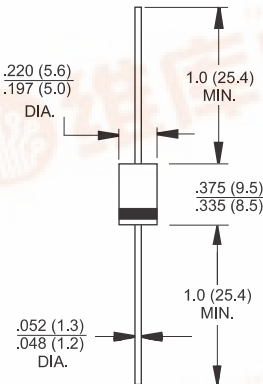


	SF41G THRU SF48G 4.0 AMPS. Glass Passivated Super Fast Rectifiers						
				Voltage Range 50 to 600 Volts Current 4.0 Amperes DO-201AD			
Features - Low forward voltage drop - High current capability - High reliability - High surge current capability Mechanical Data - Case: Molded plastic - Epoxy: UL 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: 1.2 grams				 Dimensions in inches and (millimeters)			
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	SF41G	SF42G	SF43G	SF44G	SF48G	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	150	200	600	V
Maximum RMS Voltage	V_{RMS}	35	70	105	140	420	V
Maximum DC Blocking Voltage	V_{DC}	50	100	150	200	600	V
Maximum Average Forward Rectified Current .375 (9.5mm) Lead Length @ $T_A = 55^{\circ}\text{C}$	$I_{(AV)}$	4.0					A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	150					A
Maximum Instantaneous Forward Voltage @ 4.0A	V_F	1.0				1.7	V
Maximum DC Reverse Current @ $T_A=25^{\circ}\text{C}$ at Rated DC Blocking Voltage @ $T_A=100^{\circ}\text{C}$	I_R	5.0 500					uA uA
Maximum Reverse Recovery Time (Note 1)	T_{rr}	35					nS
Typical Junction Capacitance (Note 2)	C_j	100				80	pF
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$	25					°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 16mm x 16mm on P.C.B.

RATINGS AND CHARACTERISTIC CURVES (SF41G THRU SF48G)

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

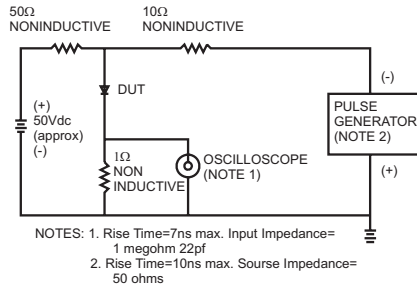


FIG.2- MAXIMUM AVERAGE FORWARD CURRENT DERATING

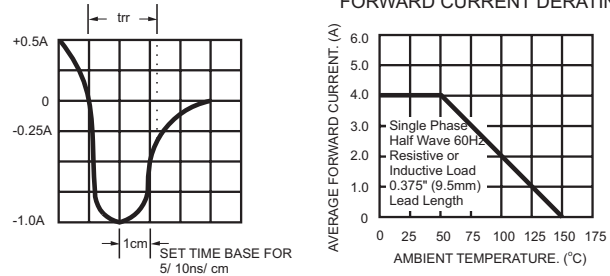


FIG.3- TYPICAL REVERSE CHARACTERISTICS

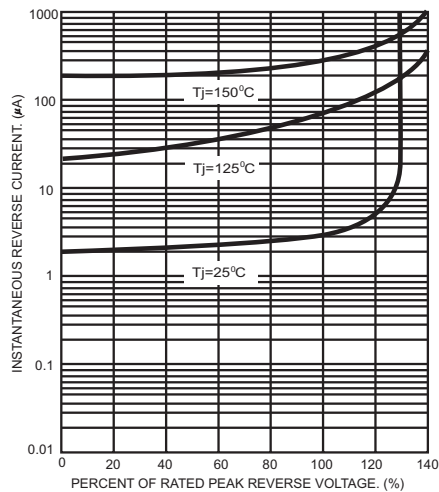


FIG.4- TYPICAL FORWARD CHARACTERISTICS

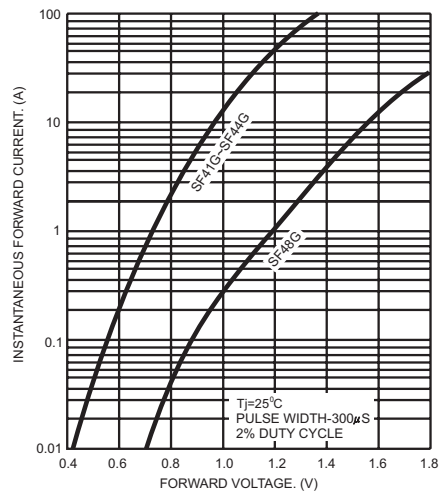


FIG.5- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

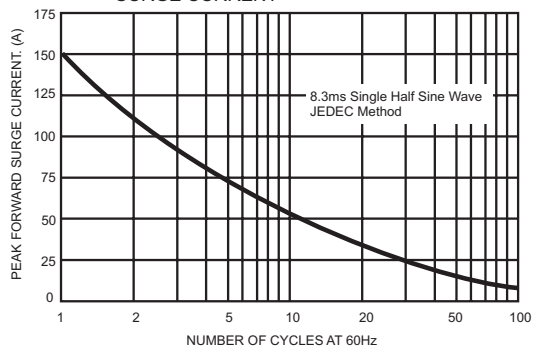


FIG.6- TYPICAL JUNCTION CAPACITANCE

