



1.SCOPE:

**This specification shall cover the characteristics of SAW filter with Strong’s P/N: SG8127M**

2. SYSTEM: B/G

3. APPLICATION: TV IF FILTER

4. ELECTRICAL CHARACTERISTICS

4-1 Insertion Loss: Standards±2 dB

4-2 Attenuation ( ref. : 37.4 MHz):

fp-8	30.90 MHz	-42.0 dB Max.
fp-7	31.90 MHz	-42.0 dB Max.
fp-5.5	33.40 MHz	-19.0±2.0 dB
fp-4.43	34.47 MHz	-3.8±1.5 dB
fp	38.90 MHz	-6.0±1.2 dB
fp+1.5	40.40 MHz	-42.0 dB Max.
fp+2.5	41.40 MHz	-37.0 dB Max.

4-3 Amplitude ripple within passband: 0.5 dB Max.

4-4 Outband Rejection:

25.00 to 30.90 MHz	-35.0 dB Max.
40.40 to 45.00 MHz	-33.0 dB Max.

4-5 Temperature Coefficient Of Center Frequency: -75 ppm/°C Max.

4-6 Maximum DC Voltage: 10V DC.

4-7 Operating Temperature Range: -10°C to +70°C

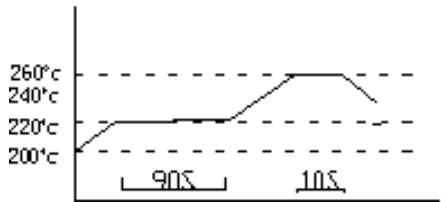
4-8 Storage Temperature Range: -20°C to +80°C

5. RELIABILITY TEST

5.1 Humidity, temperature Test

ITEM	REQUIREMENT	JUDGEMENT
High temperature storage	T=+85±2°C Duration time 500H Being placed in natural condition for 2±.5hours	1.No visible damage clear marker 2. Other electric characteristics should be fit for the provided characteristics in the form 3.4 after testing
Low temperature storage	T= -40±3°C Duration time 500H Being placed in nature condition for 2±5hours	
High-low temperature cycle	It shall be placed at temperature of -40°C±3°C for 30 minutes, then within 3 minutes replaced at temperature of +85°C±2°C for 30 minutes, and vice versa. Totally cycle 100 times. It shall be placed in natural condition for 2±0.5 hours.	
Humidity resistance test	T=60°C±2°C, RH=90~95% Duration time 500H. Being placed in natural condition for 2±0.5 hours	

5.2 Solder-heat Resistance Test

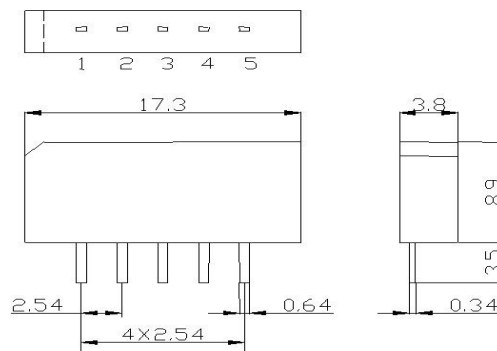
ITEM	REQUIREMENT	JUDGEMENT
Solder-heat Resistance	(1) Soldering trough: The 1mm thick PCB fixed with device are immersed in solder trough of $260\pm 5^{\circ}\text{C}$ for $10\pm 1$ seconds. And then it shall be measured after being placed in natural condition for $2\pm 0.5$ hours. (2) Manual soldering with electrical soldering iron: $T=350\pm 10^{\circ}\text{C}$ for 3-4 seconds. And then it shall be measured after being placed in natural condition for $2\pm 0.5$ hours	Same as judgement of 6.1
solderability	Lead terminals are immersed in solder bath of $245\pm 5^{\circ}\text{C}$ for 3-5 seconds.	The solder shall cover at least 80% of the lead terminal
reflow soldering	Repeated 3 times after being on PCB under following condition: 	Same as judgement of 6.1

6. PACKAGE DIMENSION

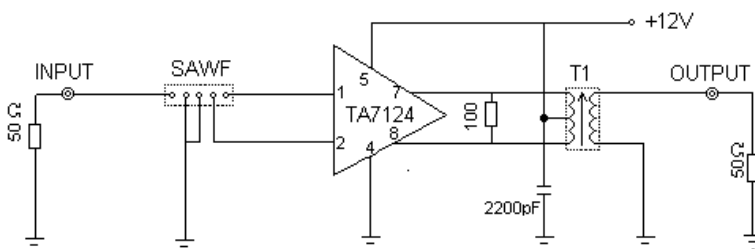
M:SIP5K

unit:mm

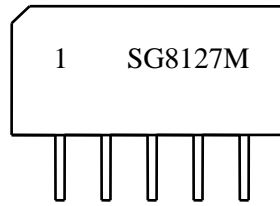
- 1. INPUT
- 2. INPUT
- 3. GROUND
- 4. OUTPUT
- 5. OUTPUT



7. MEASUREMENT CIRCUIT



8.MARKING



SG8127M  
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MODEL  
PIN NO.1 MARK

9.FREQUENCY RESPONSE

