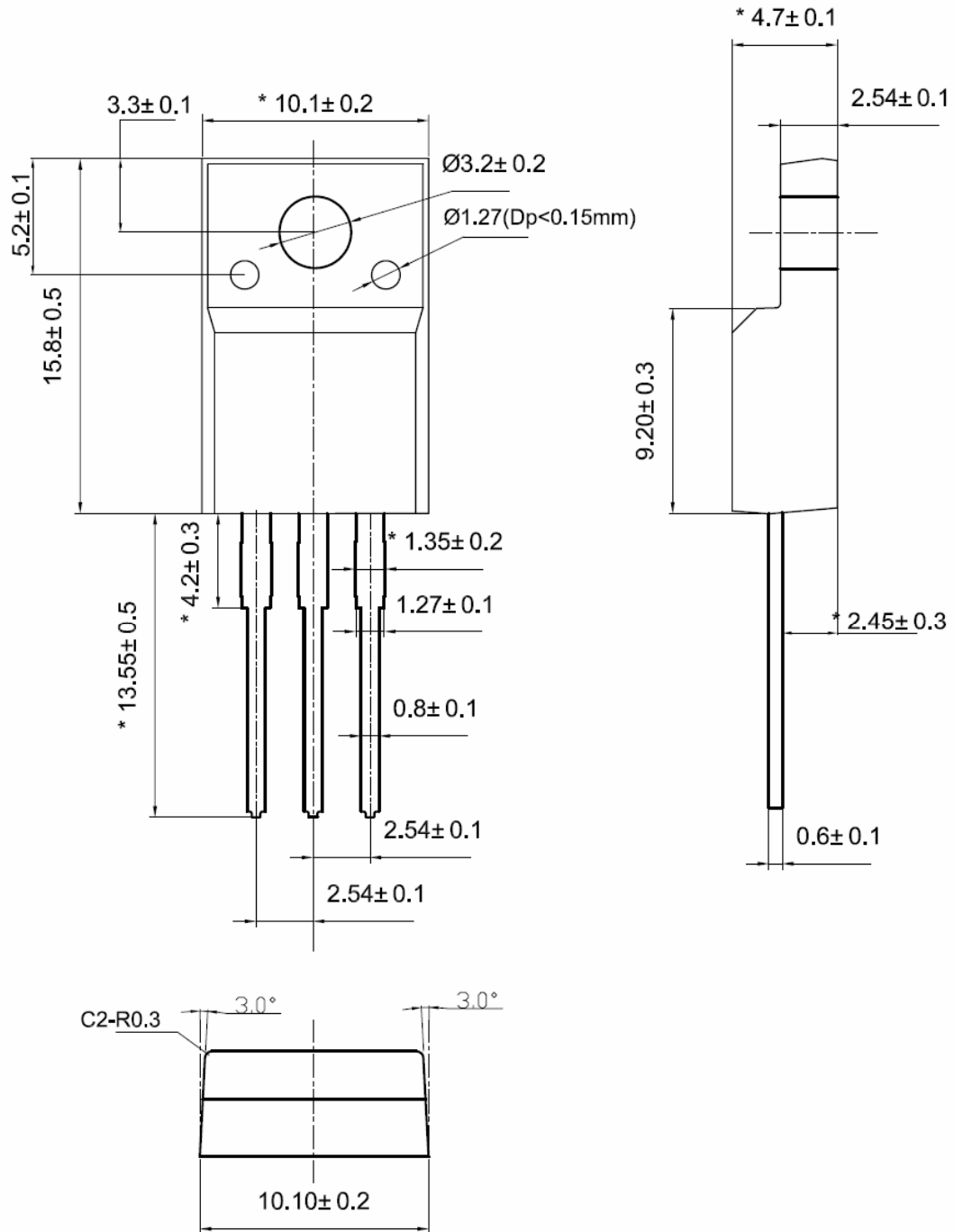
1. Anode 2. Cathode 3. Anode

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1. Package Outline (TO220F-AB)

UNIT:mm



Lead Frame Material : Copper Plating: Pure Tin Plating

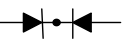
Plating Thickness : $8\mu\text{m}$ to $25.4\mu\text{m}$

2. MARKING



1. Part Name : MUR1220FCT

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	MUR1220FCT	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		IF(AV)	6	A
	Per device			12	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load per diode			IFSM	90	A
Operating junction temperature range			TJ	-55 to+150	°C
Isolation voltage (ITO-220AB 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=6A	TC=25	VF	0.95	V
	IF=6A	TC=125		0.87	
	IF=12A	TC=25		1.30	
	IF=12A	TC=125		1.15	
Maximum reverse current per leg at working peak Reverse voltage	TJ=25 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 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

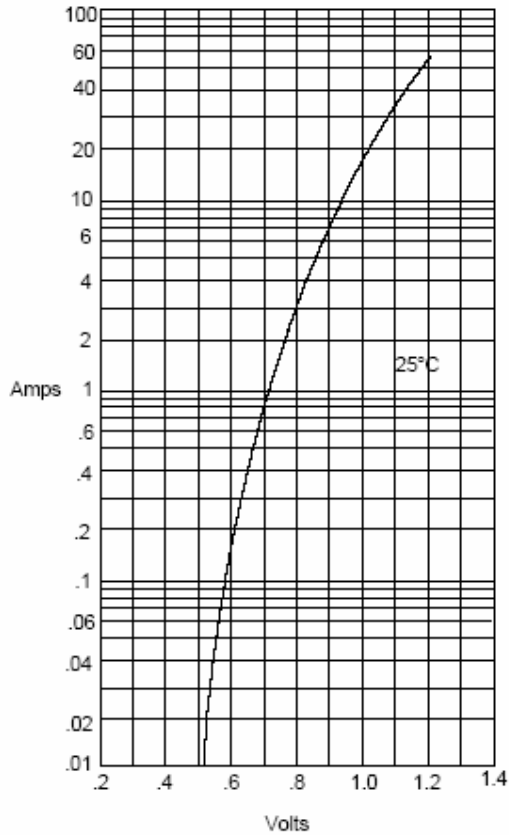
Note :

1. Screw mounting with 4-40 screw , where washer diameteris≤4.9mm(0.19 ")
2. Pulse test:300us pulse width,1% duty cycle



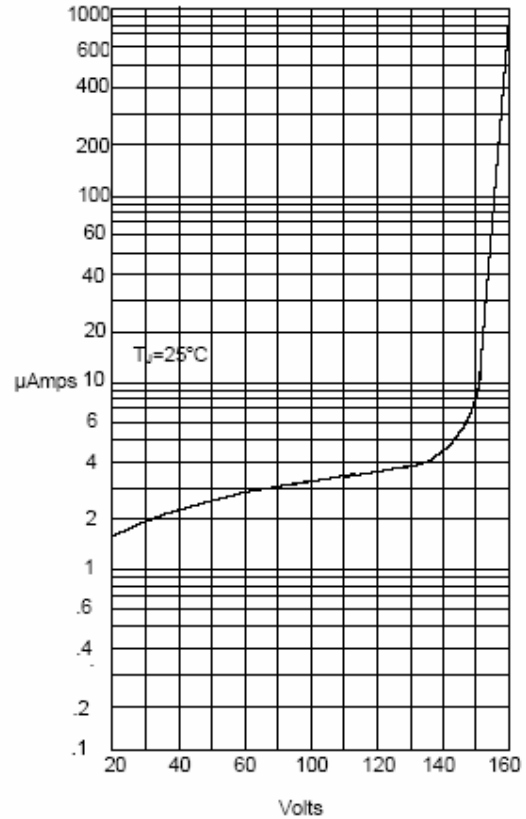
5. Rating and Characteristic Curves

Figure 1
 Typical Forward Characteristics



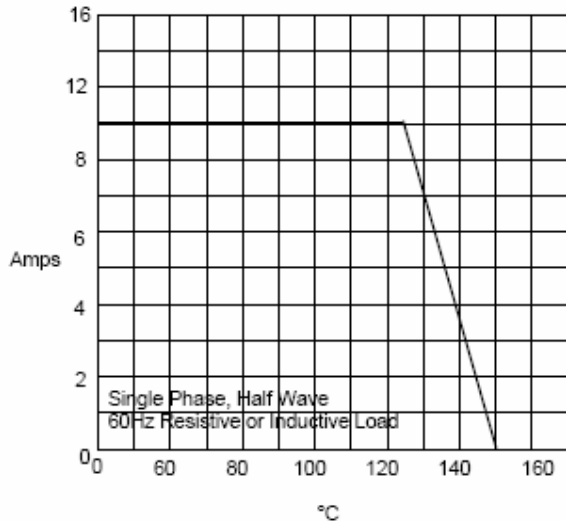
Instantaneous Forward Current - Amperes versus
 Instantaneous Forward Voltage - Volts

Figure 2
 Typical Reverse Characteristics



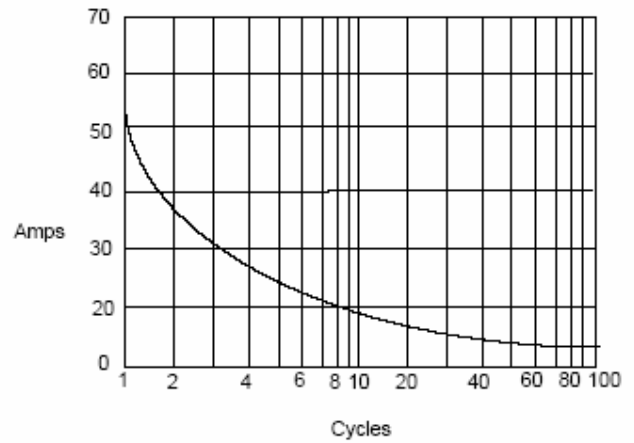
Instantaneous Reverse Leakage Current - MicroAmperes versus
 Percent Of Rated Peak Reverse Voltage - Volts

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

	
<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>