# **RSFAL - RSFML**

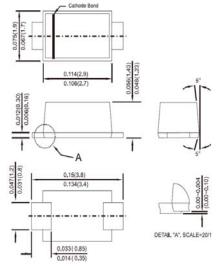


0.5AMP. Surface Mount Fast Recovery Rectifiers

#### Sub SMA

### 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



## Dimensions in inches and (millimeters)

#### Marking Diagram

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

### Mechanical Data

- $\diamond\quad \text{Case: Sub SMA plastic case}$
- $\diamond$   $\;$  Terminals: Pure tin plated, Lead free  $\;$
- ♦ Polarity: Indicated by cathode band
- ♦ Packing: 8mm / 12mm tape per EIA STD RS-481
- ♦ Weight: 0.0196 grams

# **Maximum Ratings and Electrical Characteristics**

Rating at 25  $^\circ\!{\rm C}$  ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.

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For capaci	tive load	derate c	urrent by	20%	

Type Number		RSF AL	RSF BL	RSF DL	RSF GL	RSF JL	RSF KL	RSF ML	Unit
Maximum Repetitive Peak Reverse Voltage		50	100	200	400	600	800	1000	V
Maximum RMS Voltage		35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage		50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current .375 (9.5mm) Lead Length @ $T_L$ =55°C					0.5				А
Peak Forward Surge Current, 8.3 ms Single Half Sine- wave Superimposed on Rated Load (JEDEC method)		10						А	
Maximum Instantaneous Forward Voltage (Note 1) @ 0.5A		1.3						V	
Maximum Reverse Current @ Rated VR $T_A$ =25 $^\circ$ C $T_A$ =125 $^\circ$ C		5 50						uA	
Maximum Reverse Recovery Time (Note 2)		150 250 500				00	nS		
Typical Junction Capacitance (Note 3)		4							pF
Typical Thermal Resistance		150 32						°C/W	
Operating Temperature Range		- 55 to + 150						°C	
Storage Temperature Range		- 55 to + 150						°C	

Note 1: Pulse Test with PW=300 usec, 1% Duty Cycle

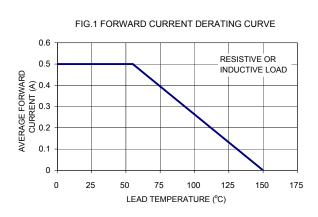
Note 2: Reverse Recovery Test Conditions:  $I_F$ =0.5A,  $I_R$ =1.0A,  $I_{RR}$ =0.25A

Note 3: Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.

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### RATINGS AND CHARACTERISTIC CURVES (RSFAL THRU RSFML)



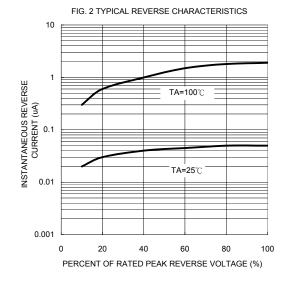


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT B CURRENT B CURRENT B CURRENT B CURENT B CURRENT B CURENT B CURRENT CURRENT CURRENT B COMPANY CURRENT CURR



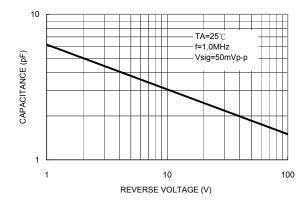


FIG. 5 TYPICAL FORWARD CHARACTERISRICS

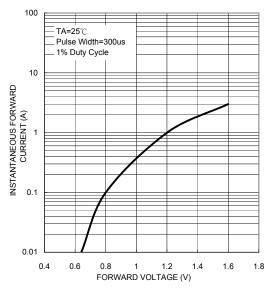
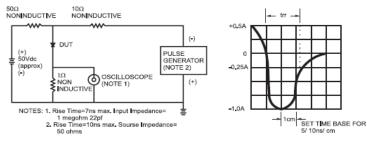


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



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