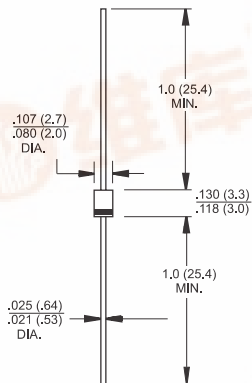
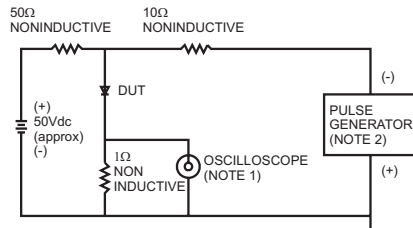


	SFT11 THRU SFT18 1.0 AMP. Super Fast Rectifiers										
					Voltage Range 50 to 600 Volts Current 1.0 Ampere						
Features ✧ Low forward voltage drop ✧ High current capability ✧ High reliability ✧ High surge current capability					TS-1  Dimensions in inches and (millimeters)						
Mechanical Data ✧ Cases: 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 ✧ Weight: 0.20 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	SFT 11	SFT 12	SFT 13	SFT 14	SFT 15	SFT 16	SFT 17	SFT 18	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 =100°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	30			15						pF
Typical Thermal Resistance (Note 3)	R θ _{JA}	100									°C/W
Operating Temperature Range	T _J	-65 to +125									°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 (SFT11 THRU SFT18)

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

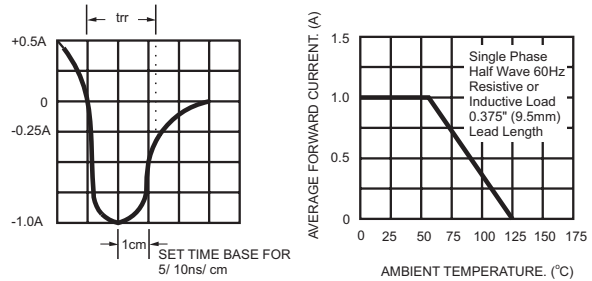


FIG.3- TYPICAL REVERSE CHARACTERISTICS

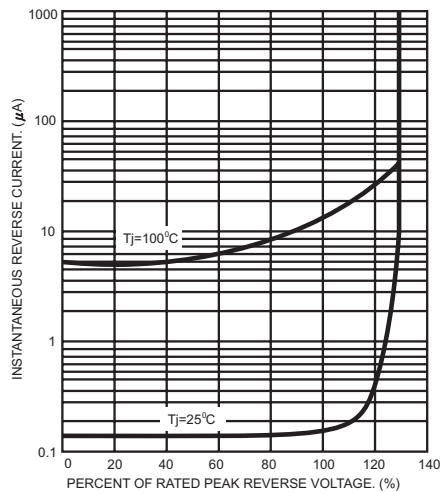


FIG.4- TYPICAL FORWARD CHARACTERISTICS

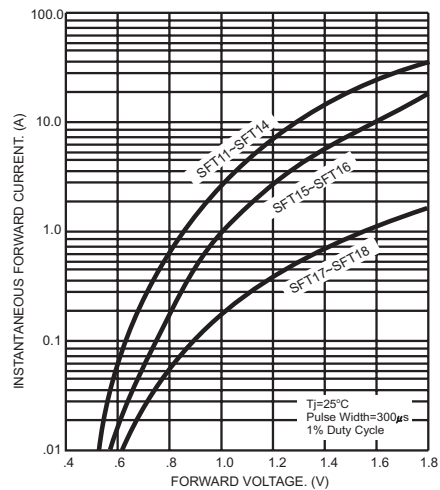


FIG.5- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

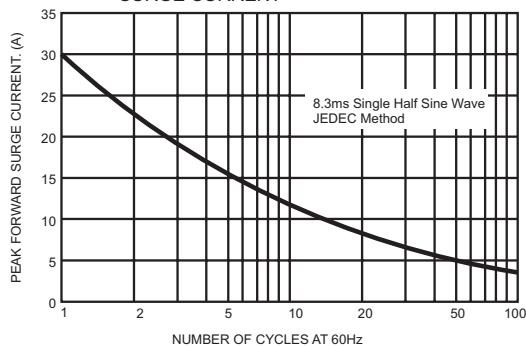


FIG.6- TYPICAL JUNCTION CAPACITANCE

