



Surge Components, Inc.

Product Specification

Surge Type
MUR560,MUR560F

Construction : Ultra Fast Recover diode

Application : For power switch

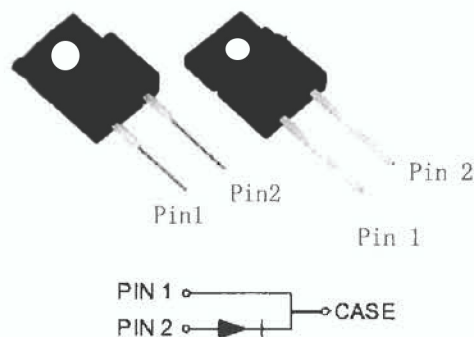
(Manufacturer) :

Surge Components, Inc.

Prepared on Sep. 17th, 2008

Prepared: R & D Department

Approval:



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UNIT:mm

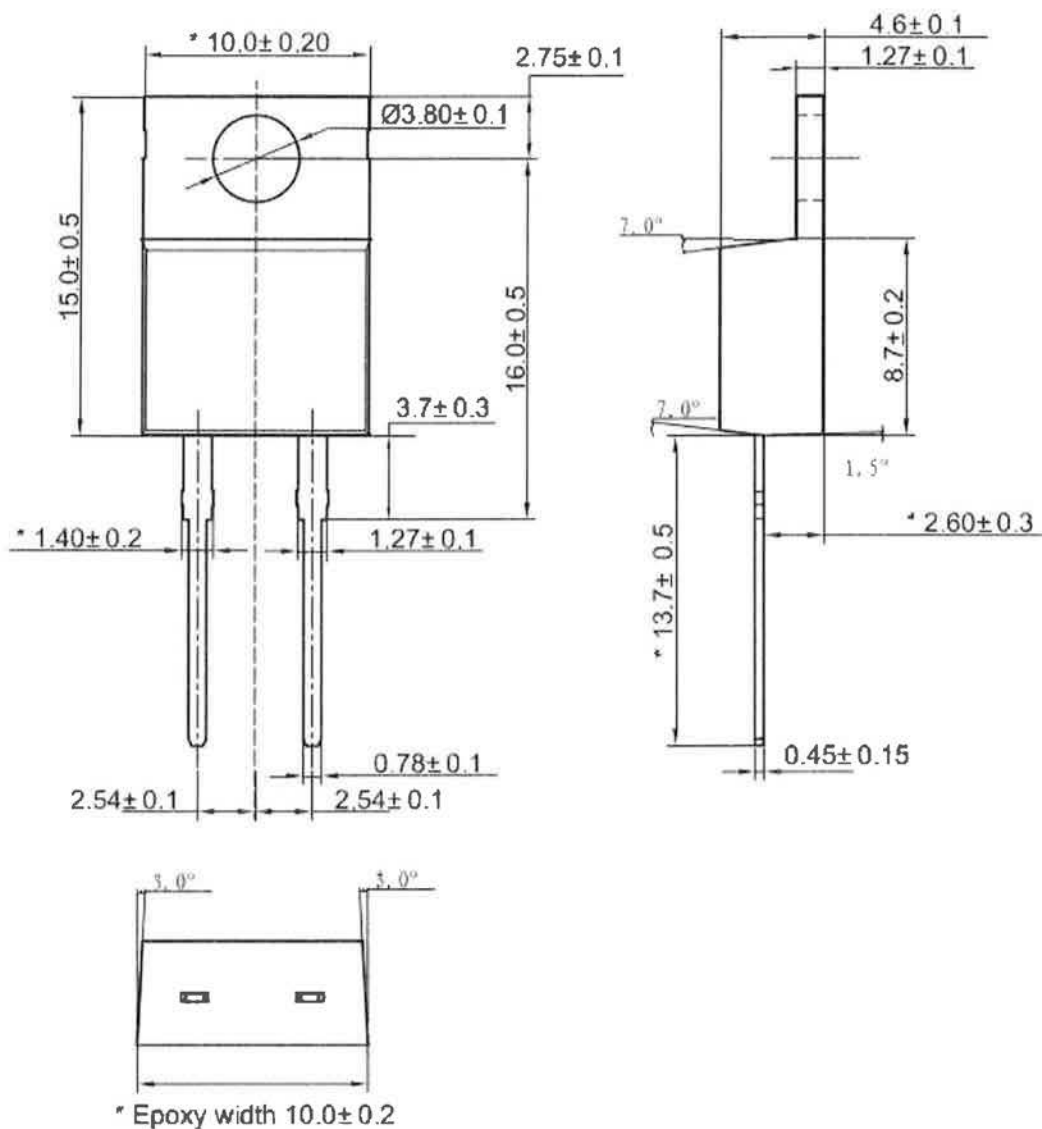




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1. Package Outline (TO220-AC)

UNIT:mm





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2. MARKING



1. Part Name : MUR560(TO220-AC)
MUR560F(ITO220-AC)

2. Logo Mark:

3. Polarity: 





Surge Components, Inc.

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. for 10 sec
- Shipped 50 units per plastic tube

4. Maximum Ratings and Electrical Characteristics

MAXIMUM RATINGS and ELECTRICAL CHARACTERISTICS (TC=25°C unless otherwise noted)					
PARAMETER	TEST CONDITIONS		SYMBOL	MUR560(F)	UNIT
Maximum repetitive peak reverse voltage			VRRM	600	V
Working peak reverse voltage			VRWM	600	V
Maximum DC blocking voltage			VDC	600	V
Maximum average forward rectified current at Tc=100°C total device per diode			IF(AV)	5	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load per diode			IFSM	80	A
Operating junction temperature range			TJ	—55 to +150	°C
Storage temperature range			TSTG	—55 to +150	°C
Maximum instantaneous forward voltage per leg	IF=5A IF=5A	TC=25°C TC=125°C	VF	1.60 1.50	V
Maximum reverse current per leg at working peak Reverse voltage		TJ=25°C TJ=100°C	IR	10 500	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 (TO220AC)	Max (ITO220AC)	Unit
RθJC	Thermal Resistance, Junction to Case per Leg	2.0	4.0	°C /W
RθJA	Thermal Resistance, Junction to Ambient per Leg	62.5	62.5	°C /W

Note:

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



5. Rating and Characteristic Curves

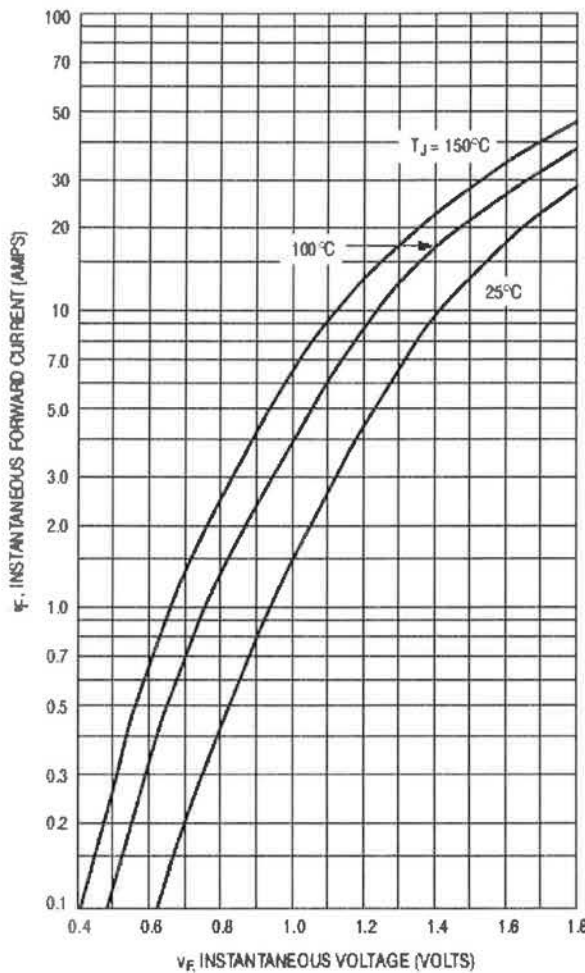


Figure 11. Typical Forward Voltage

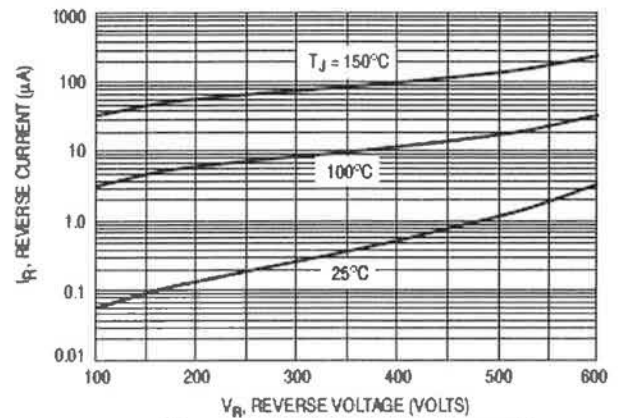


Figure 12. Typical Reverse Current*

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

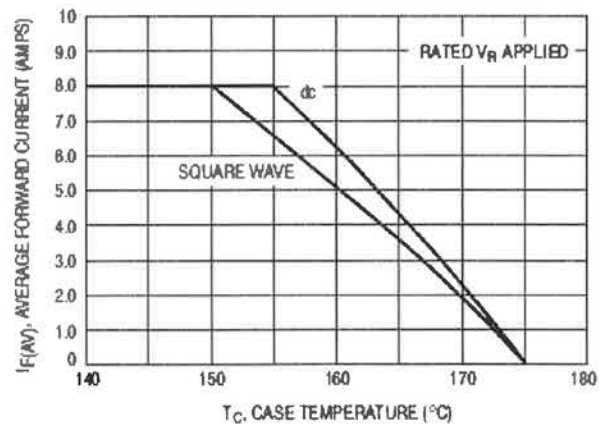


Figure 13. Current Derating, Case

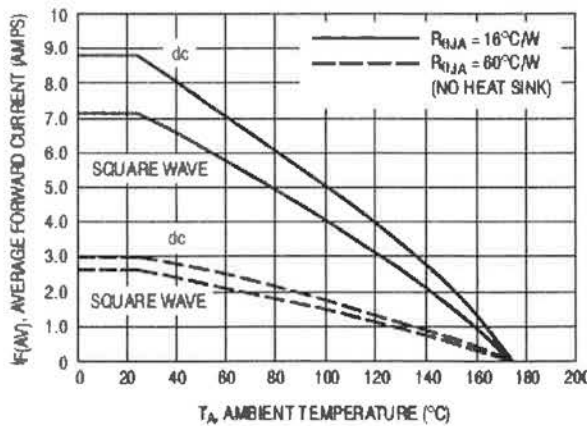


Figure 14. Current Derating, Ambient

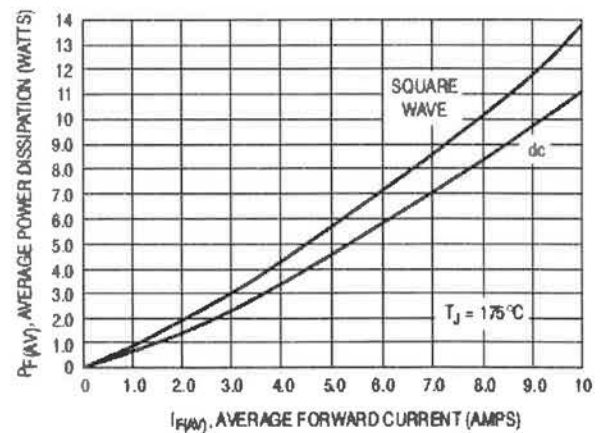


Figure 15. Power Dissipation

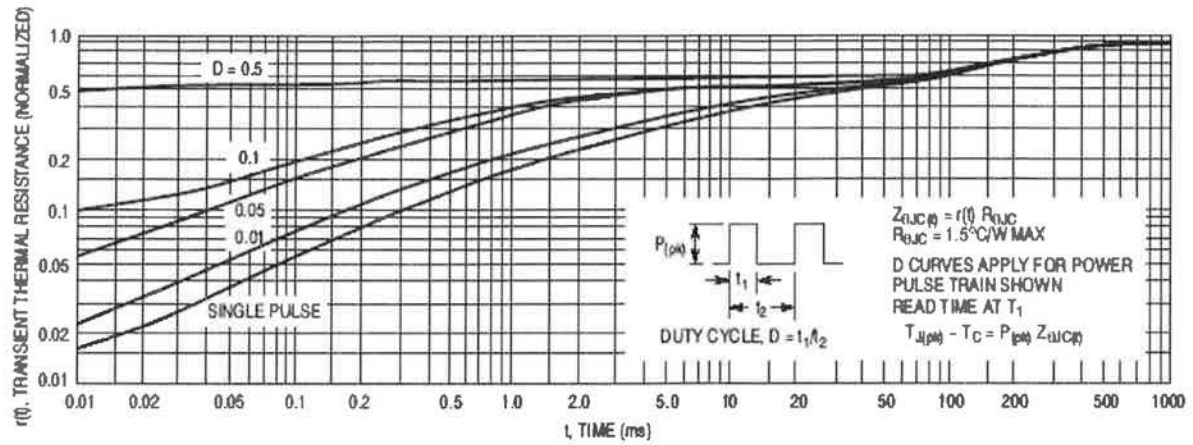


Figure 16. Thermal Response

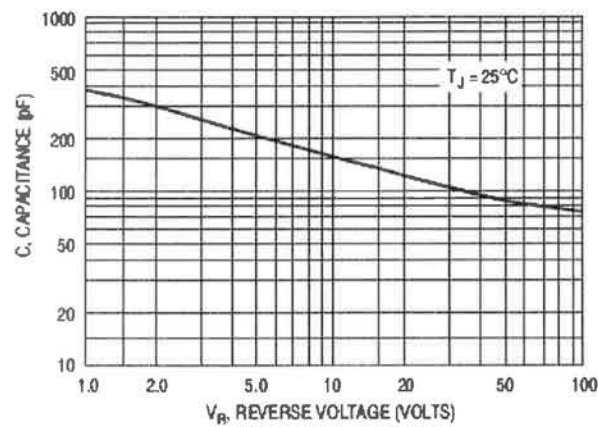
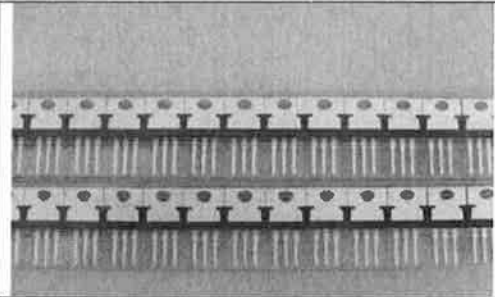
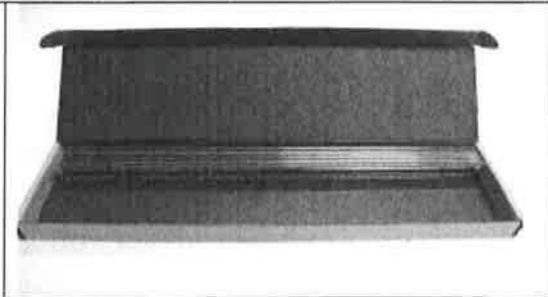
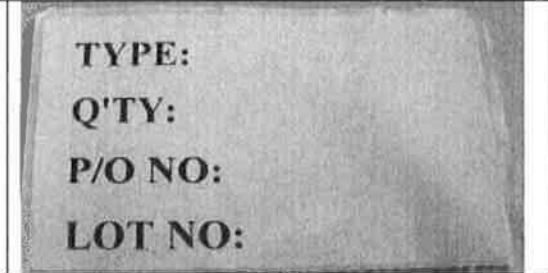
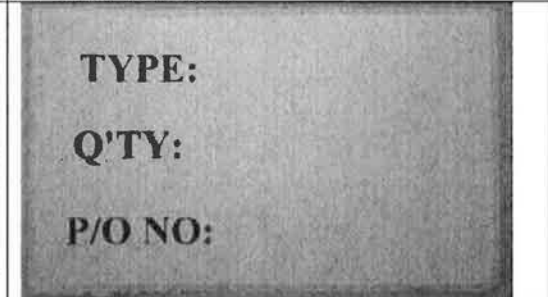


Figure 17. Typical Capacitance

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