

Product Specification

GOODARK Type

MUR1505(F) –MUR1560(F)

Construction : Ultra Fast Recover diode

Application : For power switch

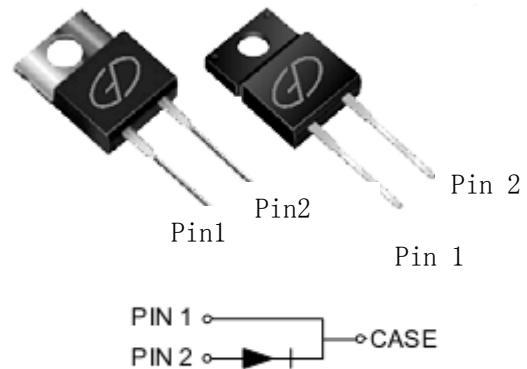
(Manufacturer) :

Suzhou Goodark Electronics Co.,Ltd

Prepared on Sep. 17th, 2008

Prepared: R & D Department

Approval:

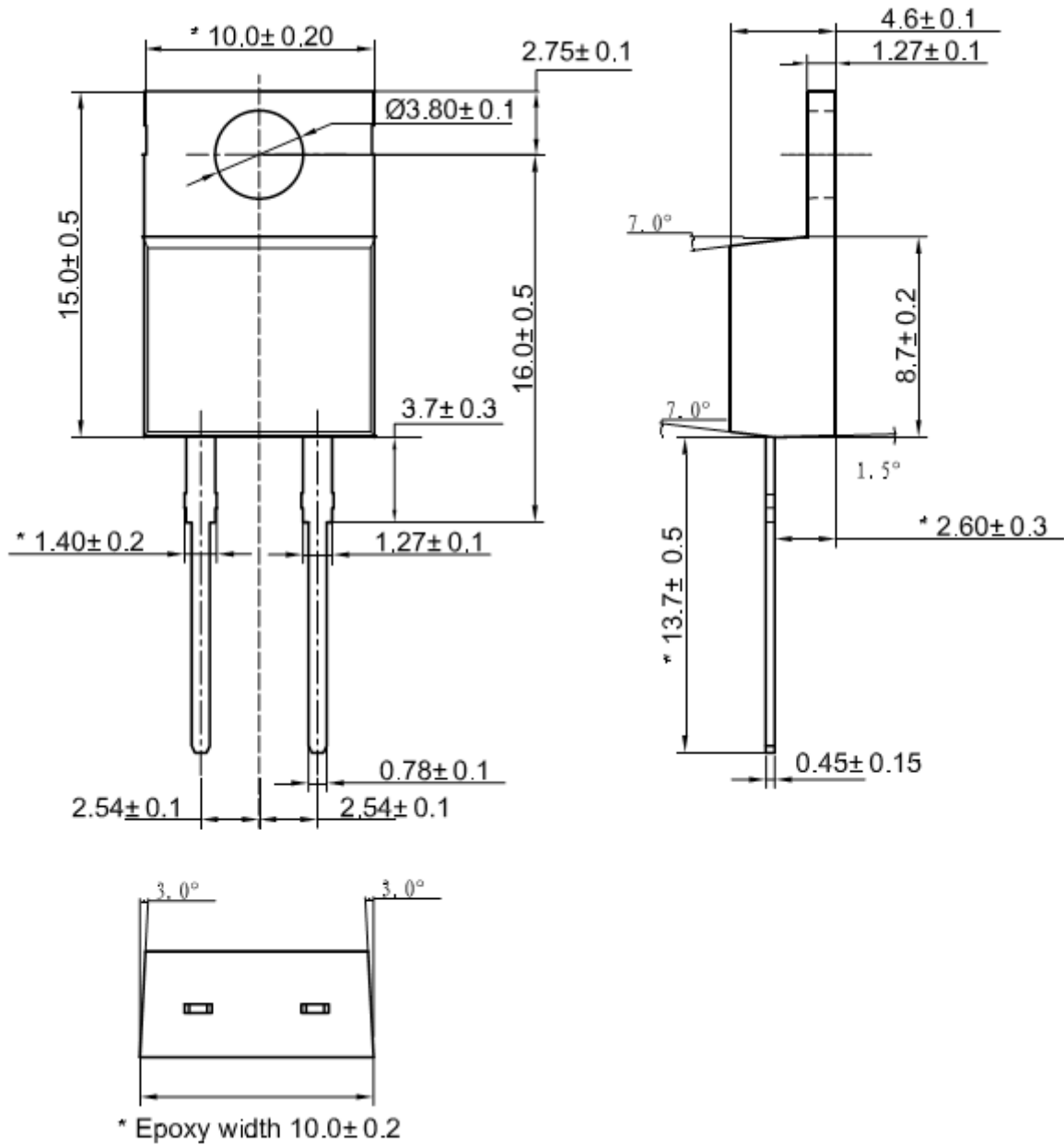


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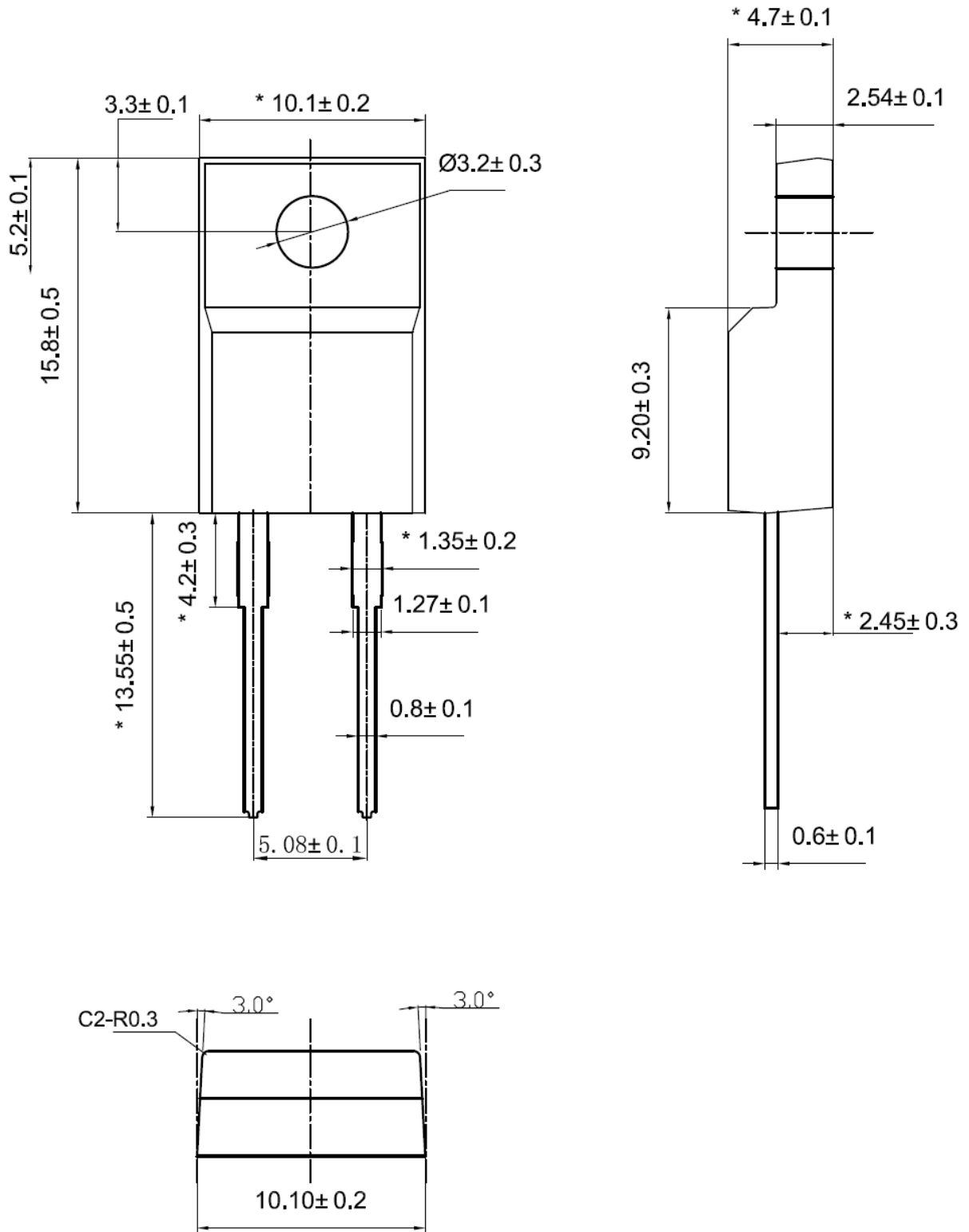
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1. Package Outline (TO220-AC)

UNIT:mm

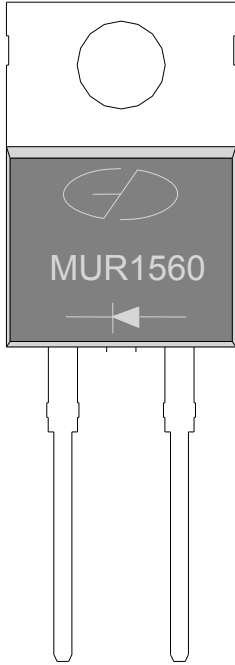




Package Outline (ITO220-AC)



Lead Frame Material : Copper Plating: Pure Tin Plating

2. MARKING



1. Part Name : MUR1560(TO220-AC)
MUR1560F(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

- Operating Temperature: - 55°C to +155°C
- Storage Temperature: - 55°C to +155°C

MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MUR1505	MUR1505	50V	35V	50V
MUR1510	MUR1510	100V	70V	100V
MUR1520	MUR1520	200V	140V	200V
MUR1540	MUR1540	400V	280V	400V
MUR1560	MUR1560	600V	420V	600V

Electrical Characteristics @ 25°C Unless Otherwise Specified

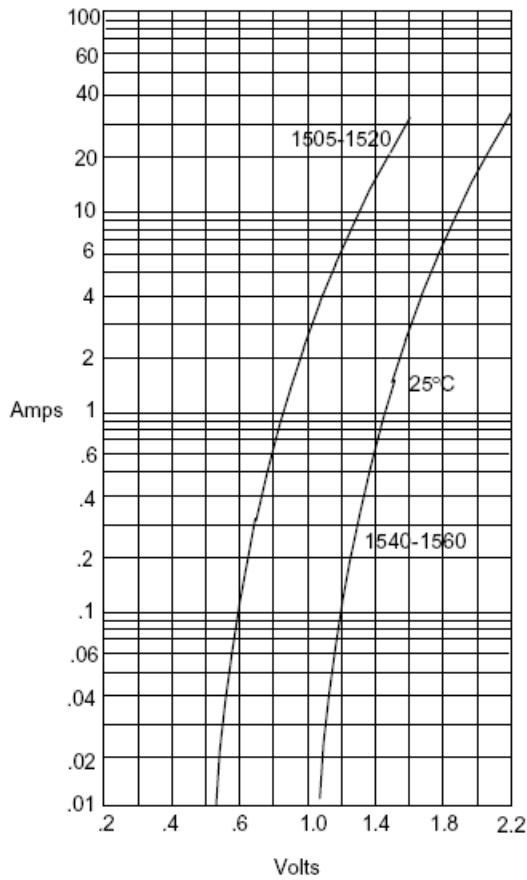
Average Forward Current	$I_{F(AV)}$	15.0A	$T_C = 110^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	150A	8.3ms, half sine
Maximum Forward Voltage Drop Per Element 1505-1520 1540-1560	V_F	1.25V 2.0 V	$I_{FM} = 15A$ $T_J = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	10uA 1000uA	$T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$
Maximum Reverse Recovery Time 1505-1520 1540-1560	T_{rr}	35ns 60ns	$I_F=0.5A, I_r=1.0A,$ $I_{rr}=0.25A$
Typical Junction Capacitance	C_J	160pF	Measured at 1.0MHz, $V_R=4.0V$

*Pulse Test: Pulse Width 300μsec, Duty Cycle 2%

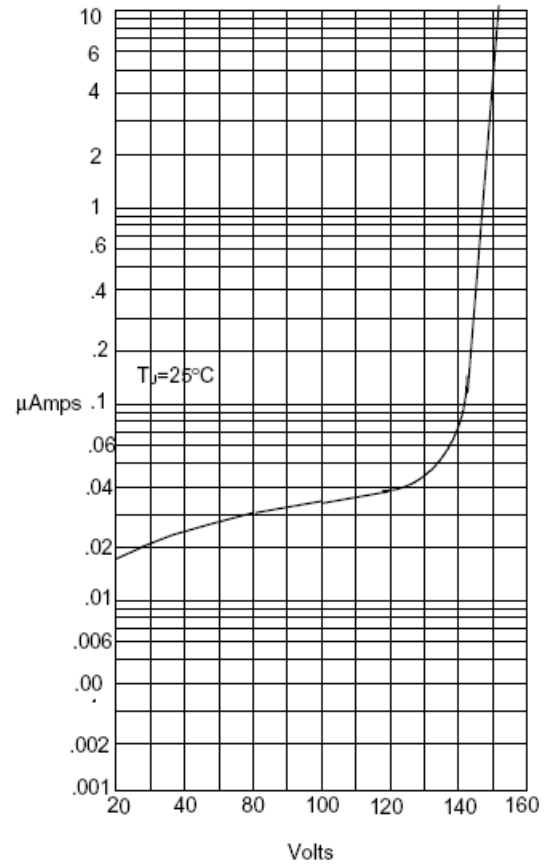
Thermal Characteristics $T_a=25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Max (TO220AC)	Max (ITO220AC)	Unit
$R_{\theta JC}$	Thermal Resistance, Junction to Case per Leg	2.0	4.0	$^\circ\text{C}/\text{W}$
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient per Leg	62.5	62.5	$^\circ\text{C}/\text{W}$

5. Rating and Characteristic Curves

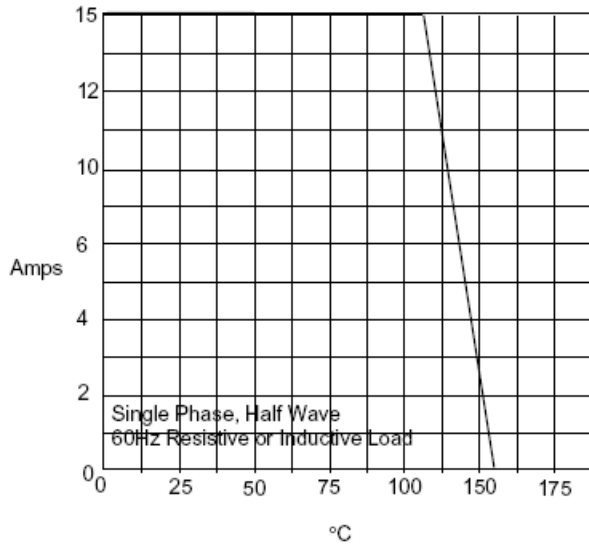


Instantaneous Forward Current - Amperes versus Instantaneous Forward Voltage - Volts



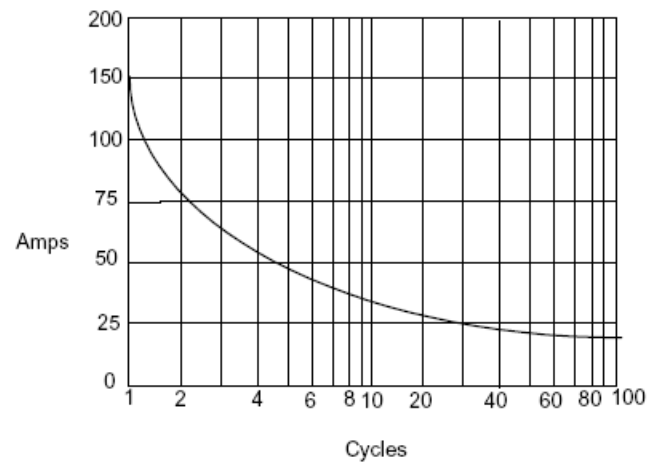
Instantaneous Reverse Leakage Current - MicroAmperes versus Percent Of Rated Peak Reverse Voltage - Volts

Figure 3
 Forward Derating Curve






Average Forward Rectified Current - Amperes versus Case Temperature - $^\circ\text{C}$

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>