



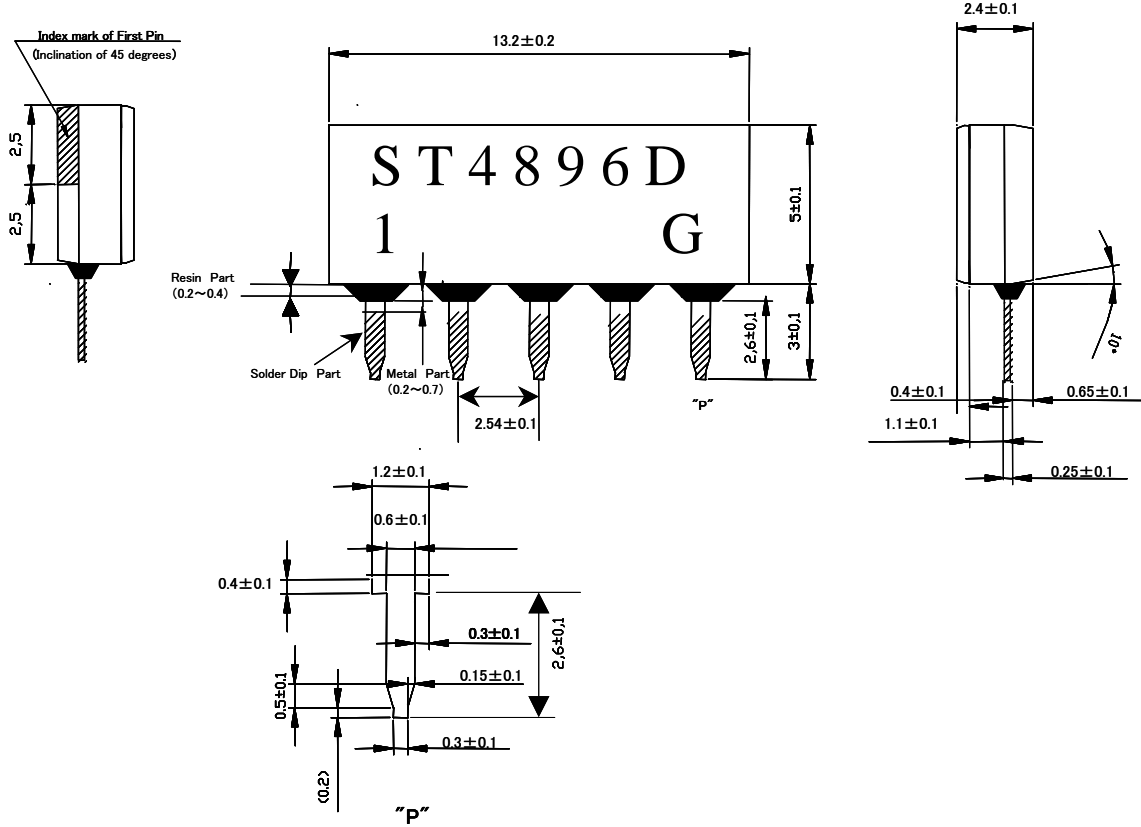
SCOPE:

This specification shall cover the characteristics of SAW filter with Strong's P/N: ST4896D

1.Package Dimension

(SIP5D)

Unit: mm



Pin No.	Functions
1.	Input
2.	Input-ground
3.	Chip carrier-ground
4.	Output
5.	Output

2、Marking

ST4896D	.STRONG ELECTRONICS PART NO.
1	.Pin1
G	.Green products

### 3. Performance

#### 3.1 Use: SAW FILTER FOR INTERCARRIER

#### 3.2 MAXIMUM RATINGS

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	°C	
Storage Temperature Range	$T_{stg}$	-40~85	°C	

#### 3.3 Electronic Characteristics

Reference temperature:  $T_a=25(45)^\circ\text{C}$

Terminating source impedance  $Z_S=50\ \Omega$

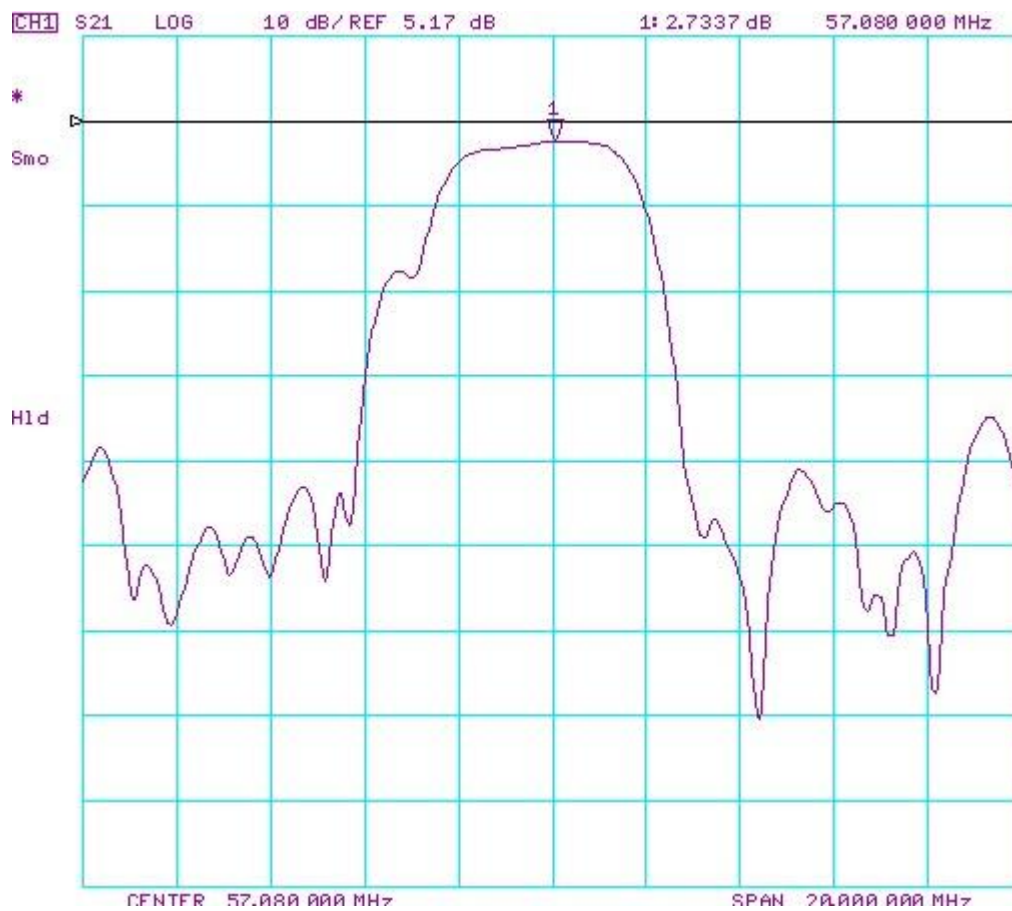
Terminating load impedance  $Z_L=2k\ \Omega // 3\ \text{pF}$

##### 3.4.1. Amplitude Characteristics

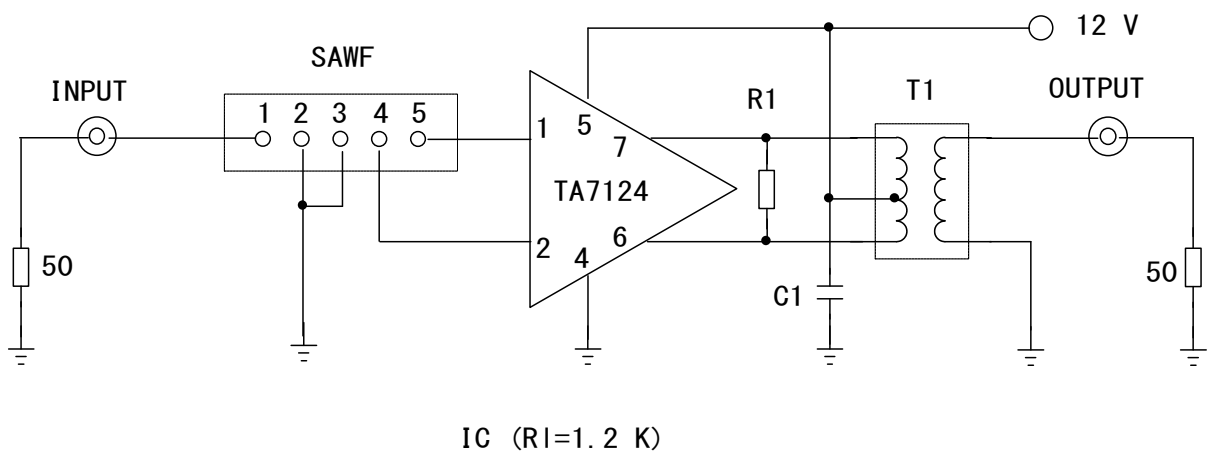
M/N

FREQUENCY(MHz)		VALUE			
		Min.	Typ.	Max.	
Insertion attenuation Reference level for the following data	57.08MHz	-12.2	-11	-9.8	dB
	60.33MHz		-50	-41	dB
	58.83MHz	-5	-6.2	-7.4	dB
	55.75MHz	-1.0	-1.8	-2.6	dB
	55.25MHz	-1.8	-3.3	-4.8	
	54.75MHz	-6.2	-8.2	-10.2	
	54.33MHz	-14.5	-16.5	-18.5	dB
	52.83MHz		-49	-41	dB
Lower sidelobe 45.08MHz-52.83MHz		-39	-36	dB	
Upper sidelobe 60.33MHz-65.08MHz		-41	-38	dB	
Group delay ripple 34.47 ... 38.9 MHz		45	80	ns	
Temperature Coefficient of frequency	-	-72.0	-	ppm/K	

### 3.5 Frequency Characteristics



### 4 Test Circuit



## Test Circuit

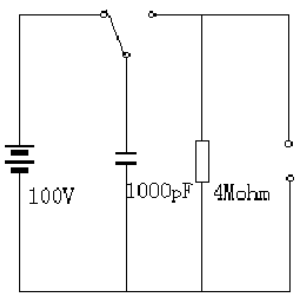
**5.3 Environmental Performance Characteristics**

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

**3.4 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° 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)
<p style="text-align: center;">Surge test</p> <p>Between any two electrode</p> 	<p>&lt;1.0</p>

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