SUPER-FAST RECOVERY RECTIFIERS

Features

- Ultrafast 35 Nanosecond Recovery Time
- 175° C Operating Junction Temperature
- Popular TO-220AC ITO-220AC Package
- Epoxy Meets UL94 ,V0 @ 1/8"
- High Temperature Glass Passivated Junction
- Low Forward Voltage
- Low Leakage Current
- Reverse Voltage to 600 Volts
- Pb-Free Packages are Available

Typical Reference Data

VRRM= 200V
IF(AV)= 10A

VRRM= 400V
IF(AV)= 10A

VRRM= 600V
IF(AV)=10A

Mechanical Characteristics

- Case: Epoxy, Molded
- Weight: 1.9 grams (approximately)
- Finish: All External Surfaces Corrosion Resistant and Terminal Leads are Readily Solderable
- Lead Temperature for Soldering Purposes: 260° C Max. for 10 Seconds
- Shipped 50 units per plastic tube

MAXIMUM RATINGS

Rating	Symbol	SF1002A SFF1002A	SF1004A SFF1004A	SF1006A SFF1006A	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	VRRM VRWM VR	200	400	600	V
Average Rectified Forward Current Total Device, (Rated VR), TC = 150°C	IF(AV)	10			A
Peak Repetitive Forward Current (Rated VR, Square Wave, 20 kHz), TC = 150°C	IFM	5			A
Nonrepetitive Peak Surge Current (Surge applied at rated load conditions halfwave , single phase, 60 Hz)	IFSM	125			A
Operating Junction Temperature and Storage Temperature	TJ, Tstg	– 40 to +175			°C

THERMAL CHARACTERISTICS (Per Diode Leg)

Maximum Thermal Resistance, Junction to Case	RθJC	3.0	2.0		°C/W

ELECTRICAL CHARACTERISTICS (Per Diode Leg)

Maximum Instantaneous Forward Voltage (1) (IF = 8.0 Amps, TC = 25° C)	VF	1.05	1.35	1.5	V
Maximum Instantaneous Reverse Current (1) (Rated dc Voltage, TJ = 150° C) (Rated dc Voltage, TJ = 25° C)	IR	800 10	800 10	800 10	μA
Maximum Reverse Recovery Time (IF = 0.5 A, IR = 1.0 A, IREC = 0.25 A)	Trr	35			ns

(1) Pulse Test: Pulse Width = 300μs, Duty Cycle≤ 2.0%.

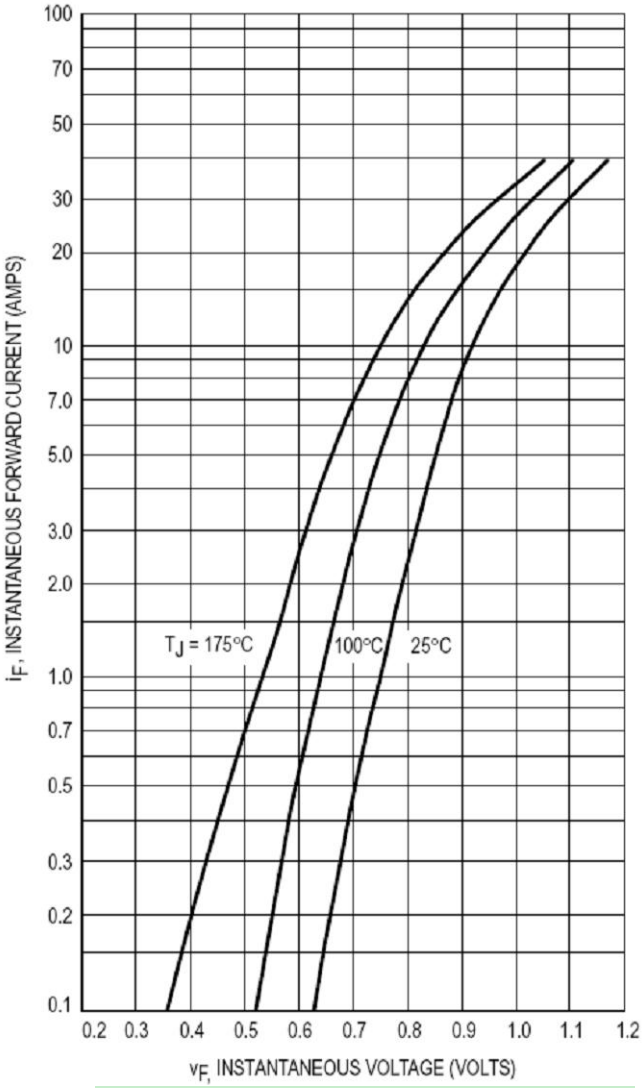


Figure 1.Typical Forward Voltage

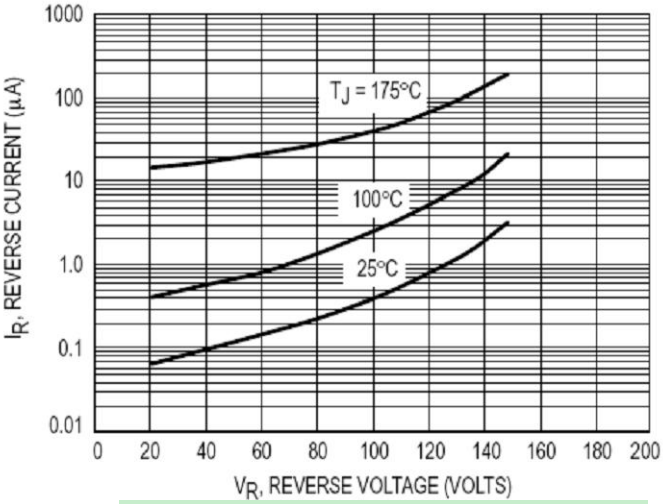


Figure 2.Typical Reverse Current

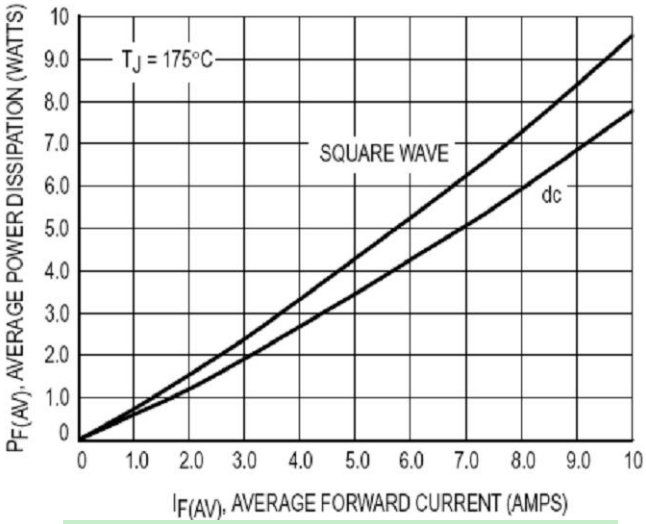


Figure 3.Current Derating, Case

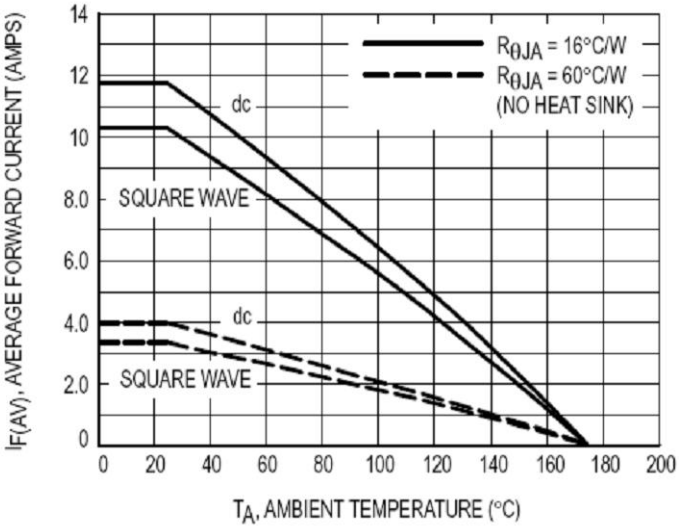


Figure 4.Current Derating, Ambient

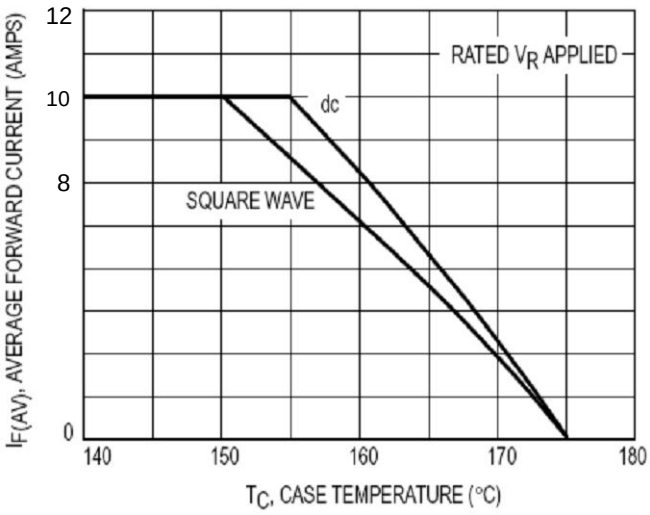


Figure 5.Power Dissipation

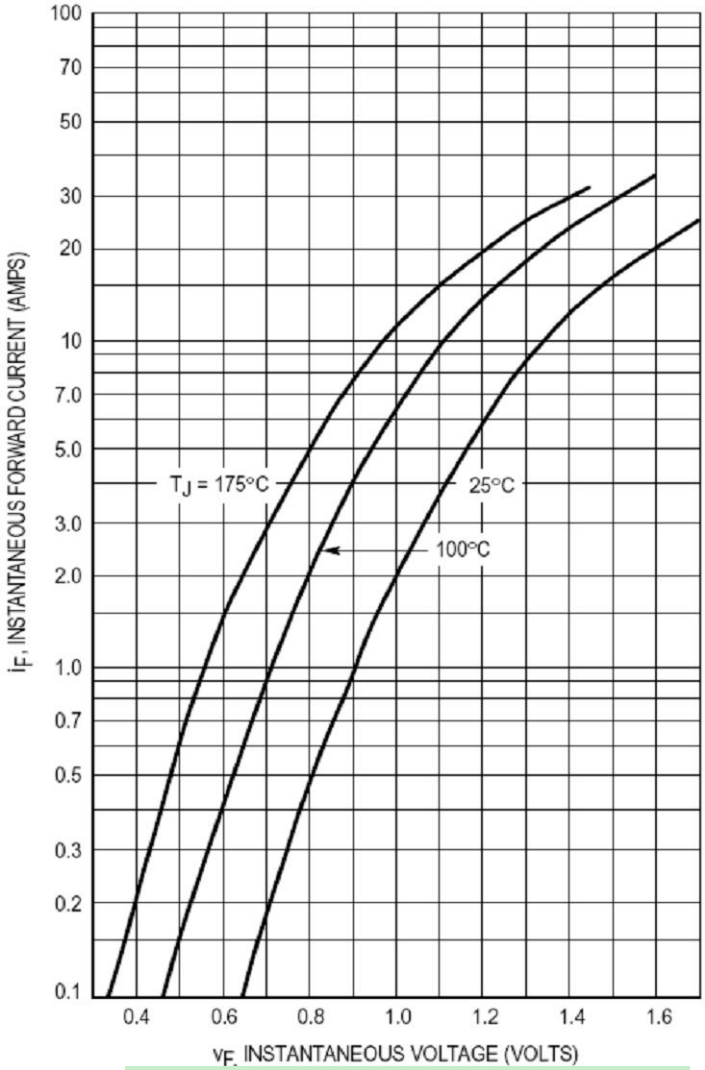


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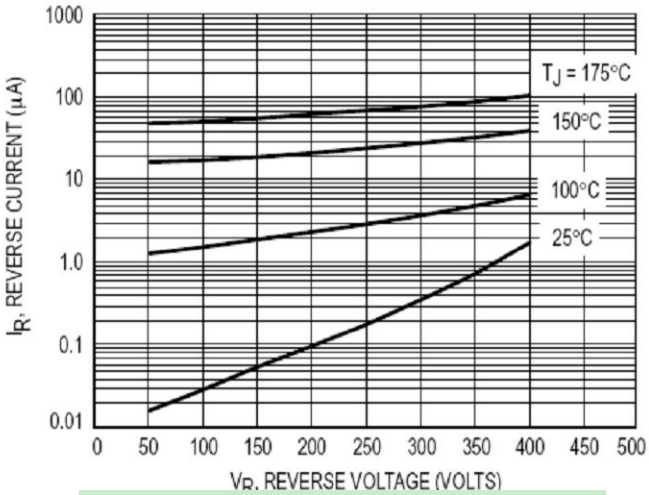


Figure 2.Typical Reverse Current

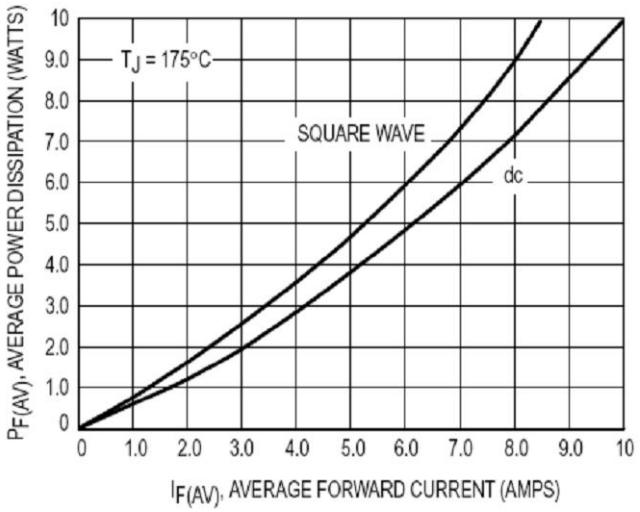


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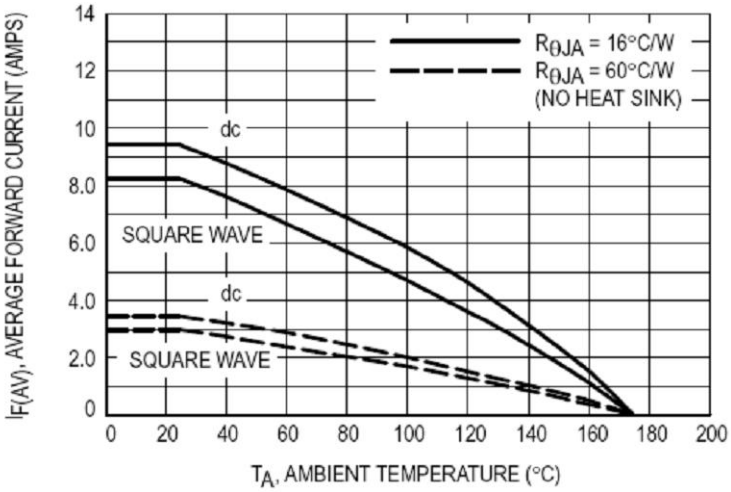


Figure 4.Current Derating, Ambient

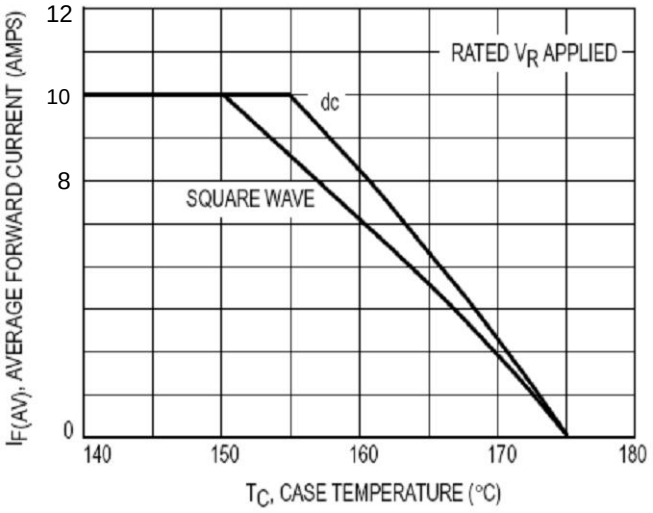


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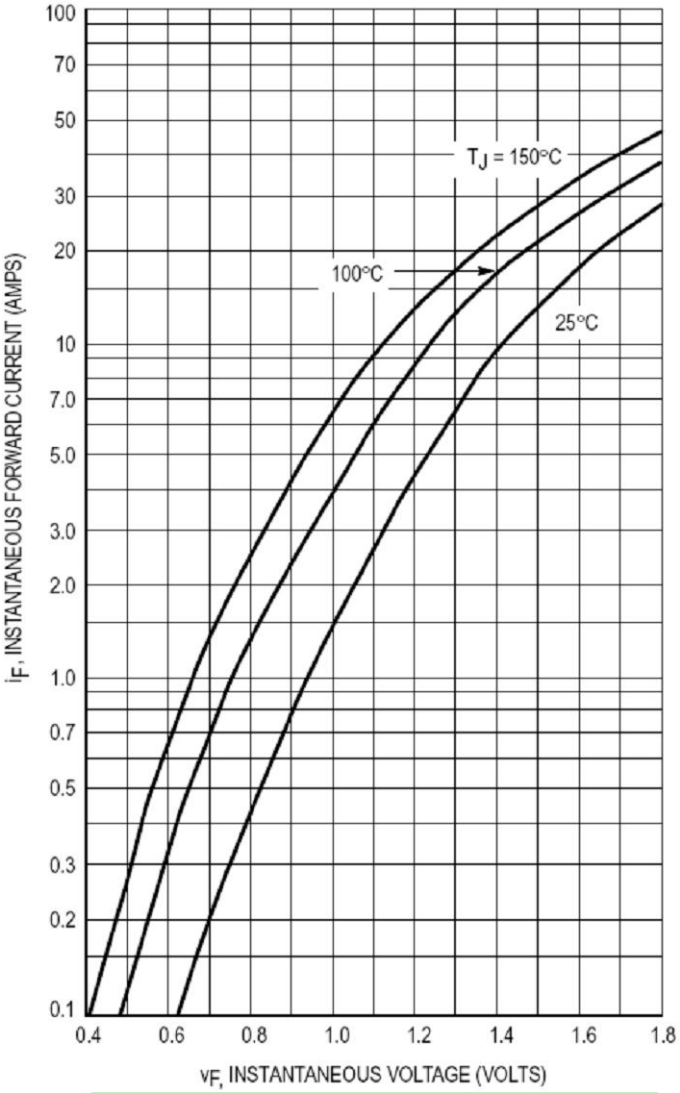


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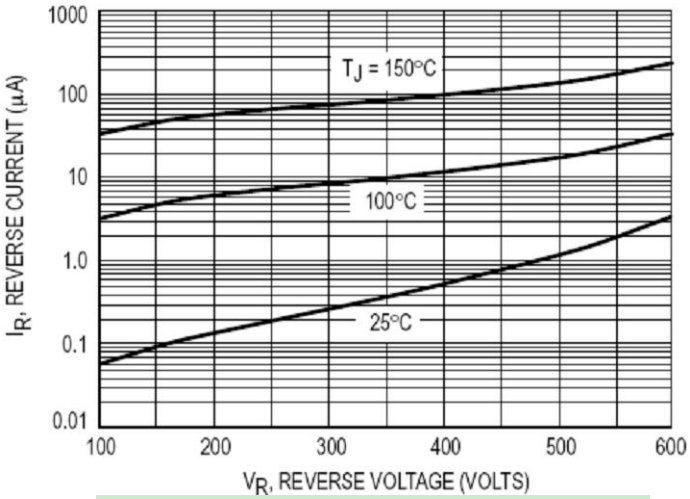


Figure 2.Typical Reverse Current

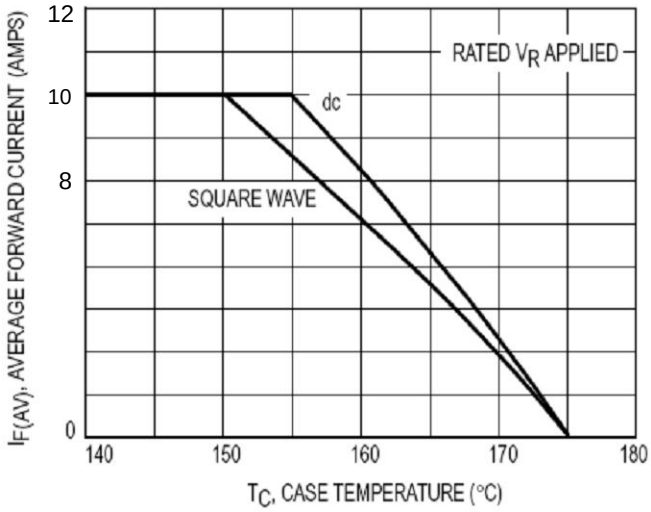


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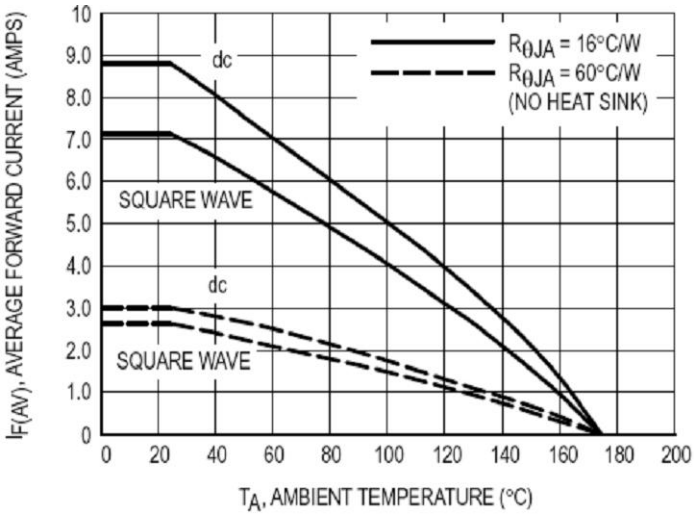


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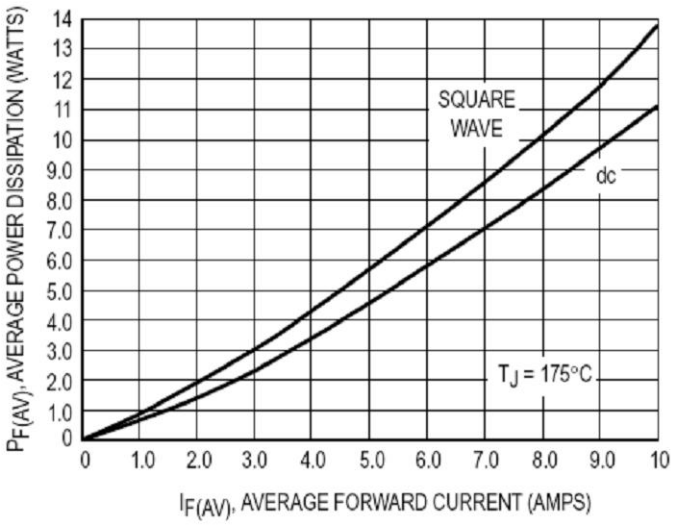
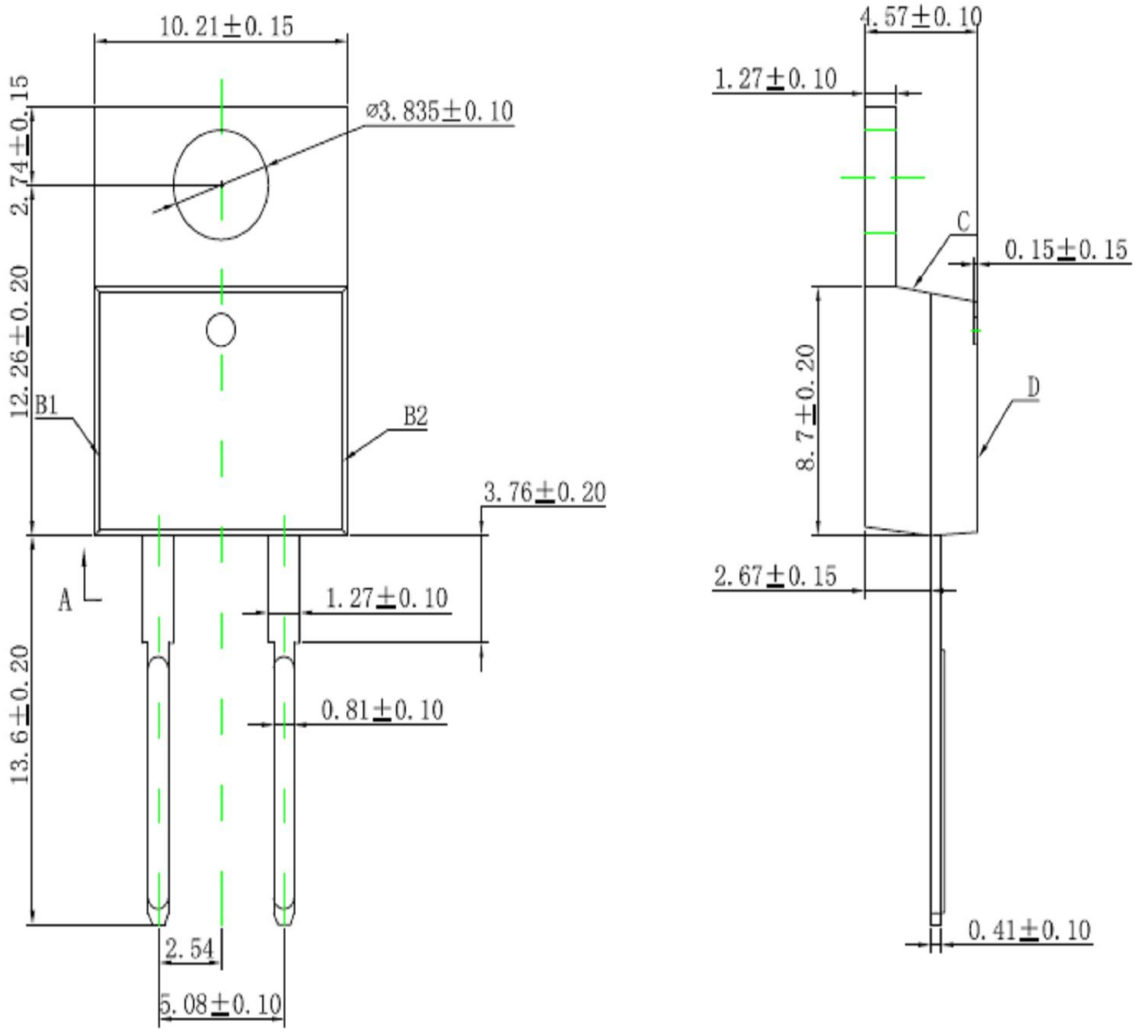


Figure 5.Power Dissipation

SUPER-FAST RECOVERY RECTIFIERS

TO-220AC



注意事项：

1. XXXX代表日期码，第一码表示公元年的最后一码，第二码表示生产时当月码（A,B,C…为一月，二月，三月…),第三，四码表示大量生产时批次码。
   例如:2009年第一月生产的，D/C为9AXX。
2. 包装及出货:ROHS,50PCS/管,1K/BOX,5K(5K BOXEX)/CARTON, BOXEX及CARTON。

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修订内容