

SUPER-FAST RECOVERY RECTIFIERS

REV:1.01

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	V
Working Peak Reverse Voltage	VWRM				
DC Blocking Voltage	VR				
Average Rectified Forward Current	IF(AV)	8			A
Total Device, (Rated VR), TC = 150		16			
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 _{θJC}	3.0	2.0	W
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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	μ A
(Rated dc Voltage, TJ = 25° C)		10	10	10	
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 Cycles ≤ 2.0%.

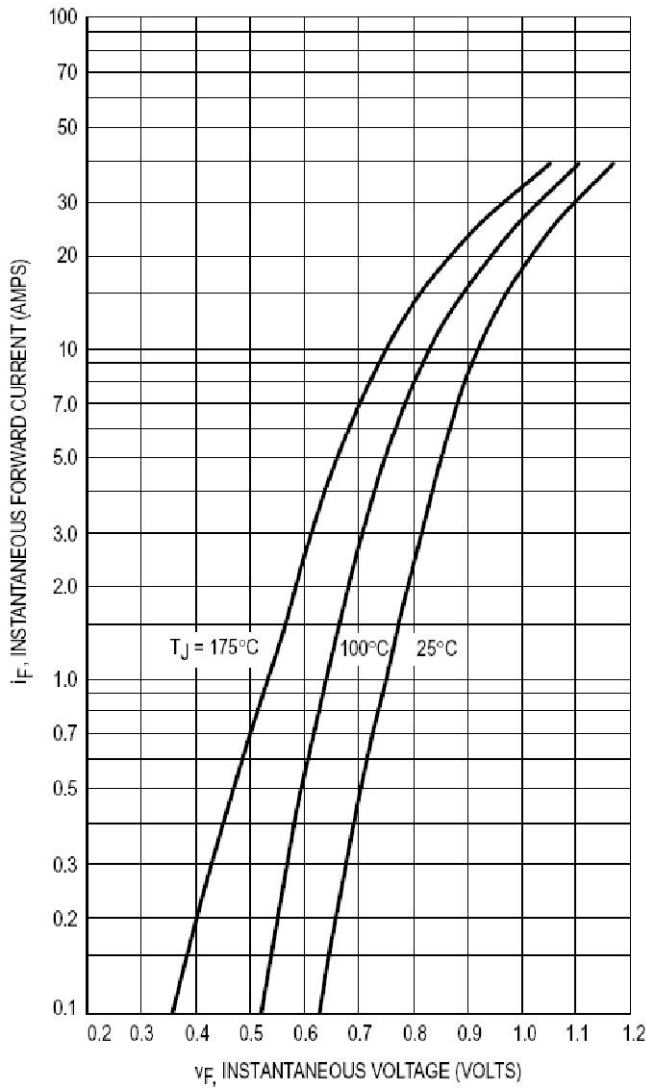


Figure 1. Typical Forward Voltage

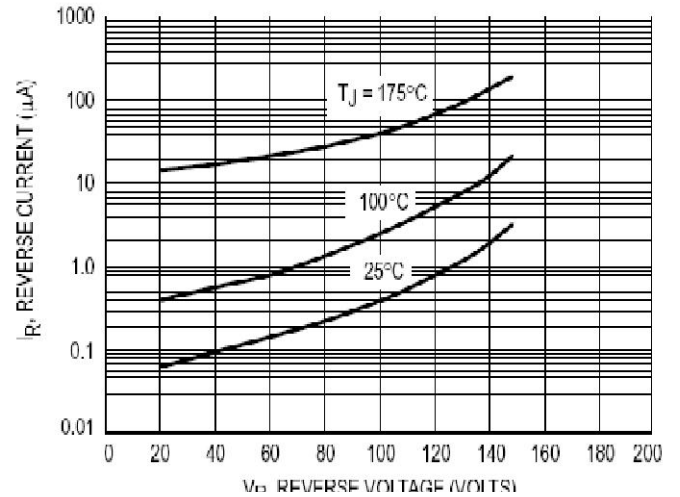


Figure 2. Typical Reverse Current

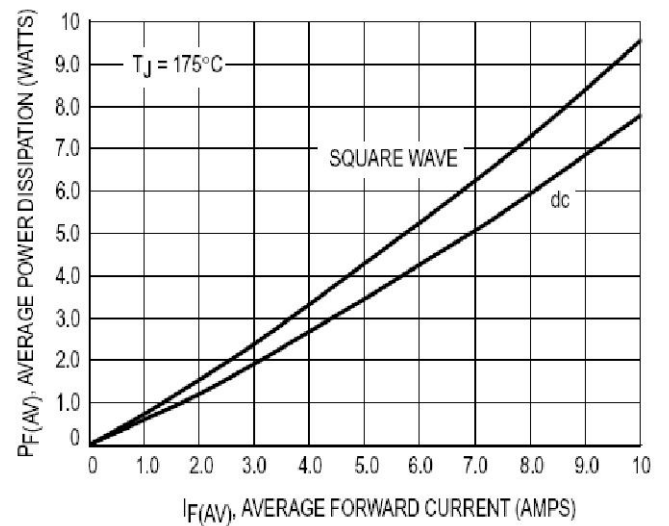


Figure 3. Current Derating, Case

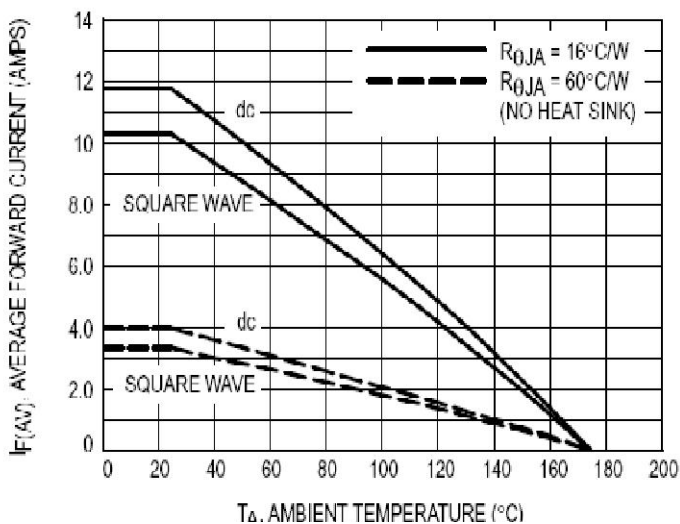


Figure 4. Current Derating, Ambient

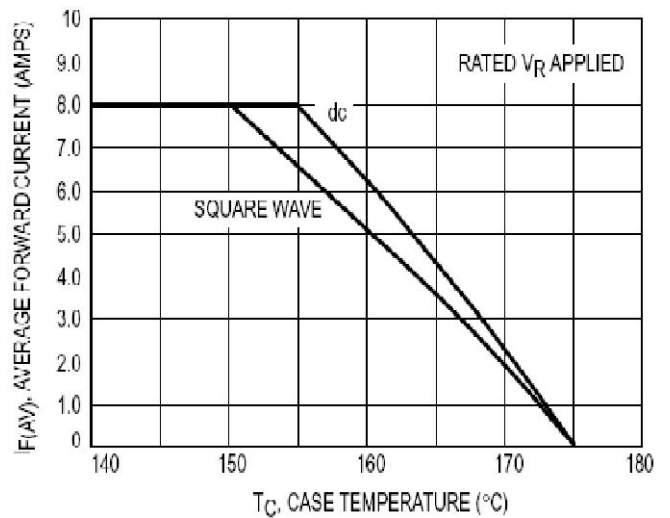


Figure 5. Power Dissipation

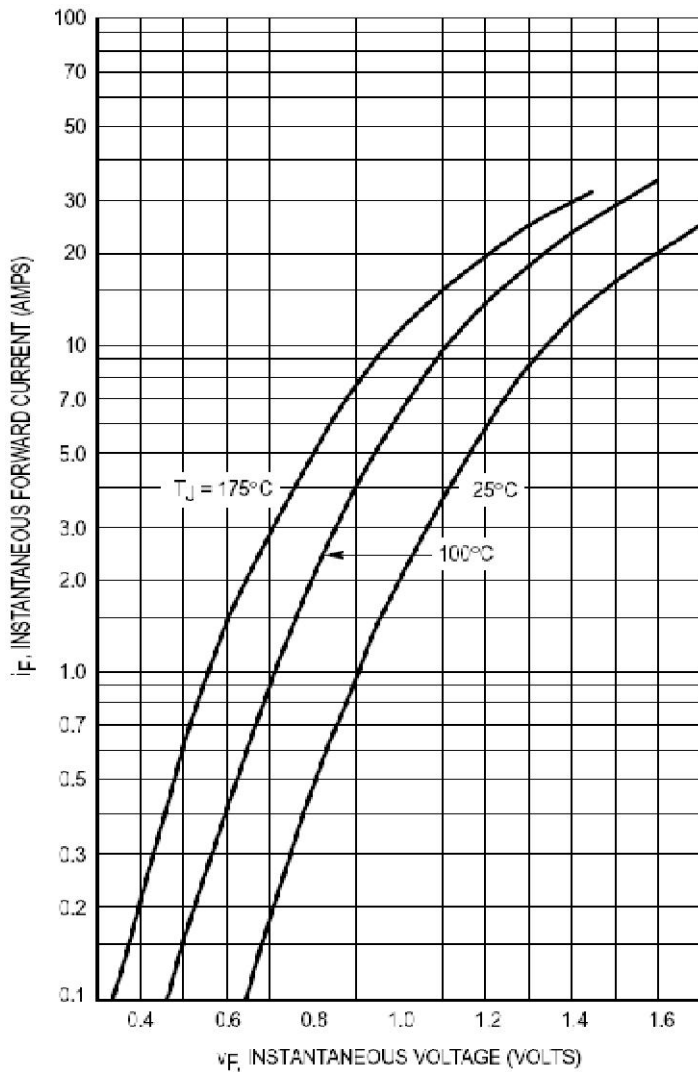


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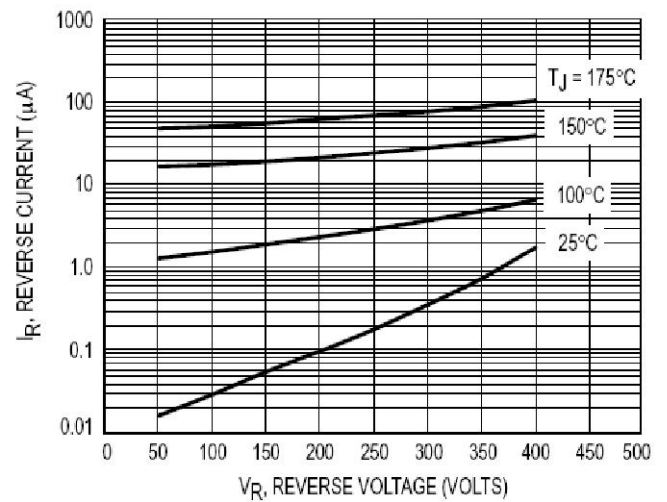


Figure 2. Typical Reverse Current

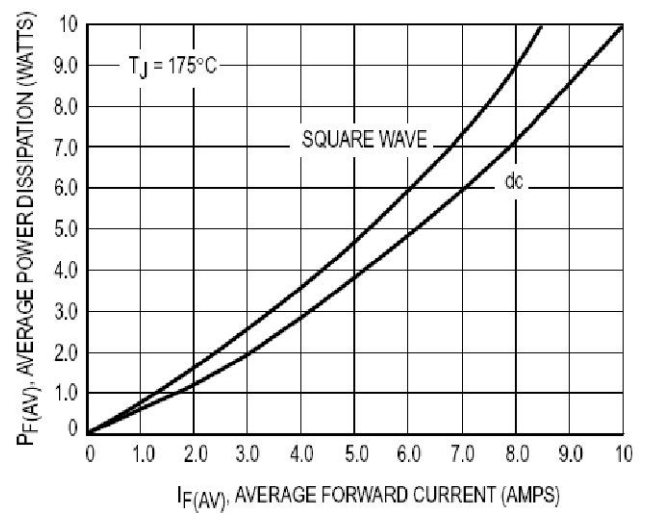


Figure 3. Current Derating, Case

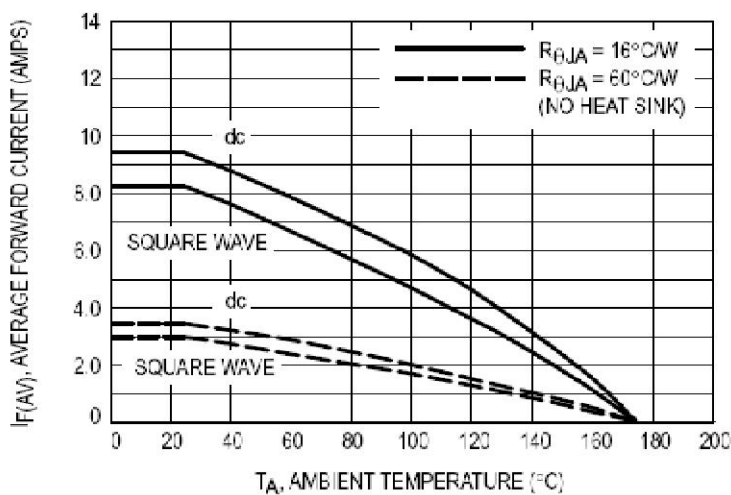


Figure 4. Current Derating, Ambient

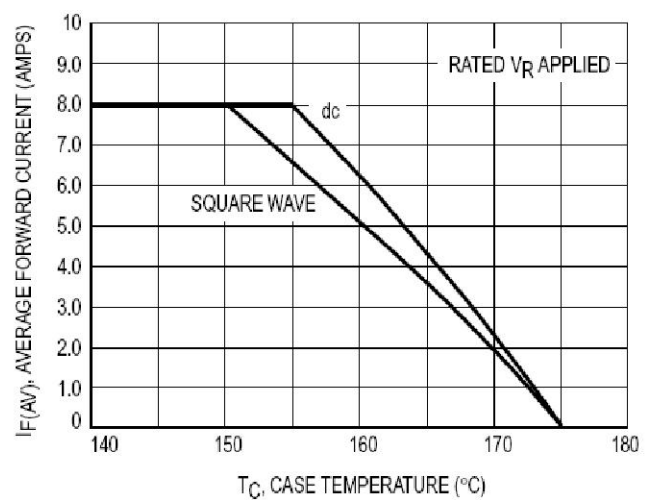
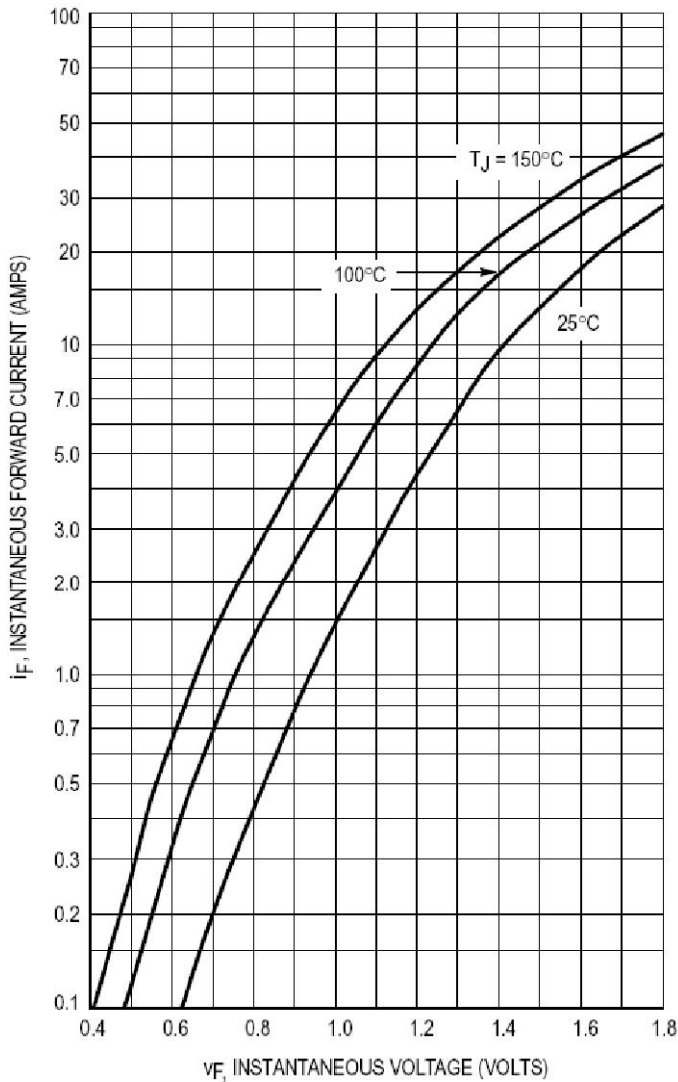
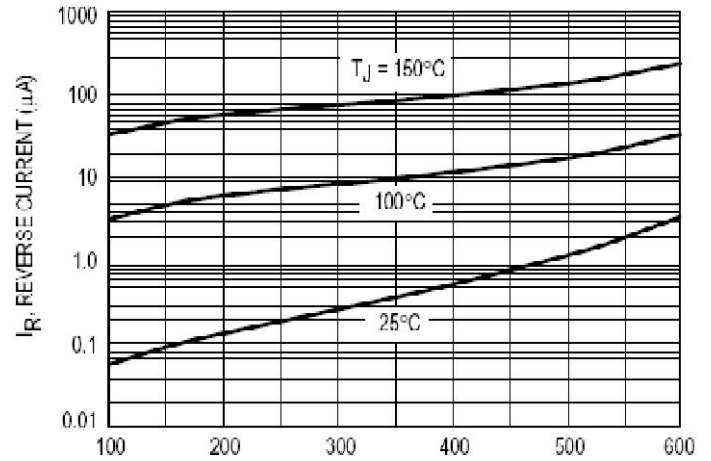
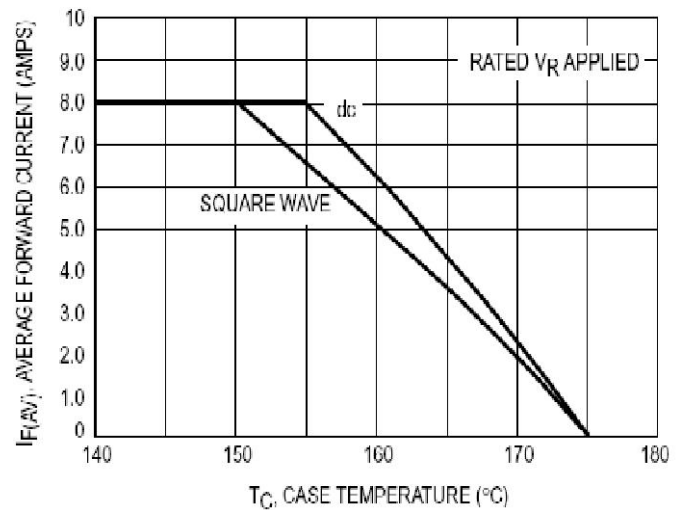
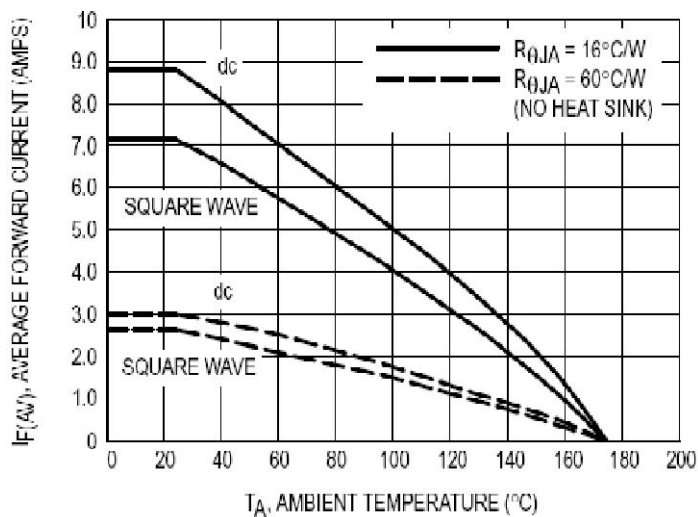
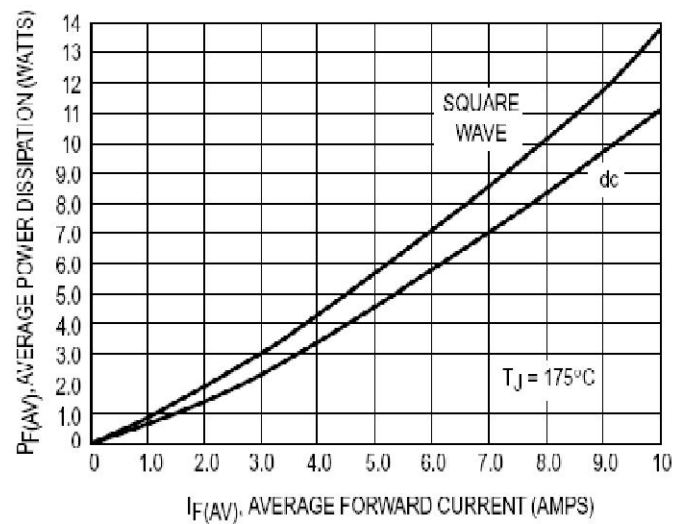
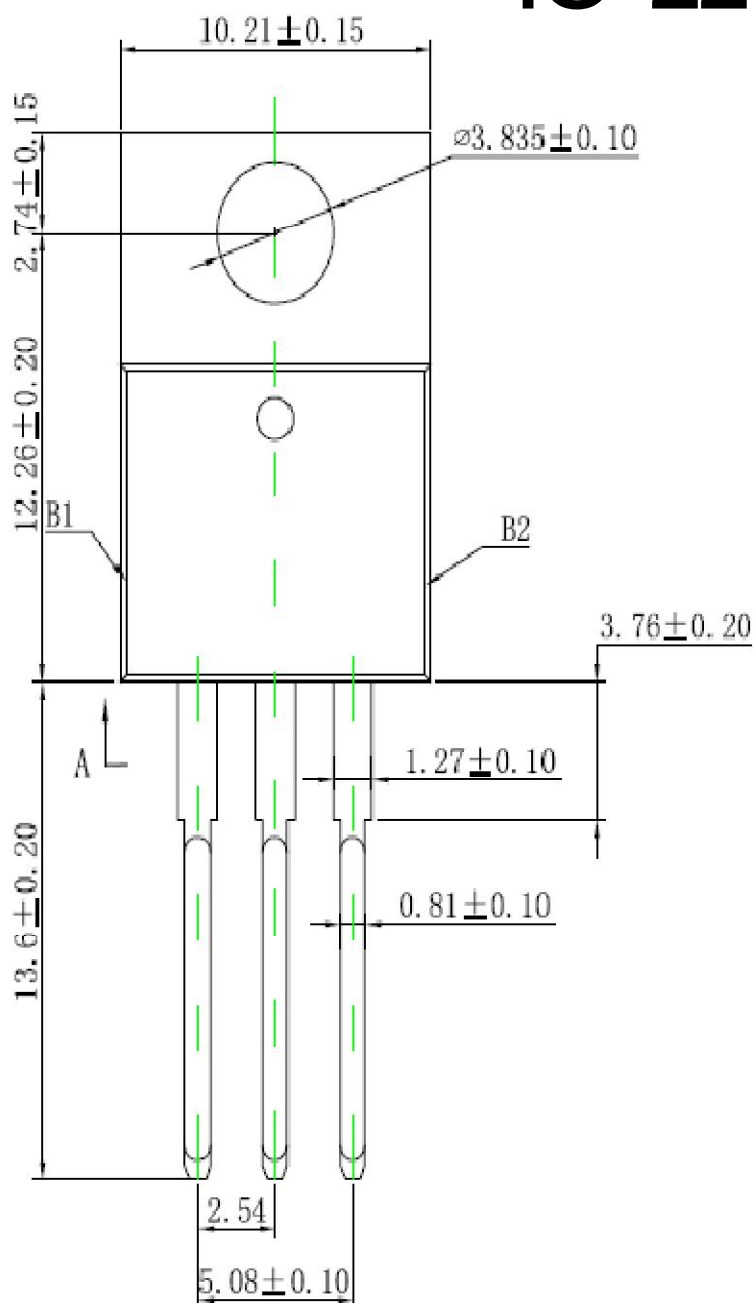


Figure 5. Power Dissipation


Figure 1. Typical Forward Voltage

Figure 2. Typical Reverse Current

Figure 3. Current Derating, Case

Figure 4. Current Derating, Ambient

Figure 5. Power Dissipation

TO-220AB



注意事项:

- 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。
- 包装及出货: ROHS, 30PCS/管, 0.6K/BOX, 1.8K (1.8K BOXEX) /CARTON, BOXEX及 CARTON。