SPEC NO.: SFS-106M

SPECIFICATION

TO:STE860
Model Name: SAW FILTER
PART NO: SSF480W03TO39
CUSTOMER PART NO.:

STRONG ELECTRONICS&TECHNOLOGY LIMITED

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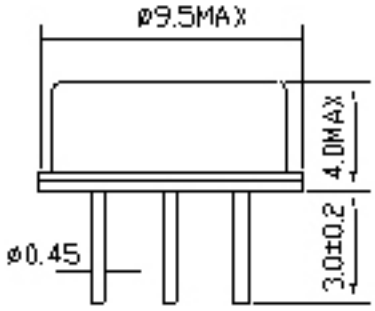
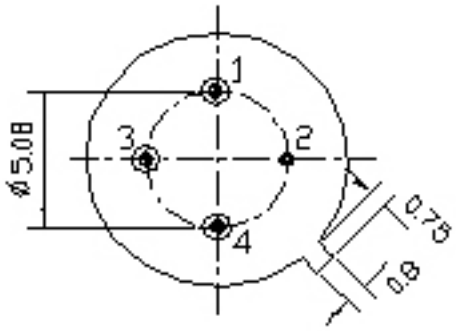
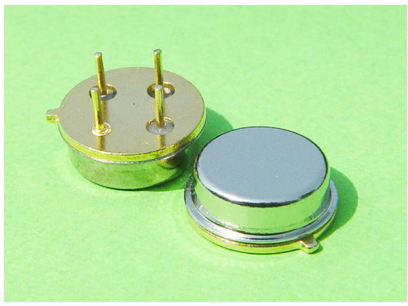
1. Package Dimension

(TO-39/4) Unit: mm







Pin No.	Function
Pin 1	Input CH1
Pin 2	Ground
Pin 3	Input CH2
Pin 4	Output

2. Marking

SSF480W03

1. Black Ink Marking
2. SSF: Manufacture's log
3. 480MHz: Center frequency
4. W03: Series code

3. Performance

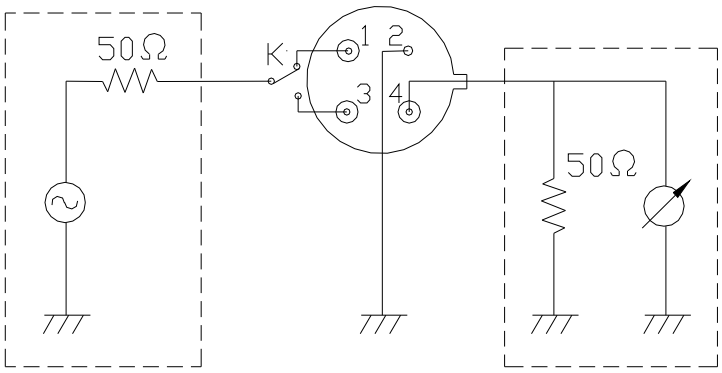
3.1 Maximum Rating

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

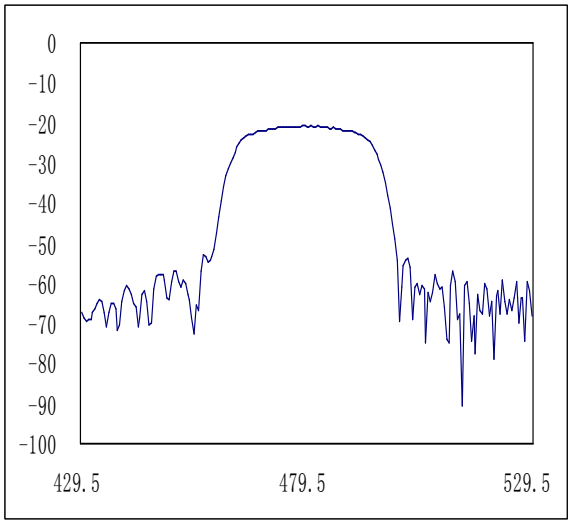
Item	Specification	
	CH1	CH2
Center Frequency of 3dB Band Width (fo) (MHz)	479.5±1.5 MHz	479.5±1.5 MHz
Insertion Loss at 479.5 MHz	23 dB standard	23 dB standard
3dB Pass Band Width	27.0 MHz	18.0 MHz
Spurious Response (0 to 750 MHz)	35 dB min.	35 dB min.
Frequency Stability (-20℃ to +80℃)	-94ppm/℃ max.	-94ppm/℃ max.
Insulating Resistance (DC 10V)	1 MΩ min.	1 MΩ min.

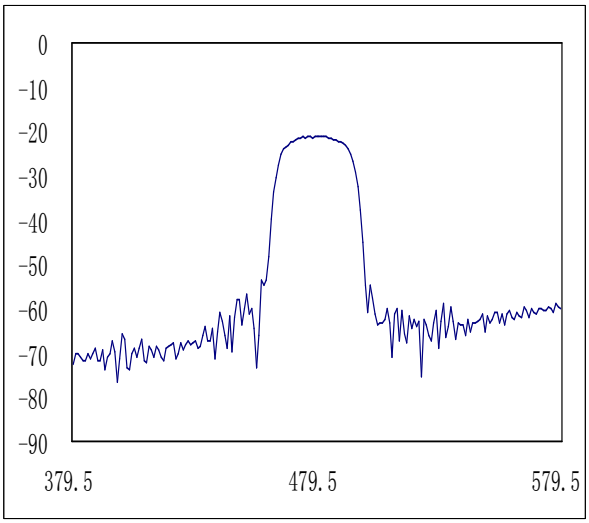
3.3 Test Circuit



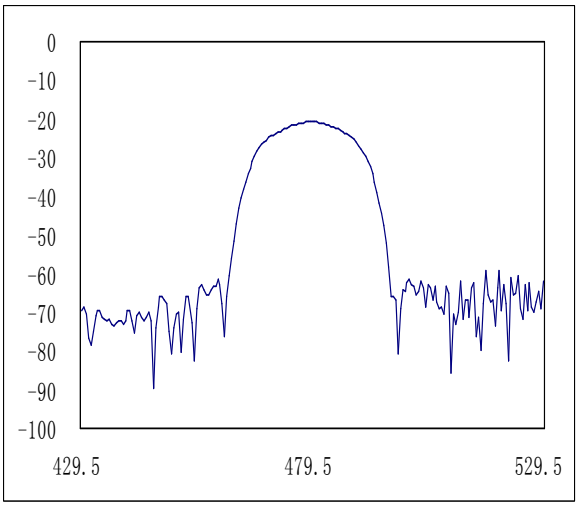
3.4 Frequency Characteristics

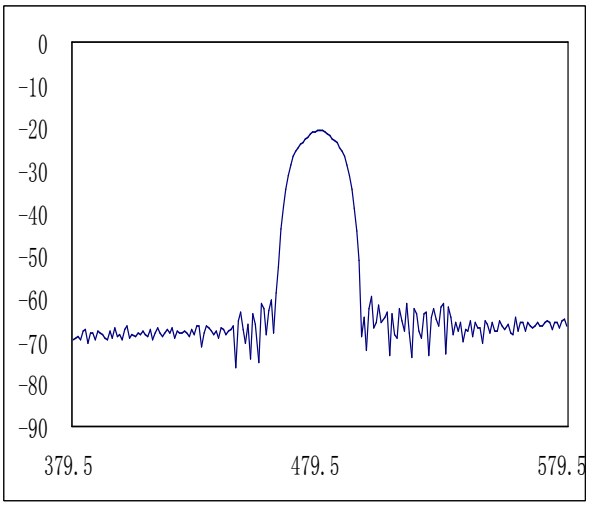
Channel 1





Channel 2





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□±5□ for 10±1 seconds.

4.1.2 The components shall remain within the electrical specifications after it soldered by electric iron, solder at 350□±10□ 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□±3□, TB=85□±2□, 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□±2□for 500 hours, recovery time : 2h±0.5h.

4.3.2 Low Temperature Storage: The components shall remain within the electrical specifications after being kept at the –40□±3□for 500 hours, recovery time : 2h±0.5h.

4.4 Humidity test:

The components shall remain within the electrical specifications after being kept at the condition of ambient temperature 60□±2□, and 90~95% 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℃±5℃ 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 m/s^2 , duration 6ms.

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.