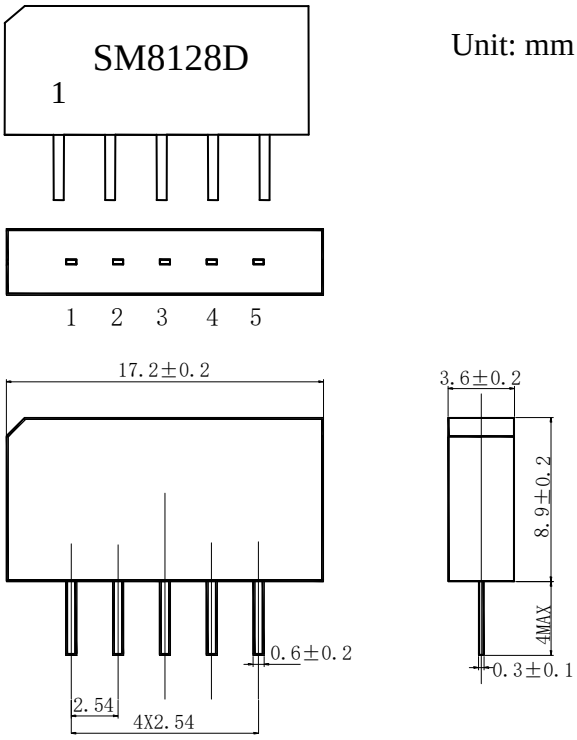
STRONG

1.Range:

This specification shall cover the characteristics of SAW filter with Strong's P/N: SM8128D

2.Package Dimension



Unit: mm

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

3. Marking

SM8128D . Model

1 . Pin 1

4. Performance

4.1 Part No:SM8128D
4.2 Use: TV SAW FILTER FOR INTERCARRIER
4.3 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	℃	
Storage Temperature Range	T_{stg}	-40~85	℃	

4.4 Electronic Characteristics

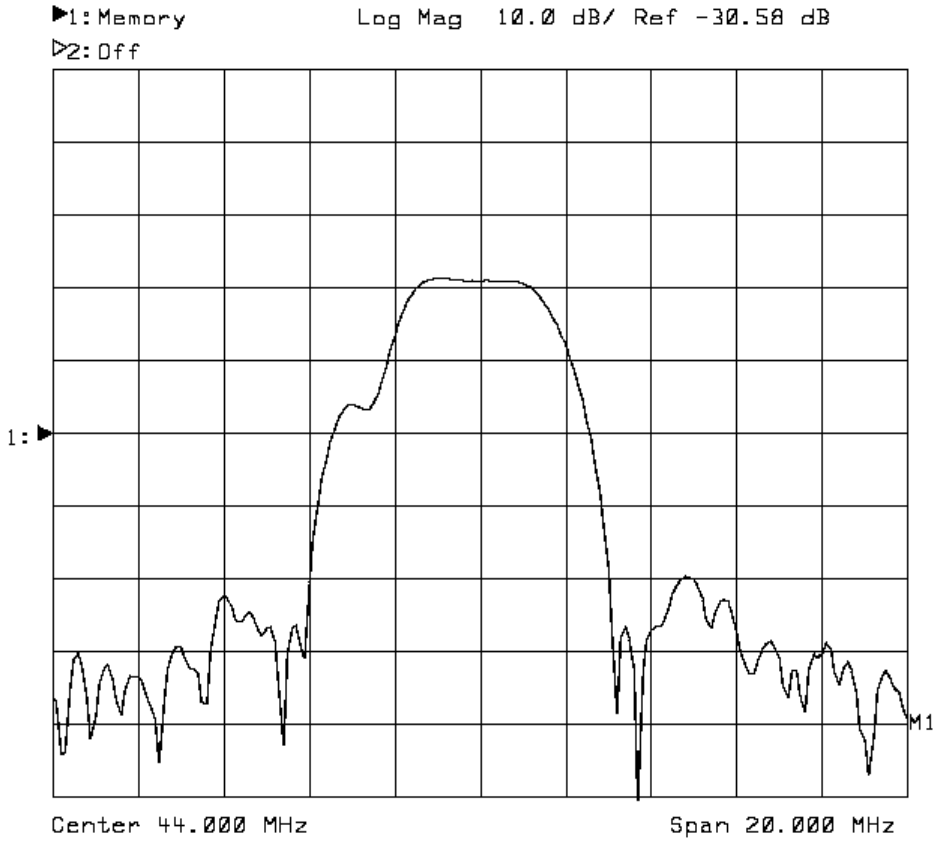
Reference temperature: Ta=25℃
Terminating source impedance Z_S=50Ω
Terminating load impedance Z_L=2kΩ//3 pF

Amplitude Characteristics

M/N

FREQUENCY(MHz)	VALUE			
	Min.	Typ.	Max.	
Insertion attenuation Reference level for the 44.06MHz following data	10.7	12.7	14.7	dB
Picture carrier 45.81MHz	4.5	6.0	7.5	dB
Color carrier 42.23MHz	2.8	4.3	5.8	dB
Sound carrier 41.31MHz	15.1	17.1	19.1	dB
Adjacent picture carrier 39.81MHz	45.0	52.0	-	dB
Adjacent sound carrier 47.31MHz	41.0	50.0	-	dB
Lower sidelobe 35.06MHz-39.81MHz	36.0	43.0	-	dB
Upper sidelobe 47.31MHz-55.06MHz	35.0	40.0	-	dB
Reflected Wave Signal Suppression	42.0	55.0	-	dB
Feedthrough Signal Suppression	50.0	56.0	-	dB
Group delay (Reference frequency 44.06MHz) Group delay ripple	-	50	-	ns
Impedance at 44.06MHz Input Impedance Output Impedance	- -	1.6 ‖ 8.3 1.1 ‖3.5	- -	 KΩ‖pF KΩ‖pF
Temperature Coefficient of frequency	-	-72.0	-	ppm/K

5. Frequency response



6. Test Circuit

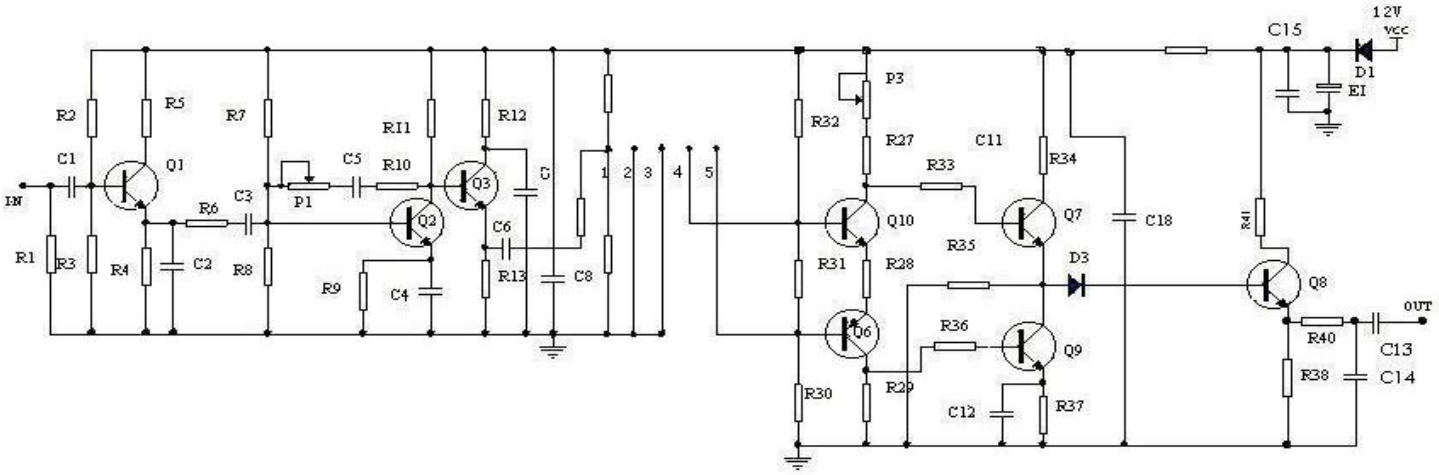


Fig.1 Test Circuit

7. RELIABILITY TEST

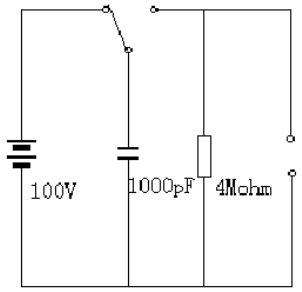
7.1 Environmental Performance Characteristics

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

7.2 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

7.3 Voltage Discharge Test

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