



SPEC NO .: SFS-107M

# **SPECIFICATION**

TO:STE Model Name: SAW FILTER **PART NO: SSF480W01TO39** CUSTOMER PART NO.:

Approval sheet:		
	Yes	
Approved	No.	
Customer's comments are welcomed here.		
Pls return this copy as a certificate of your approval by email.		
Approved By Date:		

## STRONG ELECTRONICS&TECHNOLOGY LIMITED

Tel:86-755-84528985 Fax: 86-755-84528986 Email:info@strongelectronics.net www.sawfilter.cn

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www.sawfilter.cn

# History Record

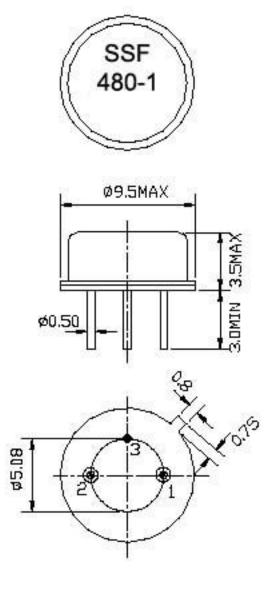
Date	Part No.	SPEC No.	Description.	Remarks.
	ISO9001:2000	Approved by	Check by	Design by
RoHS Compliant Lead free Lead-free soldering	ISO14001:2004	June-2-2003	June-2-2002	May-31-2001
Reversions	Total Page	Xu gang dong	Liu jun	Wang hon

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## 1. Package Dimension

(TO-39B)

Unit: mm



NO.	Function			
1	Input/Output			
2	Input/Output			
3	GND			

### 2. Marking

SSF 480-1

- 1. Black Ink Marking
- 2. SSF: Manufacture's log
- 3. 480MHz: Center frequency
- 4. W01: Series code

### 3. Performance

#### 3.1 Maximum Rating

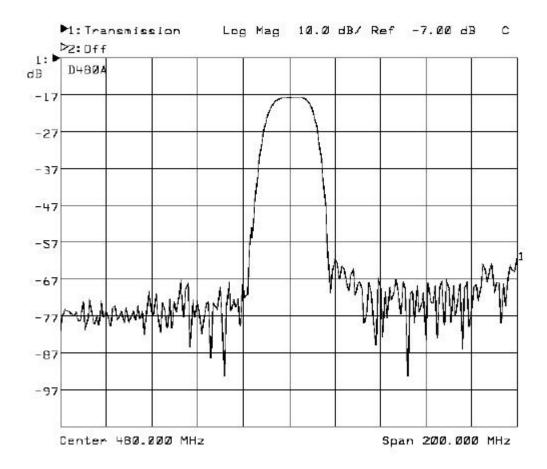
5	
Item	Value
Operation Temperature Range	-40℃ to +80℃
Storage Temperature Range	-40℃ to +85℃
DC Voltage	0V (between any terminals)
AC Voltage	5V (between any terminals)

#### **3.2 Electronic Characteristics**

Item		Units	Minimum	Typical	Maximum
Center frequency	fc	MHz	479.0	480.0	481.0
Insertion attenuation	480.0MHz	dB		19.5	21.0
Pass Band Width		MHz	16.60	17.60	18.60
Relative attention	471.0MHz	dB		3.4	5.4
	489.0MHz	dB	227	3.0	5.4
Lower sidelobe	430.0~461.0MHz	dB	38.0	50.0	
Upper sidelobe 4	199.0~530.0MHz	dB	38.0	45.0	
Reflected wave signal suppression		dB	40.0	46.0	849 N
0.13us~2.0us after main	pulse				
Amplitude ripple 4	76.0~484.0MHz	dB		0.3	0.6
Group Delay	480,0MHz	ns	55	281.0	
Group Delay Ripple 4	171.5~488.5MHz	ns		11.5	18.0
Impedance at 480.0MHz					
Input: Zin = Rin // Cin		$\Omega//pF$		70 // 3.7	
Output: Zout = Rout // Cout		$\Omega//pF$	553	280 // 2.5	
DC Resistance In	put: Rin	Ω		500	
O	utput: Rout	Ω		500	
Temperature coefficient	of frequency	ppm/k		-86	

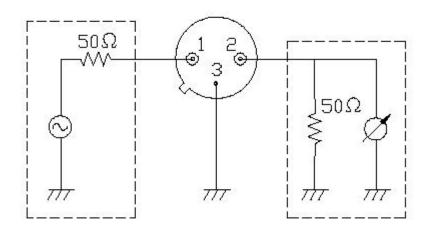
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#### **3.3 Frequency Characteristics**



#### 3.4

Test Circuit



#### 4. Reliability

4.1 Resistance to Soldering heat:

4.1.1 The components shall remain within the electrical specifications after it soldered on the 1mm-thickness PCB board and dipped in the solder at  $260^{\circ}C \pm 5^{\circ}C$  for  $10\pm 1$  seconds.

4.1.2 The components shall remain within the electrical specifications after it soldered by electric iron, solder at  $350^{\circ}C \pm 10^{\circ}C$  for 3~4 seconds, recovery time : 2h±0.5h.

#### 4.2 Thermal Shock:

The components shall remain within the electrical specifications after being kept at the condition of heat cycle conditions: TA=-40 $^{\circ}$ C ±3 $^{\circ}$ C, TB=85 $^{\circ}$ C ±2 $^{\circ}$ C, t1=t2=30min, switch time≤3min & cycle time : 100 times, recovery time : 2h±0.5h.

#### 4.3 The Temperature Storage:

4.3.1 High Temperature Storage: The components shall remain within the electrical specifications after being kept at the  $85^{\circ}C \pm 2^{\circ}C$  for 500 hours, recovery time :  $2h\pm 0.5h$ .

4.3.2 Low Temperature Storage: The components shall remain within the electrical specifications after being kept at the  $-40^{\circ}C \pm 3^{\circ}C$  for 500 hours, recovery time :  $2h\pm 0.5h$ .

#### 4.4 Humidity test:

The components shall remain within the electrical specifications after being kept at the condition of ambient temperature  $60^{\circ}C \pm 2^{\circ}C$ , and  $90 \sim 95\%$  RH for 500 hours.

#### 4.5 Drop test:

The components shall remain within the electrical specifications after random free drops 10 times from height of 1.0 meter onto concrete floor, and the specimens shall meet the electrical specifications in table 5, external visual inspection.

#### 4.6 Solderability test:

at the condition of temperature 245  $^\circ\!C$   $\pm$  5  $^\circ\!C$  Depth: DIP 2/3 , SMD 1/5, time: 3.0s-5.0s, 80% or more of the immersed surface shall be covered with solder and well-proportioned.

#### 4.7 Vibration Fatigue:

The components shall remain within the electrical specifications after loaded vibration at 10~55Hz, amplitude 1.5mm, X, Y, Z, direction, for 2 hours.

#### 4.8Terminal strength:

The force 10±1 seconds of 19.6N is applied to each terminal, and 45° in the same direction 2 times with 2N bending force (Exception: SMD)

#### 4.9 Mechanical Shock:

The components shall remain within the electrical specifications after 1000 shocks, acceleration  $392 \text{ m/s}^2$ , duration 6ms.

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Note: As a result of the particularity of inner structure of SAW products, it easy to be breakdown by electrostatic, so we should pay attention to ESD protect in the test.

#### 5. Remarks

5.1 Static voltage

Static voltage between signal load & ground may cause deterioration & destruction of the component. Please avoid static voltage.

#### 5.2 Ultrasonic cleaning

Ultrasonic vibration may cause deterioration & destruction of the component. Please avoid ultrasonic cleaning.

#### 5.3 Soldering

Only leads of component may be soldered. Please avoid soldering another part of component.



单击下面可查看定价,库存,交付和生命周期等信息

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