



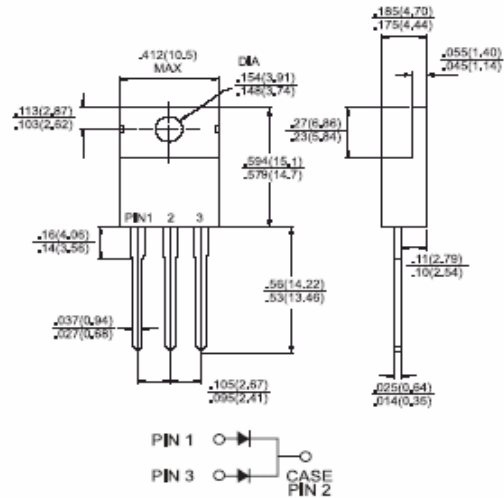
# FR1601G - FR1607G

## 16.0 AMPs. Glass Passivated Fast Recovery Rectifiers

### TO-220AB

### Features

- ◇ Glass passivated chip junction.
- ◇ High efficiency, Low VF
- ◇ High Current capability
- ◇ High reliability
- ◇ High Surge current capability
- ◇ Low power loss
- ◇ For use in low voltage , high frequency inverter, free wheeling and polarity protection application
- ◇ Green compound with suffix "G" on packing code & prefix "G" on datecode.



### Mechanical Data

- ◇ Cases: TO-220AB Molded plastic
- ◇ Epoxy: UL 94V-O rate flame retardant
- ◇ Terminal : Pure tin plated, lead free, solderable per MIL-STD-202, Method 208 guaranteed
- ◇ Polarity: As marked
- ◇ High temperature soldering guaranteed:  
260°C/10 seconds .16"(4.06mm) from case.
- ◇ Weight: 2.24 gram

### Dimensions in inches and (millimeters)



### Marking Diagram

- FR160XG = Specific Device Code
- G = Green Compound
- Y = Year
- WW = Work Week

### Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Type Number	Symbol	FR 1601G	FR 1602G	FR 1603G	FR 1604G	FR 1605G	FR 1606G	FR 1607G	Units
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified @Tc = 105°C	I(AV)	16.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method )	IFSM	150							A
Maximum Instantaneous Forward Voltage @ 8.0A	VF	1.3							V
Maximum DC Reverse Current @ TA=25°C at Rated DC Blocking Voltage @ TA=125°C	IR	5.0 100							uA
Typical Junction Capacitance (Note 1)	Cj	60							pF
Typical Reverse Recovery Time (Note 2)	TRR	150					250	500	nS
Typical Thermal Resistance (Note 3)	RθJC	3.0							°C/W
Operating Temperature Range	TJ	-65 to +150							°C
Storage Temperature Range	TSTG	-65 to +150							°C

Note 1. Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C.

2. Reverse rRecovery Time Condition : IF=0.5A, IR=1.0A, IRR=0.25A

3. Mount on P.C. Board with 2"x3"x0.25" Al plate

