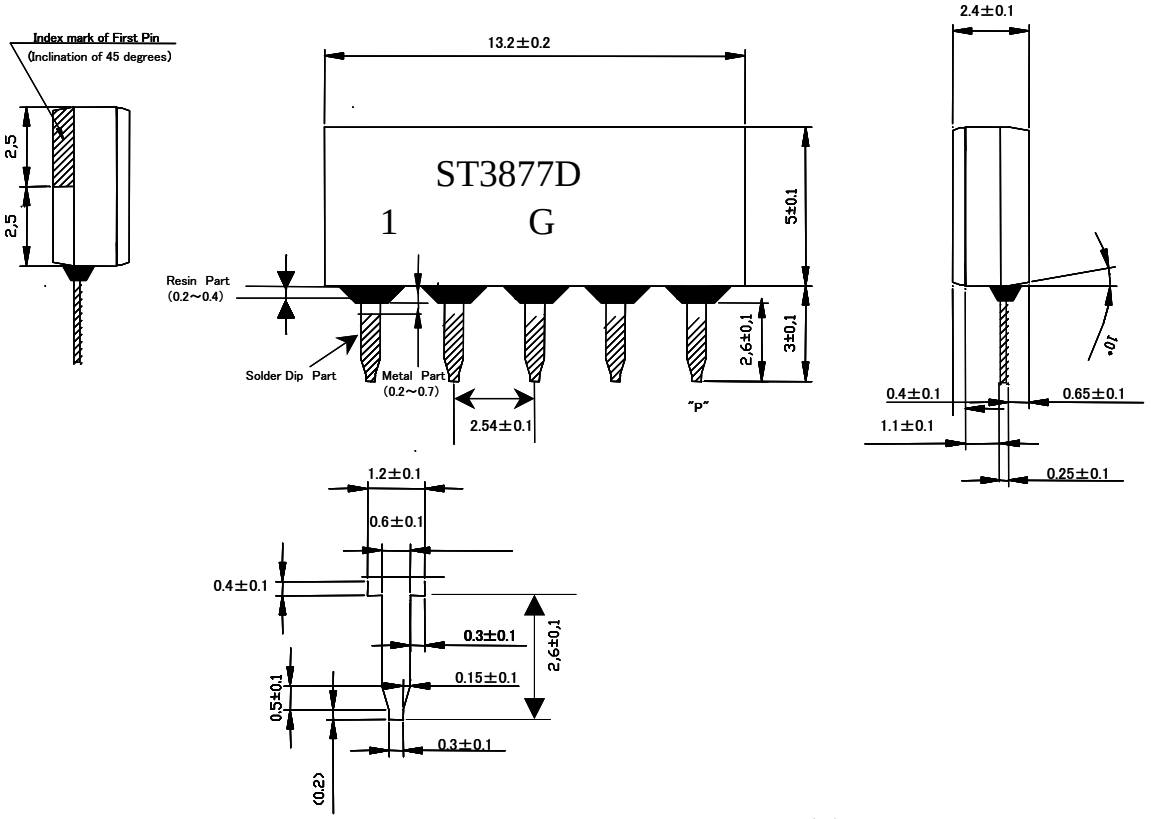
SCOPE:
This specification shall cover the characteristics of SAW filter with Strong's P/N: ST3877D

1.Package Dimension
(SIP5D)

Unit: mm



Pin No.	Functions	引脚功能
1.	Input	信号输入
2.	Ground	接地
3.	Sound output	伴音信号输出
4.	Video output	图像信号输出
5.	Video output	图像信号输出

2、Marking
标志

S	STRONG TRADE MARK
T3877D	. Model 型号
1	. Pin 1 脚位
G	.Green products

3. Performance

3.1 Use: SAW Filter For Quasi/Split Sound Applications

3.3 MAXIMUMRATINGS

DC voltage	V_{DC}	12	V	Between any terminals
AC voltage	V_{PP}	10	V	Between any terminals
Operating Temperature Range	T_A	-25~65	℃	
Storage Temperature Range	T_{stg}	-40~85	℃	

3.4 Electronic Characteristics

Reference temperature: Ta=25℃

Terminating source impedance Z_S=50Ω

Terminating load impedance Z_L=2kΩ//3 pF

3.4.1 Characteristics of Video channel

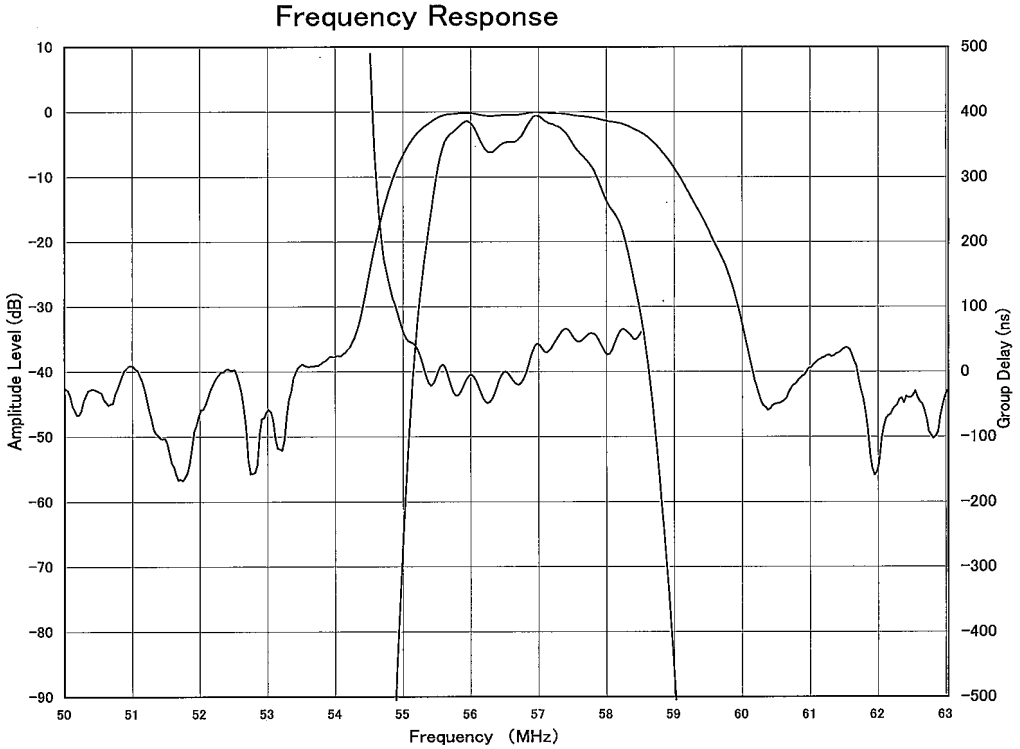
	MAX.	TYP.	MIN.	
Reference level for the Following data 57.08 MHz	-11.1	-13.1	-15.1	dB
52.83 MHz	-39.0	-49.0	-	dB
54.33 MHz	-24.0	-36.0	-	dB
54.75 MHz	-8.5	-11.5	-14.5	dB
55.25 MHz	-1.0	-2.2	-3.4	dB
55.75 MHz	1.1	-0.1	-1.3	dB
58.83 MHz	-5.1	-6.6	-8.1	dB
60.33MHz	-34.0	-45.0	-	dB
Ripple 55.25 … 58.83 MHz	0.8	-	-	dB
Lower side lobe 46.83-52.83 MHz	-35.0	-42.0	-	dB
Upper side lobe 60.33-66.33 MHz	-29.0	-35.0	-	dB
Group delay ripple 55.25 … 58.83MHz	100			ns
Impedance at 57.08 MHz Input Impedance Output Impedance	 -	 16.0 4.6	 -	 pF pF
Temperature Coefficient of frequency		-72.0		ppm/℃

3.4.2 Characteristics of Sound channel

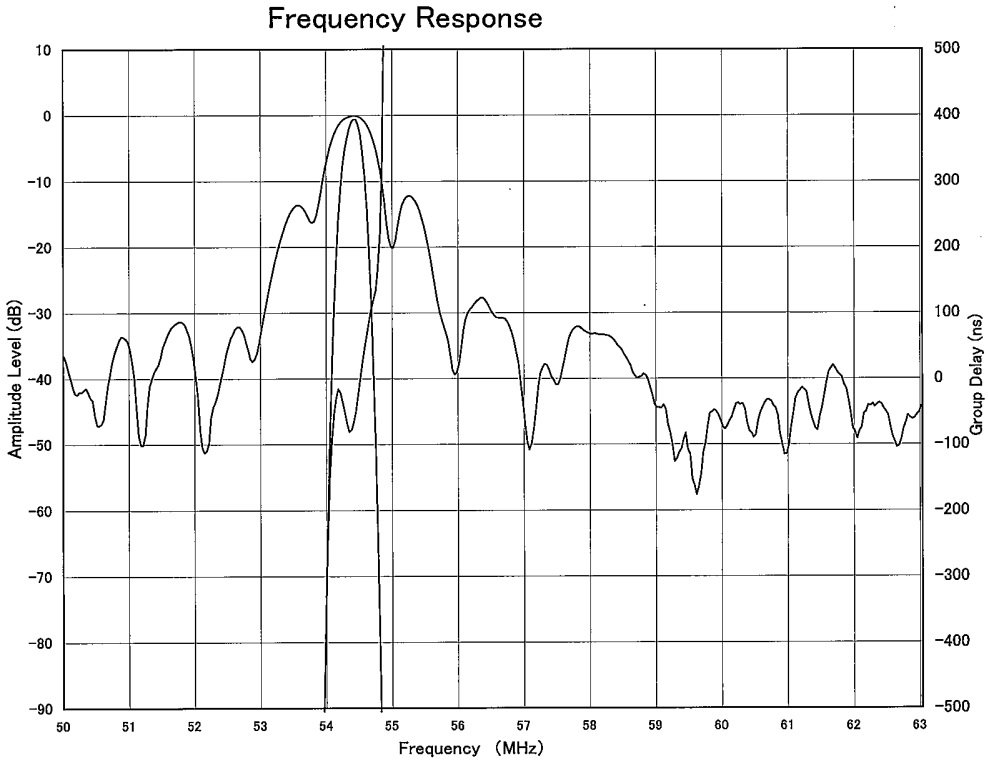
	MAX.	TYP.	MIN.	
Reference level for the Following data 54.33 MHz	-9.7	-11.7	-13.7	dB
52.83 MHz	-30.0	-48.0	-	dB
53.83 MHz	-7.0	-14.0		dB
54.83 MHz	-6.0	-11.0		dB
55.25 MHz	-9.0	-12.0	-	dB
58.83 MHz	-31.0	-39.0	-	dB
60.33 MHz	-35.0	-45.0	-	dB
Lower side lobe 39.83-52.83MHz	-26.0	-31.0	-	dB
Upper side lobe 60.33-75.08 MHz	-26.0	-36.0	-	dB
Impedance at 54.33 MHz Input Impedance Output Impedance	-	16.0 5.9	-	 pF pF
Temperature Coefficient of frequency		-72.0		ppm/℃

3.5 Frequency Characteristics

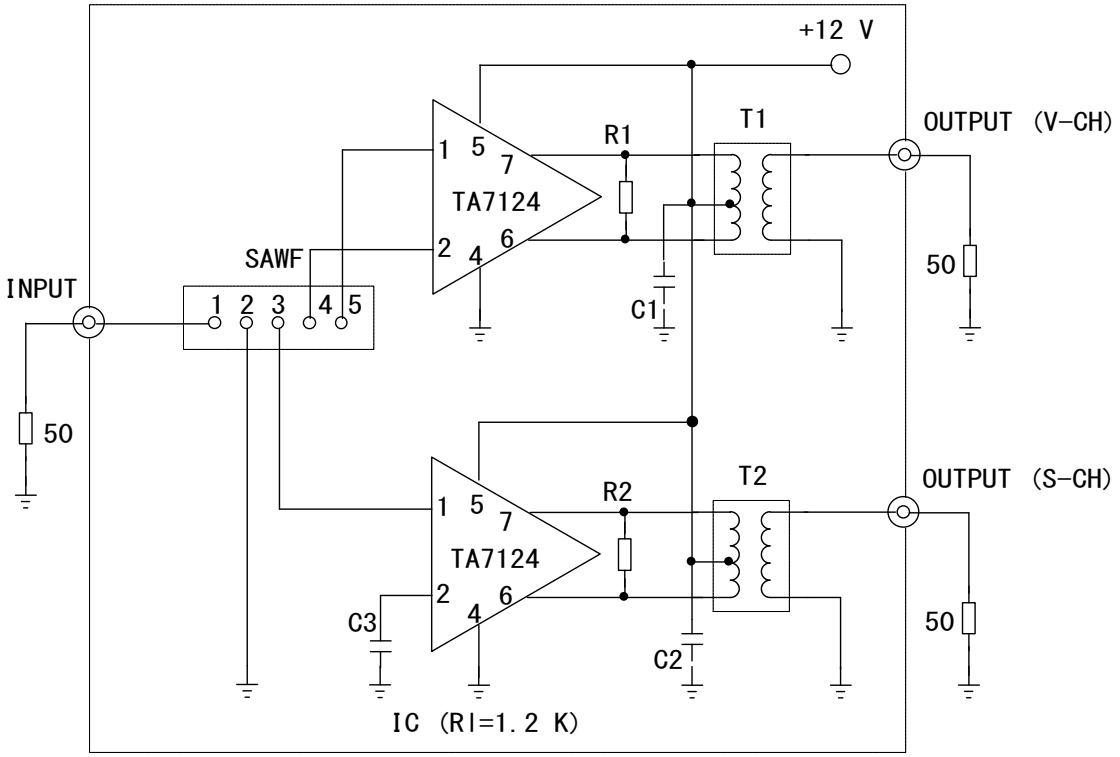
VIDEO-CH



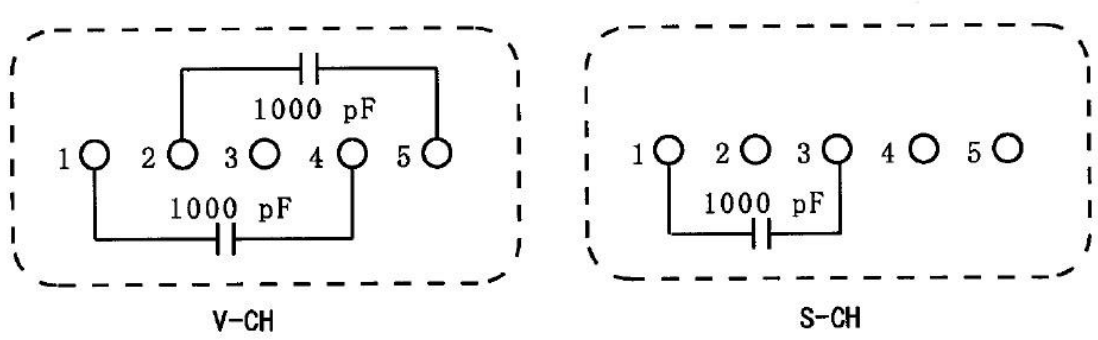
SOUND-CH



4 Test Circuit



Test Circuit



Thorough Section

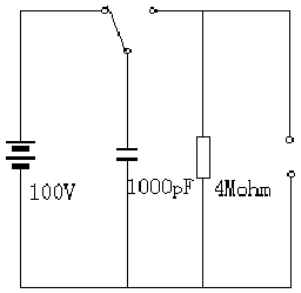
5.1 **Environmental Performance Characteristics**

Item Test condition	Allowable change of absolute Level at center frequency(dB)
High temperature test 70℃ 1000H	< 1.0
Low temperature test -40℃ 1000H	< 1.0
Humidity test 40℃ 90-95% 1000H	< 1.0
Thermal shock -20℃==25℃==80℃ 20 cycle 30M 10M 30M	< 1.0
Solder temperature test Sold temp.260℃ for 10 sec.	< 1.0
Soldering Immerse the pins melt solder at 260℃+5/-0℃ for 5 sec.	More then 95% of total area of the pins should be covered with solder

5.2 Mechanical Test

Item Test condition	Allowable change of absolute Level at center frequency(dB)
Vibration test 600-3300rpm amplitude 1.5mm 3 directions 2 H each	<1.0
Drop test On maple plate from 1 m high 3 times	<1.0
Lead pull test Pull with 1 kg force for 30 seconds	<1.0
Lead bend test 90^{o} bending with 500g weigh 2 times	<1.0

5.3 Voltage Discharge Test

Item Test condition	Allowable change of absolute Level at center frequency(dB)
Surge test Between any two electrode 	<1.0