
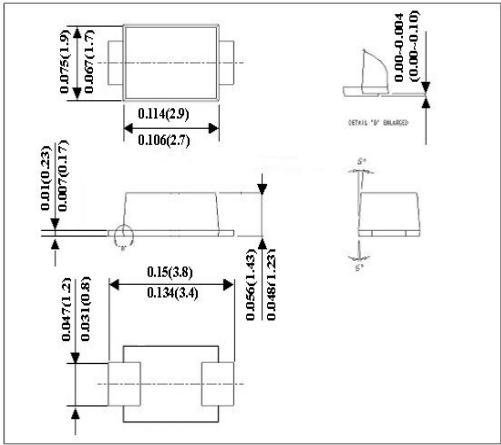
	<h2 style="margin:0;">RSFAL THRU RSFML</h2> <h3 style="margin:0;">0.5 AMP. Surface Mount Fast Switching Rectifiers</h3>
	<p>Voltage Range 50 to 1000 Volts Current 0.5 Ampere</p>
<p>Features</p> <ul style="list-style-type: none"> ✧ For surface mounted application ✧ Glass passivated junction chip ✧ High temperature metallurgically bonded construction ✧ Plastic material used carries Underwriters Laboratory Classification 94V-O ✧ Fast switching for high efficiency ✧ High temperature soldering: 260°C/ 10 seconds at terminals <p>Mechanical Data</p> <ul style="list-style-type: none"> ✧ Cases: Sub SMA plastic case ✧ Terminals: Solder plated ✧ Polarity: Indicated by cathode band ✧ Packing: 12mm tape per E1A STD RS-481 ✧ Weight: 15mg 	<p style="text-align: center;">Sub SMA</p>  <p style="text-align: center;">Dimensions in inches and (millimeters)</p>

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	Units
Maximum Recurrent 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
Marking Code (Note 4)		FALYM	FBLYM	FDLYM	FGLYM	FJLYM	FKLYM	FMLYM	
Maximum Average Forward Rectified Current See Fig. 1 @ $T_L=55^\circ\text{C}$	$I_{(AV)}$	0.5							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	10							A
Max. Full Load Reverse Current, Full cycle Average $T_A=55^\circ\text{C}$	I_R	30							μA
Maximum Instantaneous Forward Voltage @ 0.5A	V_F	1.3							V
Maximum DC Reverse Current @ $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A=125^\circ\text{C}$	I_R	5 50							μA μA
Maximum Reverse Recovery Time (Note 1)	T_{rr}	150			250	500			nS
Typical Junction Capacitance (Note 2)	C_j	4.0							pF
Typical Thermal Resistance (Note 3)	$R \theta_{JA}$ $R \theta_{JL}$	150 32							$^\circ\text{C}/\text{W}$ $^\circ\text{C}/\text{W}$
Operating Temperature Range	T_J	-55 to +150							$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150							$^\circ\text{C}$

Notes: 1. Reverse Recovery Test Conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{RR}=0.25\text{A}$
 2. Measured at 1 MHz and Applied $V_R=4.0$ Volts
 3. Measured on P.C.Board with 0.2" x 0.2" (5mm x 5mm) Copper Pad Areas.
 4. FALYM: F=0.5A, A=50V, L-Low Profile, Y-Year Code, M-Month Code.



RATINGS AND CHARACTERISTIC CURVES (RSFAL THRU RSFML)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

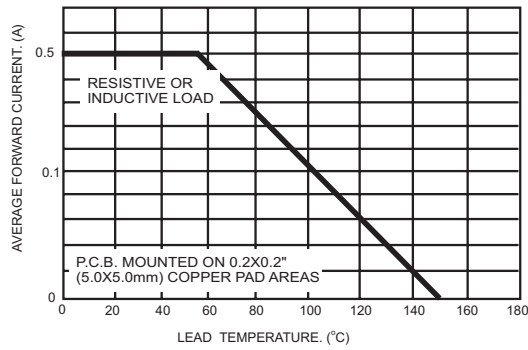


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

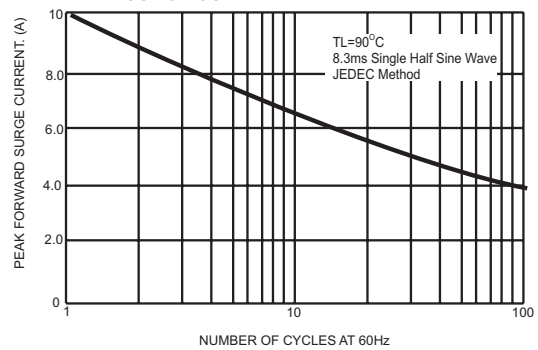


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

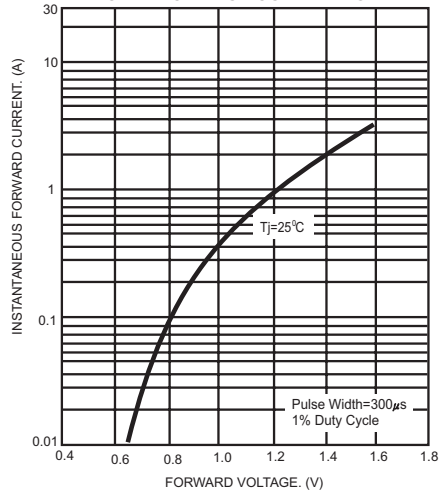


FIG.4- TYPICAL REVERSE CHARACTERISTICS

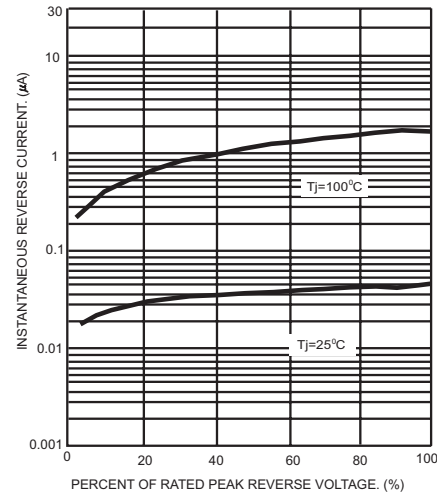


FIG.5- TYPICAL JUNCTION CAPACITANCE

