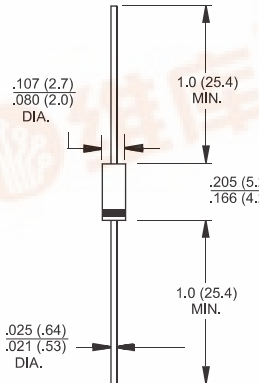
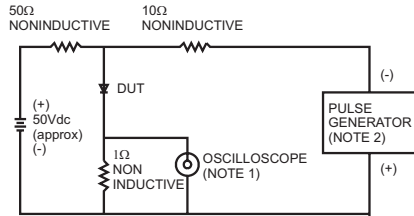


TSC 	SF11SG THRU SF18SG 1.0 AMP. Glass Passivated Super Fast Rectifiers									
	Voltage Range 50 to 600 Volts Current 1.0 Ampere									
Features - Low forward voltage drop - High current capability - High reliability - High surge current capability	A-405  Dimensions in inches and (millimeters)									
Mechanical Data - Case: Molded plastic - Epoxy: UL 94V-O rate flame retardant - Lead: Axial leads, solderable per MIL-STD-202, Method 208 guaranteed - Polarity: Color band denotes cathode end - High temperature soldering guaranteed: 260°C/10 seconds/.375", (9.5mm) lead lengths at 5 lbs., (2.3kg) tension - Mounting position: Any - Weight: 0.22 gram										
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	SF 11SG	SF 12SG	SF 13SG	SF 14SG	SF 15SG	SF 16SG	SF 17SG	SF 18SG	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 .375 (9.5mm) Lead Length @ T _A = 55°C	I _(AV)	1.0								A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	30								A
Maximum Instantaneous Forward Voltage @ 1.0A	V _F	0.95		1.3		1.7				V
Maximum DC Reverse Current @ T _A =25°C at Rated DC Blocking Voltage @ T _A =125°C	I _R	5.0		100						uA uA
Maximum Reverse Recovery Time (Note 1)	T _{rr}	35								nS
Typical Junction Capacitance (Note 2)	C _j	20		10						pF
Typical Thermal Resistance (Note 3)	Rθ _{JA}	95								°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. Mount on Cu-Pad Size 5mm x 5mm on PCB.

RATINGS AND CHARACTERISTIC CURVES (SF11SG THRU SF18SG)

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



NOTES: 1. Rise Time=7ns max. Input Impedance=1 megohm 22pf
2. Rise Time=10ns max. Source Impedance=50 ohms

FIG.2- MAXIMUM AVERAGE FORWARD CURRENT DERATING

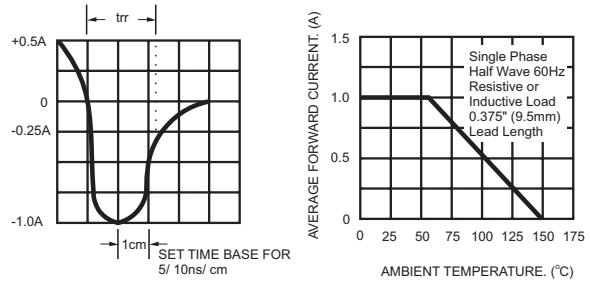


FIG.3- TYPICAL REVERSE CHARACTERISTICS

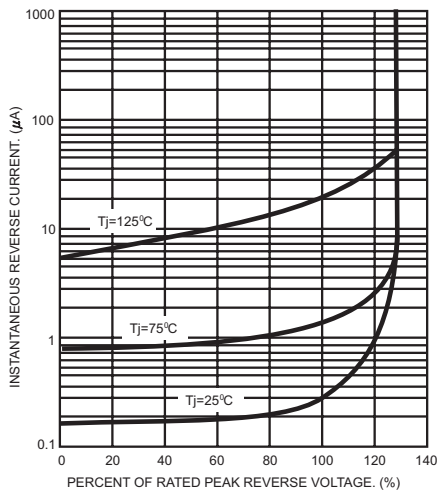


FIG.4- TYPICAL FORWARD CHARACTERISTICS

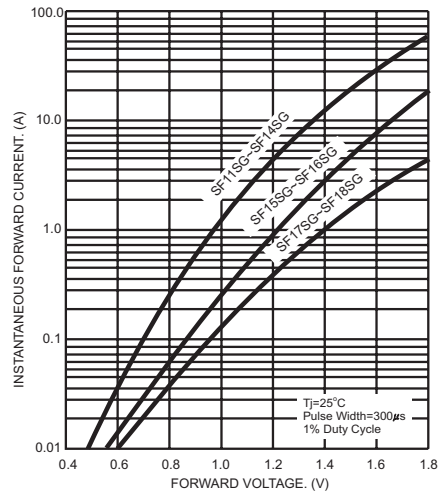


FIG.5- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

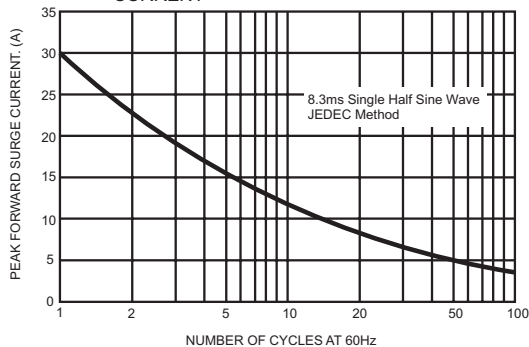


FIG.6- TYPICAL JUNCTION CAPACITANCE

