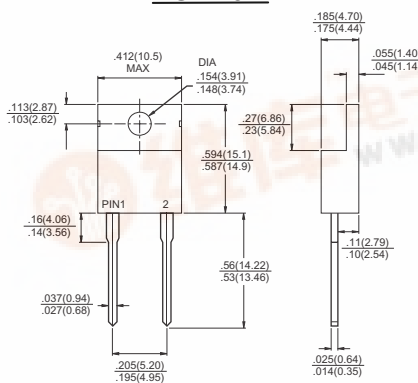


	SFA1601G THRU SFA1608G 16.0 AMPS. Glass Passivated Super Fast Rectifiers											
				Voltage Range 50 to 600 Volts Current 16.0 Amperes								
Features - Low forward voltage drop - High current capability - High reliability - High surge current capability				TO-220A  PIN 1   CASE Case Positive Dimensions in inches and (millimeters)								
Mechanical Data - Cases: Molded plastic - Epoxy: UL 94V-O rate flame retardant - Terminals: Leads 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 grams												
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	SFA 1601G	SFA 1602G	SFA 1603G	SFA 1604G	SFA 1605G	SFA 1606G	SFA 1607G	SFA 1608G	Units		
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	150	200	300	400	500	600	V		
Maximum RMS Voltage	V _{RMS}	35	70	105	140	210	280	350	420	V		
Maximum DC Blocking Voltage	V _{DC}	50	100	150	200	300	400	500	600	V		
Maximum Average Forward Rectified Current @ T _C = 100°C	I _(AV)	16.0									A	
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	200									A	
Maximum Instantaneous Forward Voltage @ 16.0A	V _F	0.975					1.3	1.7		V		
Maximum DC Reverse Current @ T _A =25°C at Rated DC Blocking Voltage @ T _A =100°C	I _R	10 400									uA uA	
Maximum Reverse Recovery Time (Note 1)	T _{rr}	35									nS	
Typical Junction Capacitance (Note 2)	C _j	130					100			pF		
Typical Thermal Resistance (Note 3)	Rθ _{JC}	1.0									°C/W	
Operating Temperature Range	T _J	-65 to +150									°C	
Storage Temperature Range	T _{STG}	-65 to +150									°C	

Notes: 1. Reverse Recovery Test Conditions: $I_F=0.5A$, $I_R=1.0A$, $I_{RR}=0.25A$
 2. Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C.
 3. Mounted on Heatsink. Size of 3 in x 5 in x 0.25 in Al-Plate.

RATINGS AND CHARACTERISTIC CURVES (SFA1601G THRU SFA1608G)

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

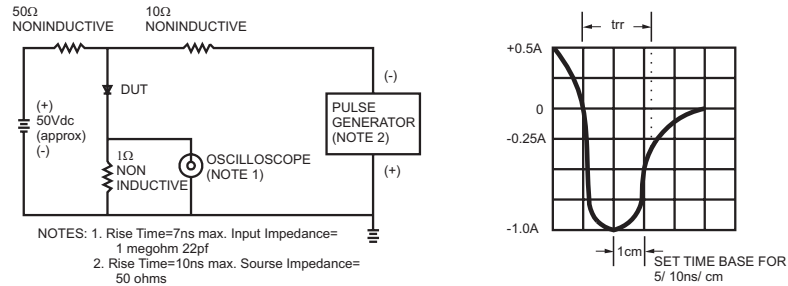


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

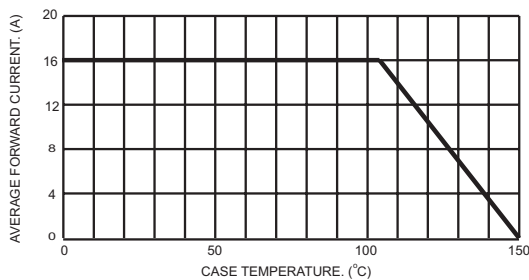


FIG.4- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

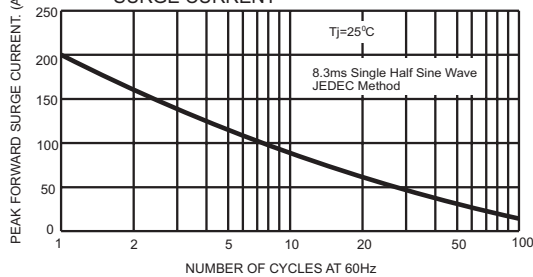


FIG.5- TYPICAL JUNCTION CAPACITANCE

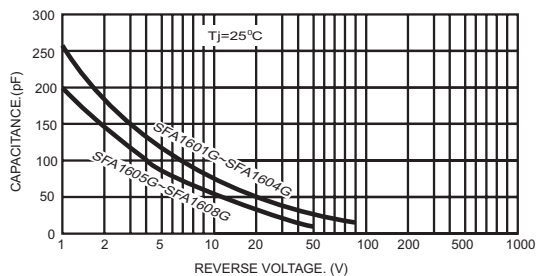


FIG.3- TYPICAL REVERSE CHARACTERISTICS

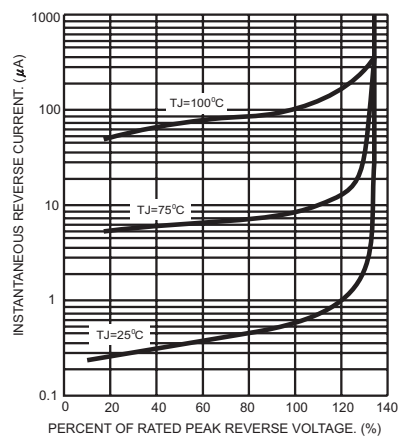


FIG.6- TYPICAL FORWARD CHARACTERISTICS

