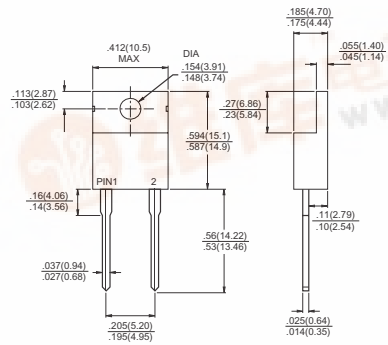


	FRA1601G THRU FRA1607G 16.0 AMPS. Glass Passivated Fast Recovery Rectifiers								
	Voltage Range 50 to 1000 Volts Current 16.0 Amperes								
Features ◇ Low forward voltage drop ◇ High current capability ◇ High reliability ◇ High surge current capability	TO-220A  PIN 1  CASE PIN 2  CASE Case Positive Dimensions in inches and (millimeters)								
Mechanical Data ◇ Cases: Molded plastic ◇ Epoxy: UL 94V-0 rate flame retardant ◇ Terminals: Leads solderable per MIL-STD-202, Method 208 guaranteed ◇ Polarity: As marked ◇ High temperature soldering guaranteed: 260℃/10 seconds .16", (4.06mm) from case. ◇ Mounting position: Any ◇ Weight: 2.24 grams									
Maximum Ratings and Electrical Characteristics Rating at 25℃ 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	FRA 1601G	FRA 1602G	FRA 1603G	FRA 1604G	FRA 1605G	FRA 1606G	FRA 1607G	Units
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current See Fig. 2	I _(AV)	16.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	250							A
Maximum Instantaneous Forward Voltage @ 16.0A	V _F	1.3							V
Maximum DC Reverse Current @ T _c =25℃ at Rated DC Blocking Voltage @ T _c =125℃	I _R	5.0 100							uA uA
Maximum Reverse Recovery Time (Note 1)	T _{rr}	150				250	500		nS
Typical Thermal resistance (Note 2)	R _{θJC}	2.5							℃/W
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +150							℃

Notes: 1. Reverse Recovery Test Conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{RR}=0.25\text{A}$

2. Thermal Resistance from Junction to Case Per Leg Mounted on Heatsink size 2" x 3" x 0.25" Al-Plate

RATINGS AND CHARACTERISTIC CURVES (FRA1601G THRU FRA1607G)

FIG.1- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

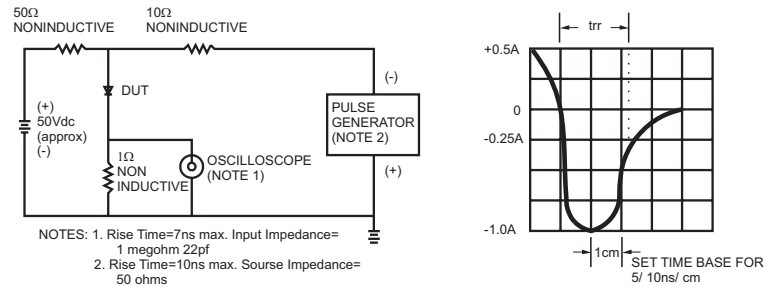


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

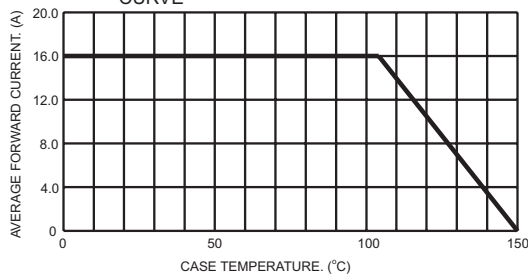


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

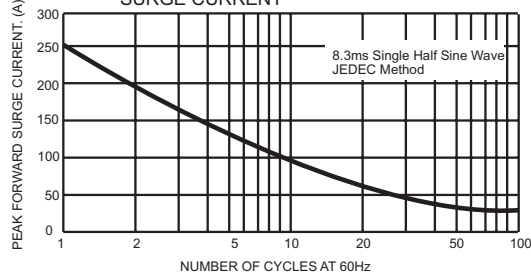


FIG.4- TYPICAL JUNCTION CAPACITANCE

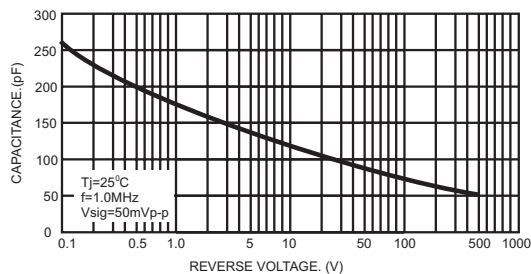


FIG.5- TYPICAL REVERSE CHARACTERISTICS

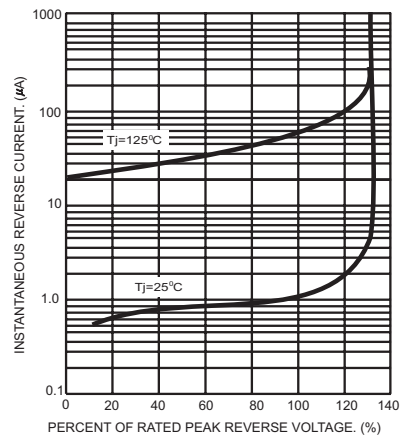


FIG.6- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

