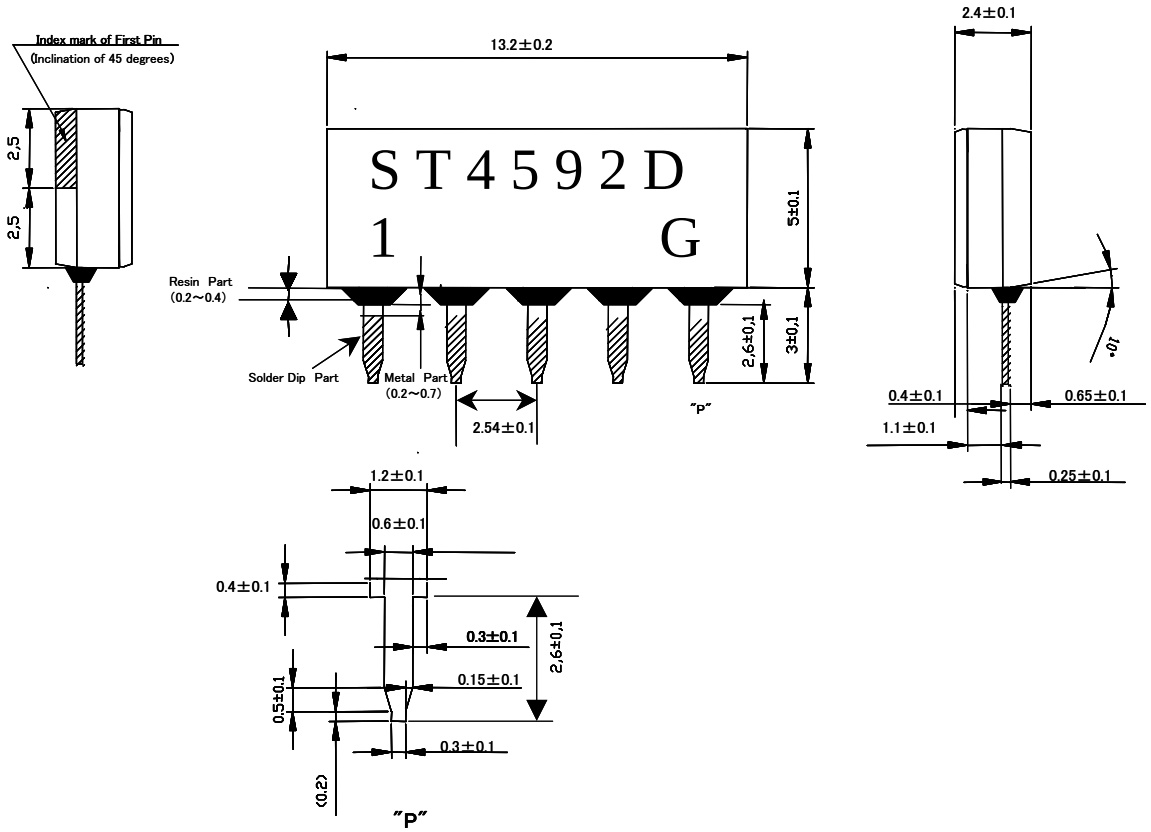
SCOPE:

This specification shall cover the characteristics of SAW filter with Strong's P/N: ST4592D

1.Package Dimension

(SIP5D) Unit: mm



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

2、Marking

S	.STRONG TRADE MARK
T4592D	.PART NO.
1	.Pin1
G	.Green products

3. Performance

3.1 Use: SAW FILTER FOR INTERCARRIER

3.2MAXIMUMRATINGS

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	℃	

3.3 Electronic Characteristics

Reference temperature: Ta=25(45)℃

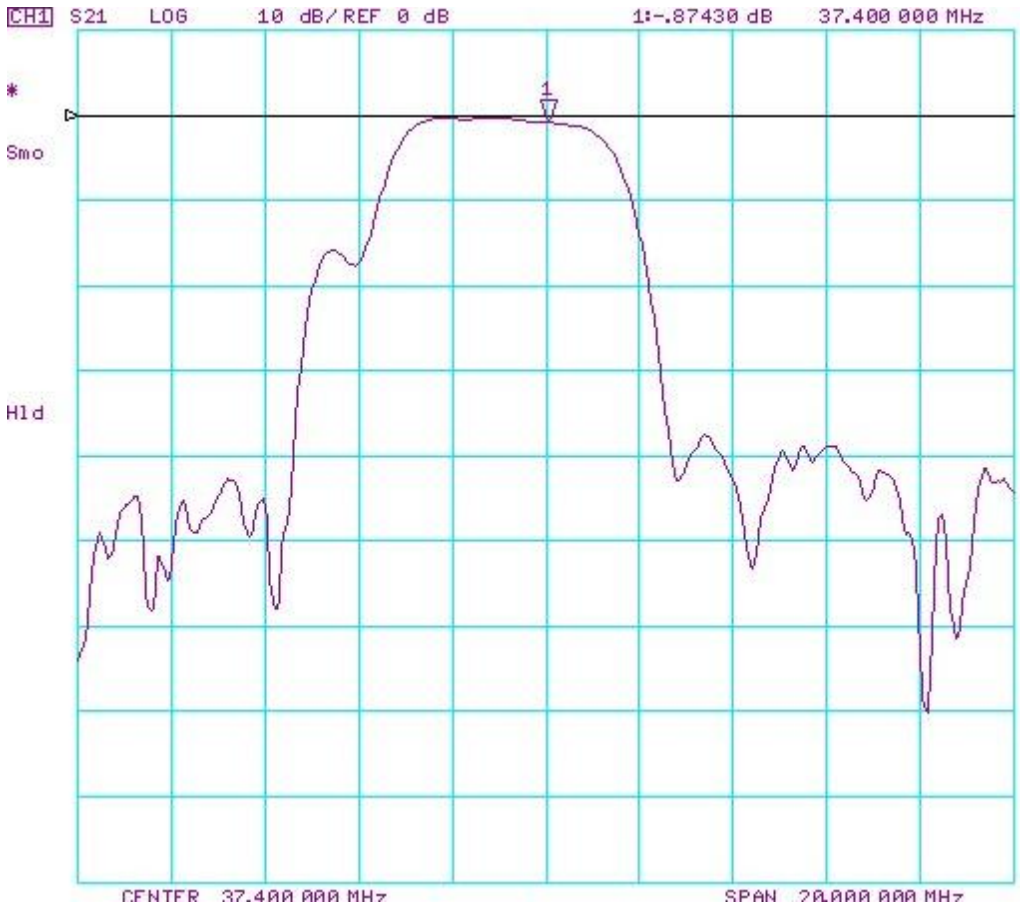
Terminating source impedance Z_S=50Ω

Terminating load impedance Z_L=2kΩ//3 pF

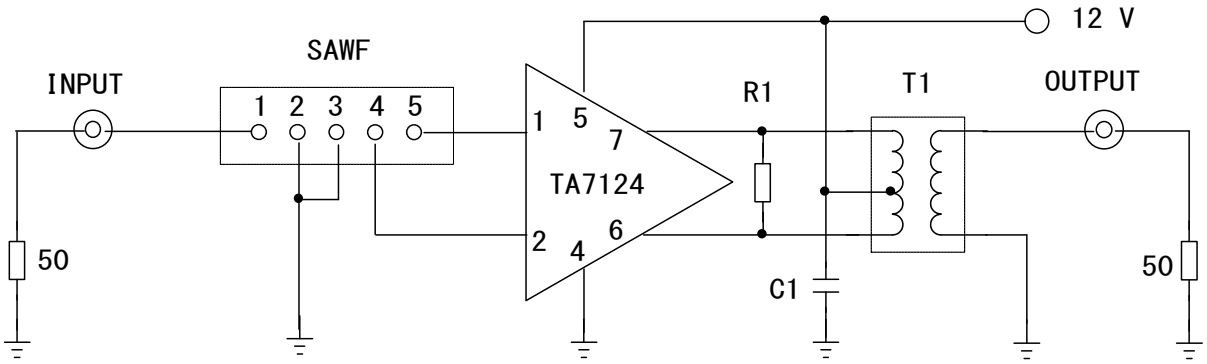
3.4.1.Amplitude Characteristics

FREQUENCY(MHz)		VALUE			
		Min.	Typ.	Max.	
Insertion attenuation Reference level for the following data	37.40MHz	-18.3	-17.1	-15.9	dB
	40.4MHz		-44	-35	dB
	38.9MHz	-5.7	-4.5	-3.3	dB
	34.47MHz	-2.8	-1.7	-0.6	dB
	33.40MHz	-19.4	-17.4	-15.4	dB
	32.4 MHz	-23.3	-21.3	-19.3	dB
	31.9MHz		-50	-42-	dB
	30.9MHz		-43	-37-	dB
Lower sidelobe 25.00MHz-30.9MHz			-40	-34	dB
Upper sidelobe 41.4MHz-45.00MHz			-37	-33	dB
Group delay ripple 34.47 … 38.9 MHz			30	60	ns
Temperature Coefficient of frequency		-	-72.0	-	ppm/K

3.4.Frequency Characteristics



4. Test Circuit



IC (RI=1.2 K)

Test Circuit

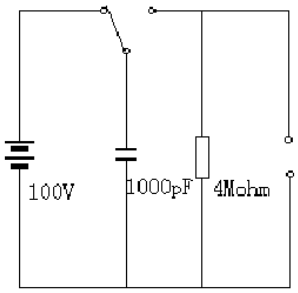
5.1 Environmental Performance Characteristics

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° 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