

**Features**

Ultrafast 35 Nanosecond Recovery Time  
 175° C Operating Junction Temperature  
 Popular TO-220AB 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)= 16A**

**VRRM= 400V**  
**IF(AV)= 16A**

**VRRM= 600V**  
**IF(AV)=16A**

**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	SF1602	SF1604	SF1606	Unit
Peak Repetitive Reverse Voltage	VRRM	200	400	600	
Working Peak Reverse Voltage	VRW				V
DC Blocking Voltage	VR				
Average Rectified Forward Current (Rated VR, Square Wave, 20 kHz), TC = 150	IF(AV)		8	16	A
Peak Repetitive Forward Current (Rated VR, Square Wave, 20 kHz), TC = 150	IFM		16		A
Nonrepetitive Peak Surge Current (Surge applied at rated load conditions halfwave, single phase, 60 Hz)	IFSM		100		A
Operating Junction Temperature and Storage Temperature	TJ, Tstg		– 40 to +175		

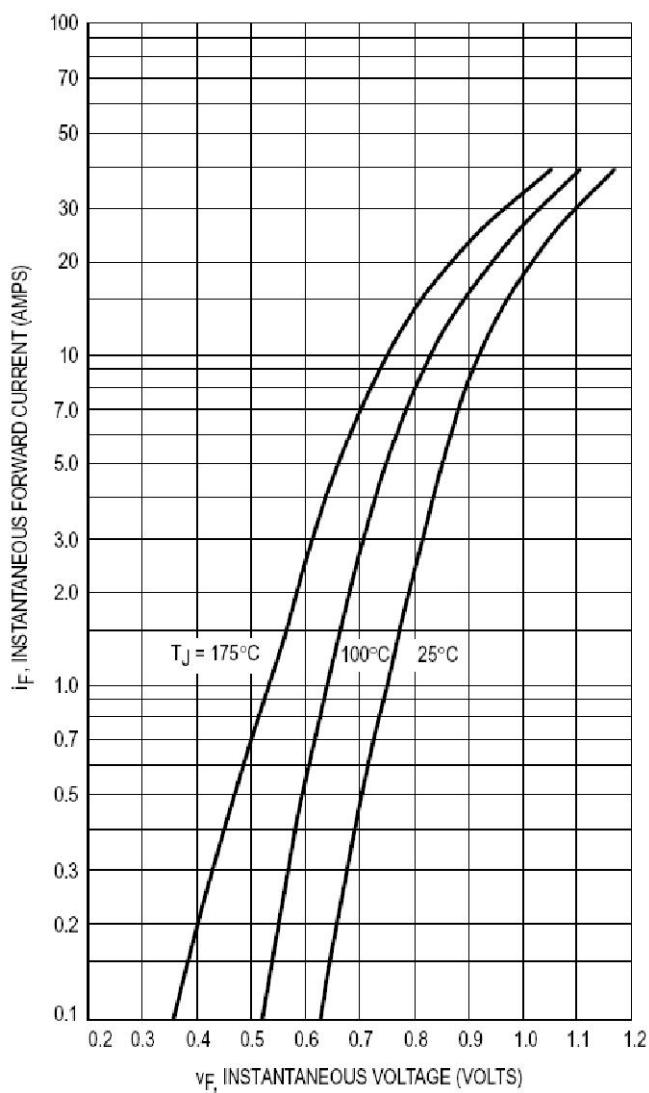
**THERMAL CHARACTERISTICS( Per Diode Leg)**

Maximum Thermal Resistance, Junction to Case	R <sub>JC</sub>	3.0	2.0	MW
--	-----------------	-----	-----	----

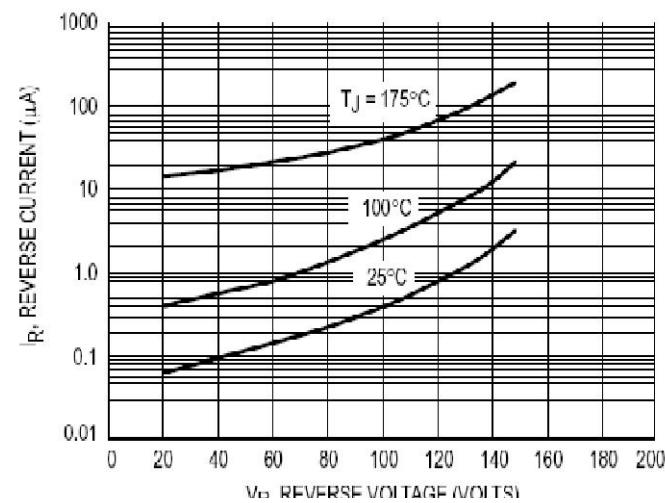
**ELECTRICAL CHARACTERISTICS(Per Diode Leg)**

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)	IR	800	800	800	
(Rated dc Voltage, TJ = 25° C)		10	10	10	µ A
Maximum Reverse Recovery Time (IF = 0.5 A, IR = 1.0 A, IREC = 0.25 A)	Trr		35		ns

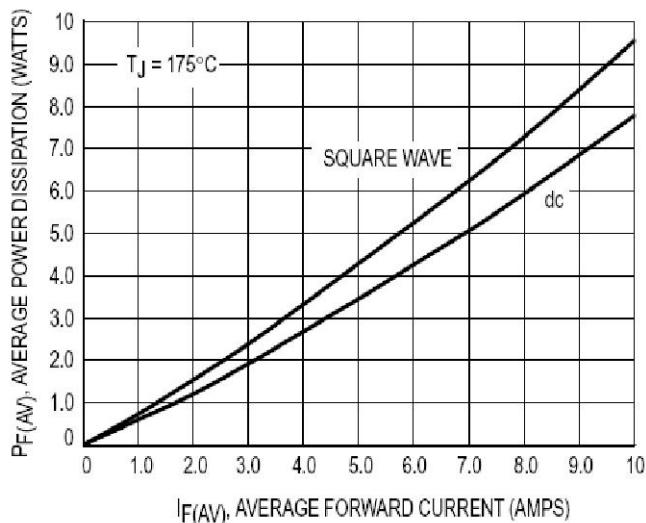
(1) Pulse Test: Pulse Width = 300µ s, Duty Cycle 2.0%.



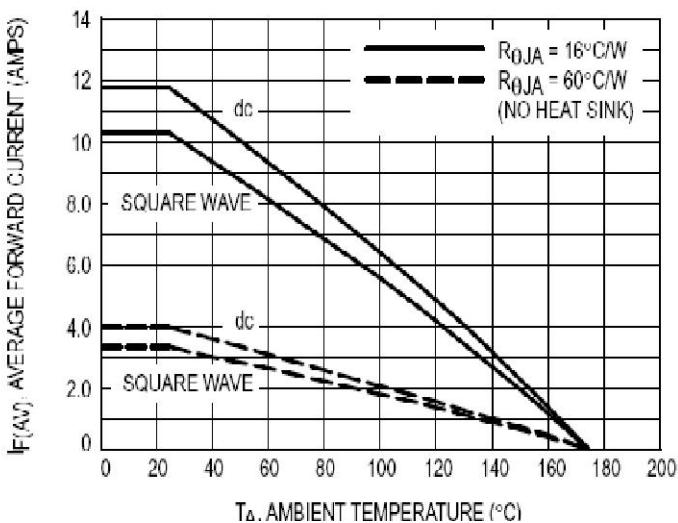
**Figure 1.Typical Forward Voltage**



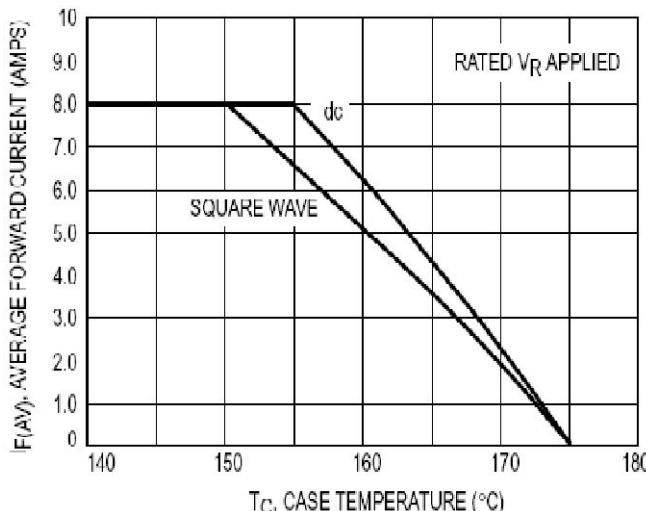
**Figure 2.Typical Reverse Current**



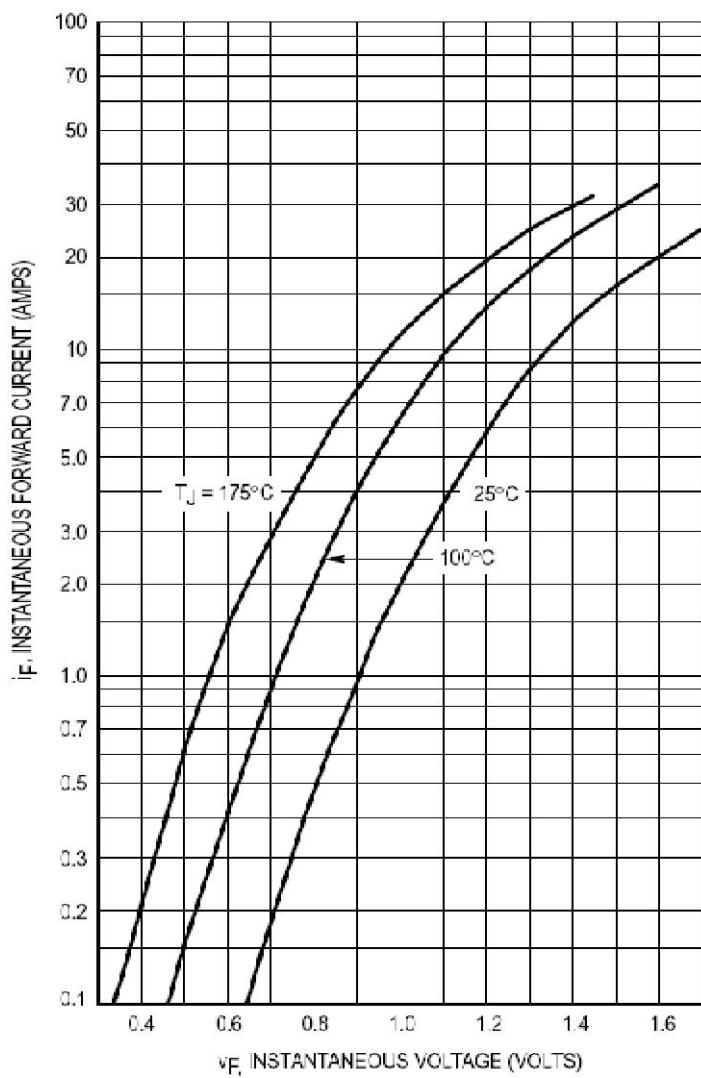
**Figure 3 Current Derating , Case**



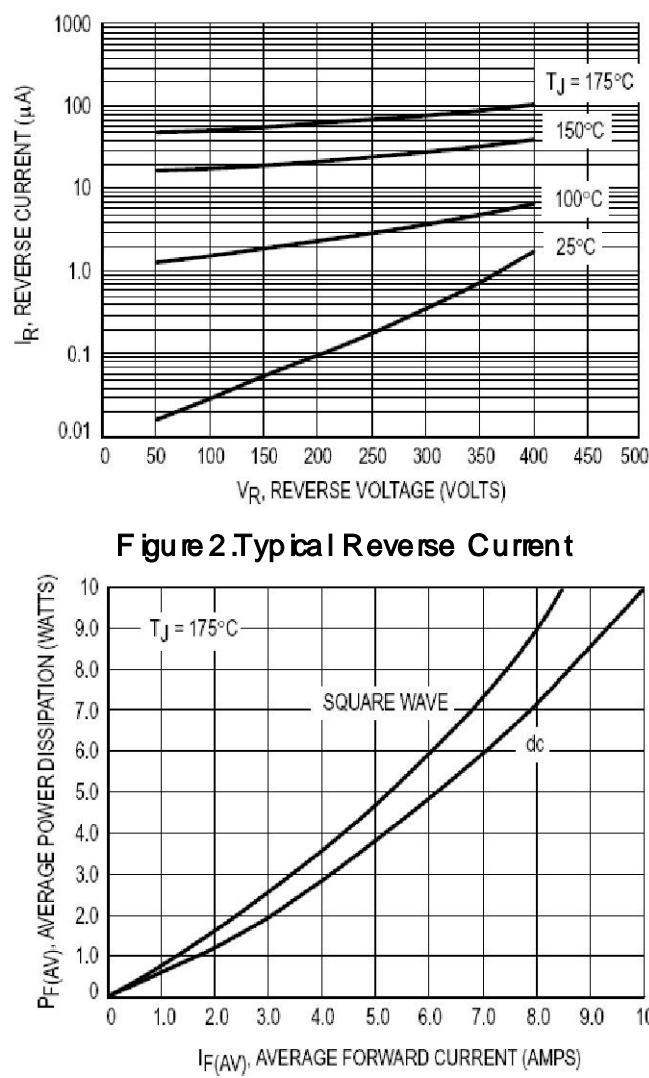
**Figure 4 Current Derating,Ambient**



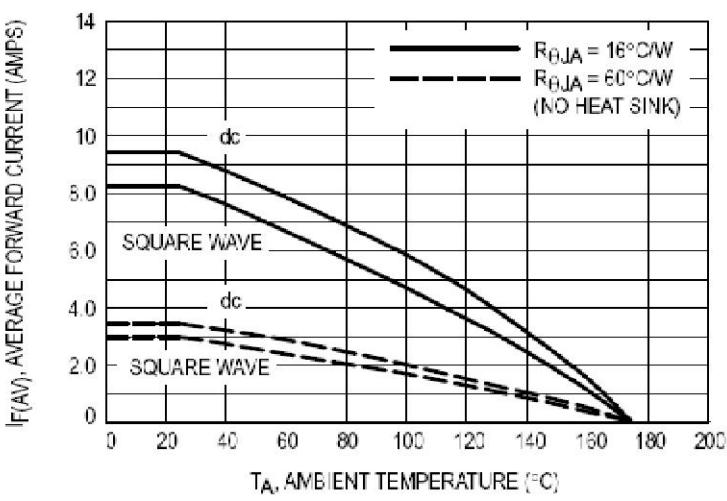
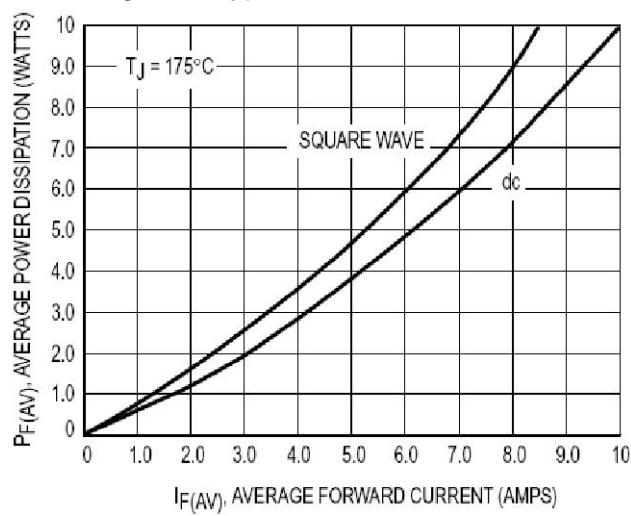
**Figure 5 Power Dissipation**



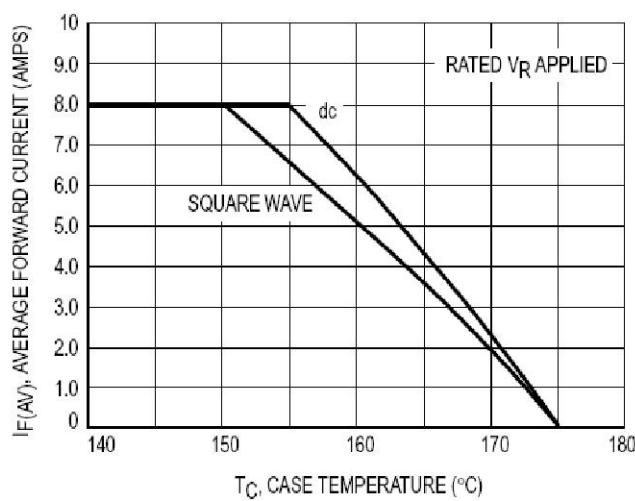
**Figure 1.Typical Forward Voltage**



**Figure 2.Typical Reverse Current**



**Figure 4 Current Derating,Ambient**



**Figure 5 Power Dissipation**

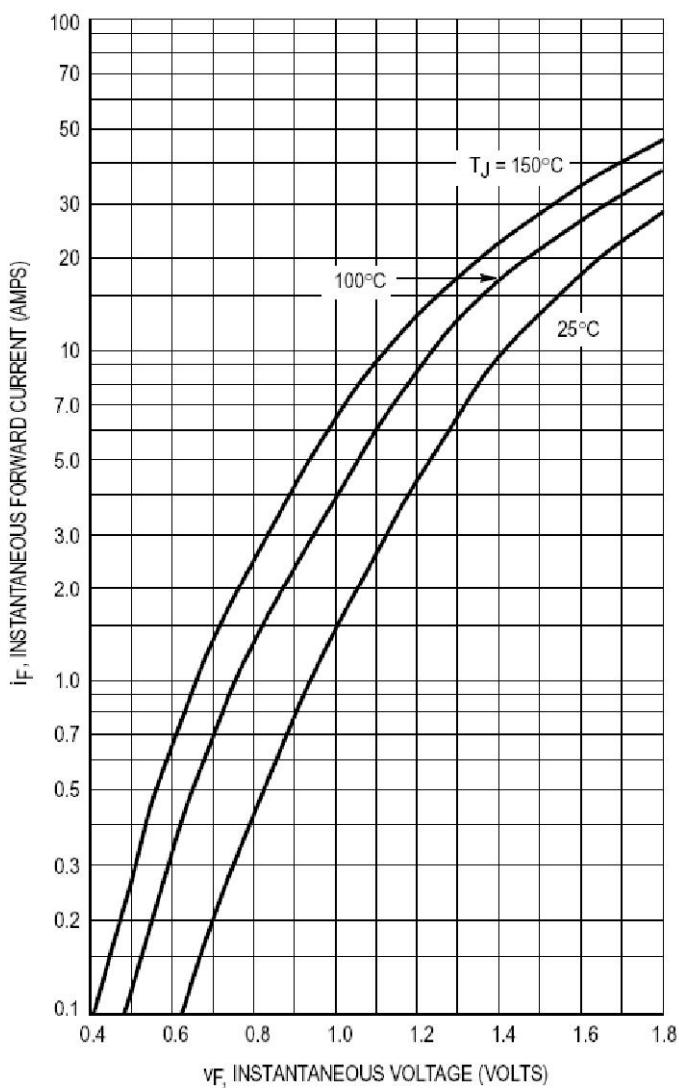


Figure 1.Typical Forward Voltage

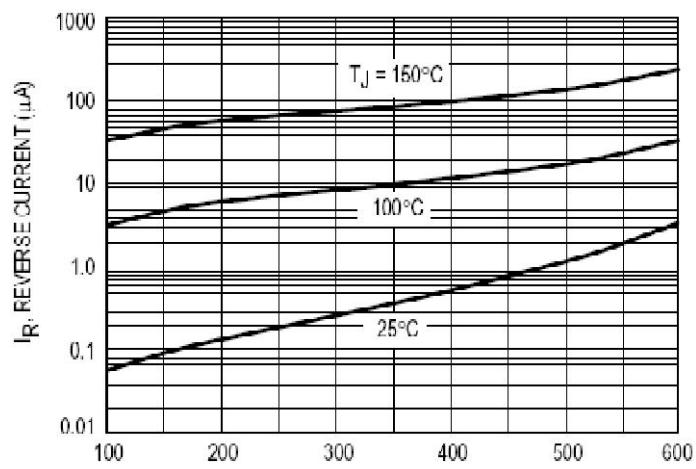


Figure 2.Typical Reverse Current

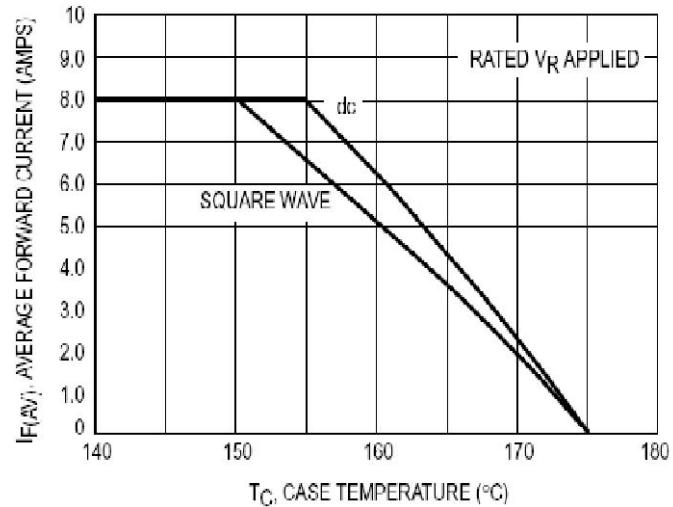


Figure 3.Current Derating , Case

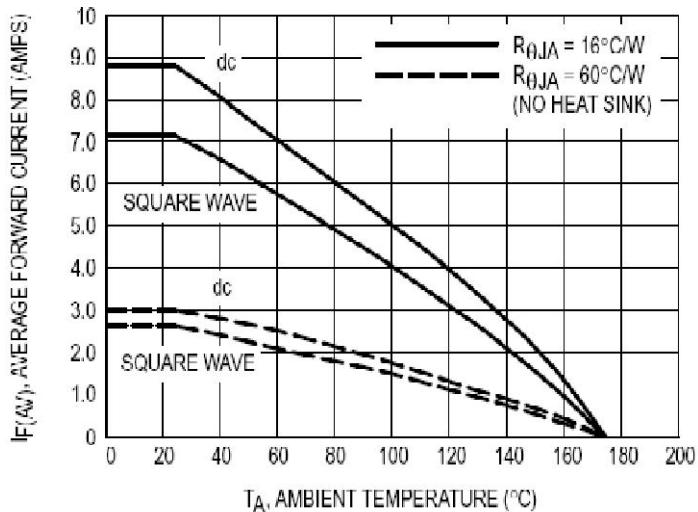


Figure 4.Current Derating ,Ambient

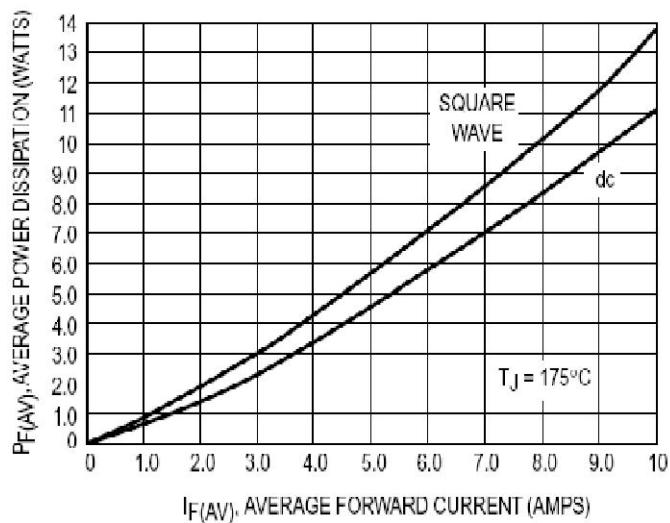
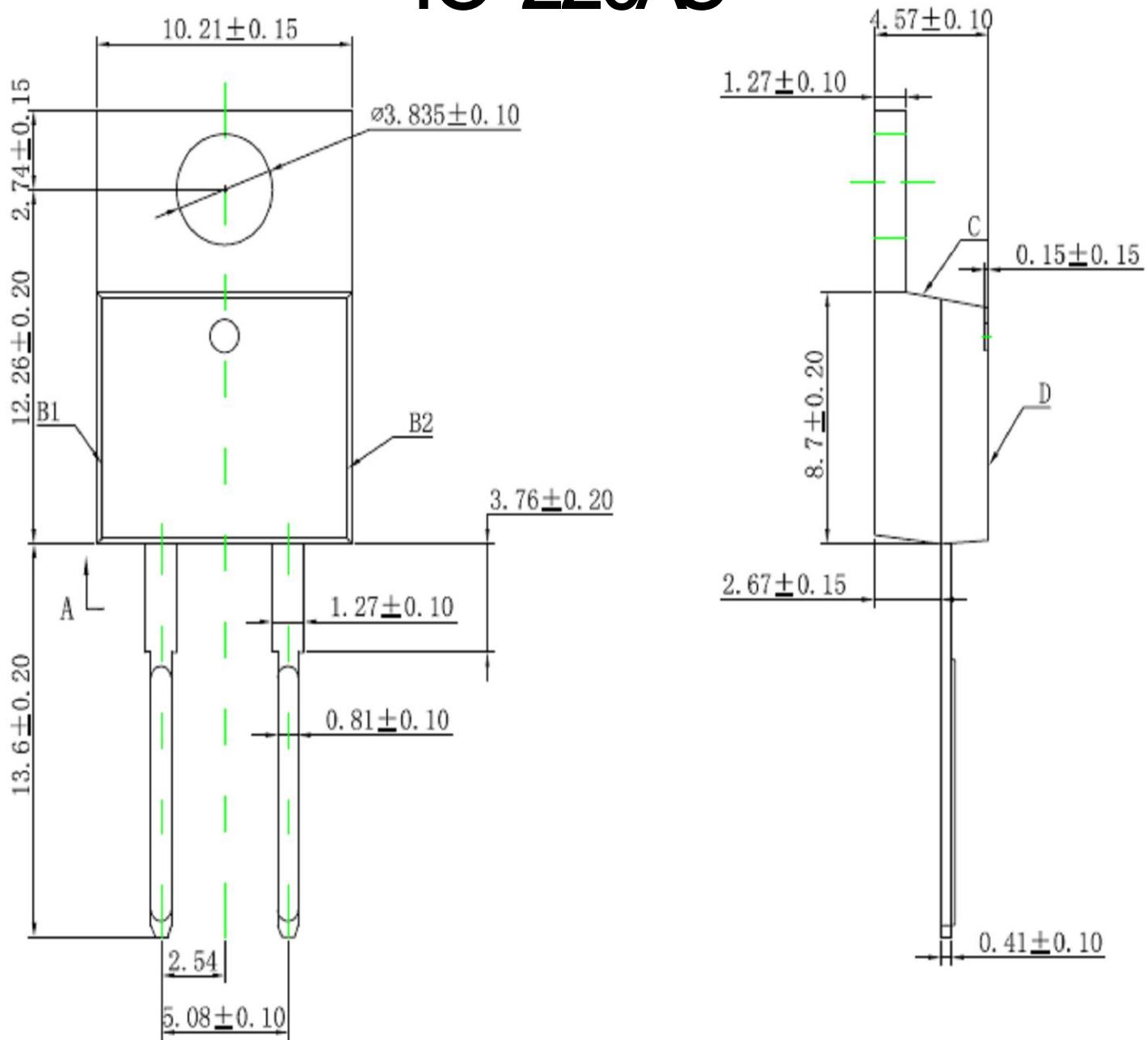


Figure 5.Power D issipation

## 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, 30PCS/管, 0.6K/BOX, 1.8K(1.8K BOXEX)/CARTON, BOXEX及CARTON。

ASEMI

MUR1660AC

 XXXX

修订内容