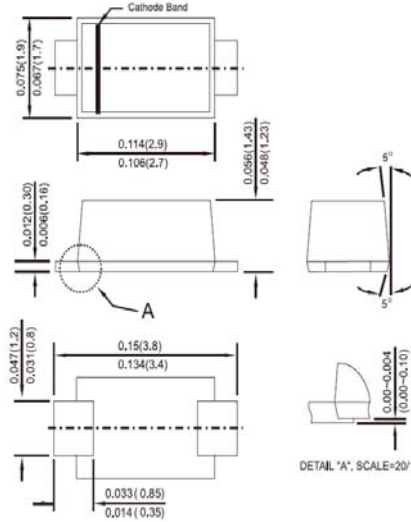




**Features**

- ✧ For surface mounted application
- ✧ Glass passivated junction chip
- ✧ High temperature metallurgically bonded construction
- ✧ Plastic material used carries Underwriters Laboratory Classification 94V-0
- ✧ Fast switching for high efficiency
- ✧ High temperature soldering: 260°C / 10 seconds at terminals
- ✧ Green compound with suffix "G" on packing code & prefix "G" on datecode



**Mechanical Data**

- ✧ Case: Sub SMA plastic case
- ✧ Terminals: Pure tin plated, Lead free
- ✧ Polarity: Indicated by cathode band
- ✧ Packing: 8mm / 12mm tape per EIA STD RS-481
- ✧ Weight: 0.0196 grams

**Dimensions in inches and (millimeters)**

**Marking Diagram**



- FXL = Specific Device Code
- G = Green Compound
- Y = Year
- M = Work Month

**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	RSF AL	RSF BL	RSF DL	RSF GL	RSF JL	RSF KL	RSF ML	Unit
Maximum Repetitive 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 .375 (9.5mm) Lead Length @ $T_L=55^\circ C$	$I_{F(AV)}$	0.5							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	10							A
Maximum Instantaneous Forward Voltage (Note 1) @ 0.5A	$V_F$	1.3							V
Maximum Reverse Current @ Rated VR $T_A=25^\circ C$ $T_A=125^\circ C$	$I_R$	5 50							uA
Maximum Reverse Recovery Time (Note 2)	$T_{rr}$	150			250		500		nS
Typical Junction Capacitance (Note 3)	$C_j$	4							pF
Typical Thermal Resistance	$R_{\theta JA}$ $R_{\theta JC}$	150 32							$^\circ C/W$
Operating Temperature Range	$T_J$	- 55 to + 150							$^\circ C$
Storage Temperature Range	$T_{STG}$	- 55 to + 150							$^\circ C$

Note 1: Pulse Test with PW=300 usec, 1% Duty Cycle  
 Note 2: Reverse Recovery Test Conditions:  $I_F=0.5A$ ,  $I_R=1.0A$ ,  $I_{RR}=0.25A$   
 Note 3: Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.

RATINGS AND CHARACTERISTIC CURVES (RSFAL THRU RSFML)

FIG.1 FORWARD CURRENT DERATING CURVE

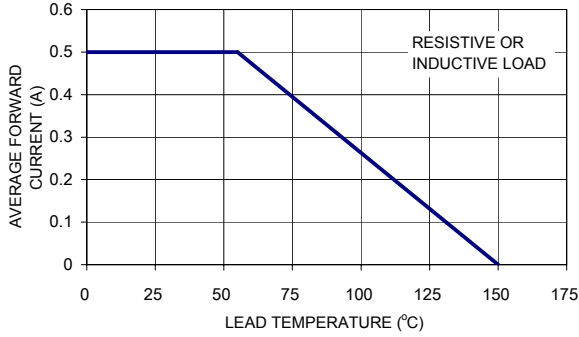


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

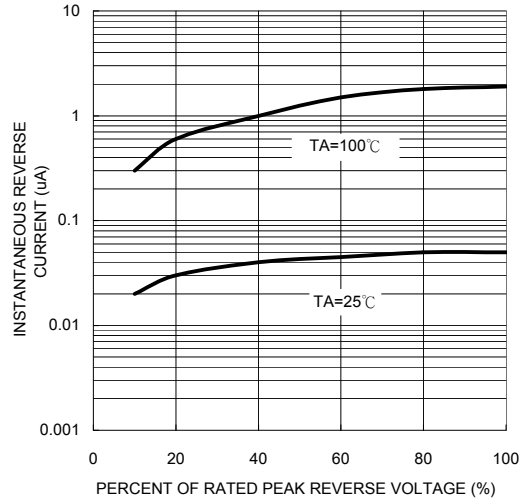


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

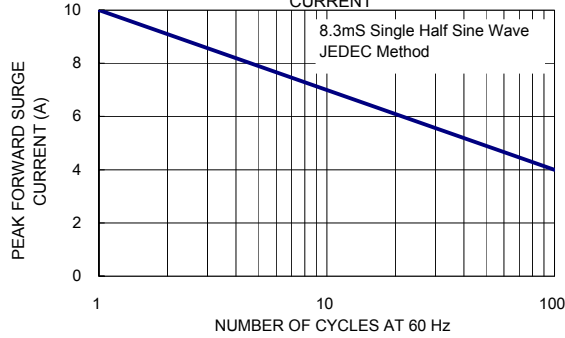


FIG. 5 TYPICAL FORWARD CHARACTERISTICS

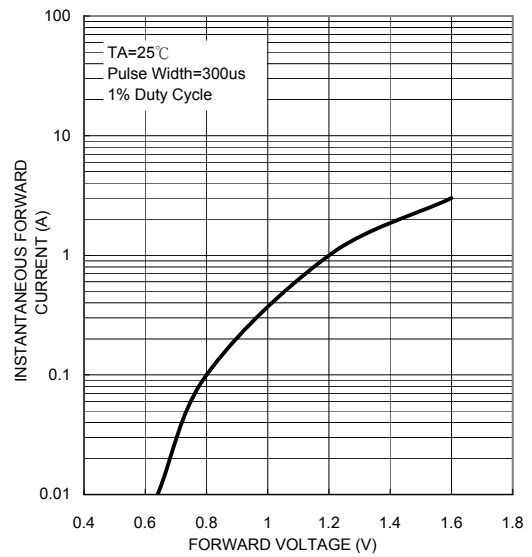


FIG. 4 TYPICAL JUNCTION CAPACITANCE

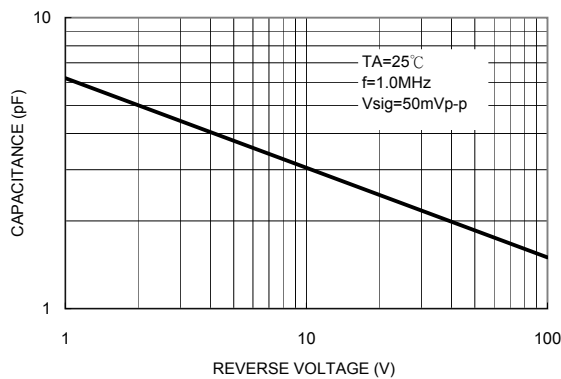


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

