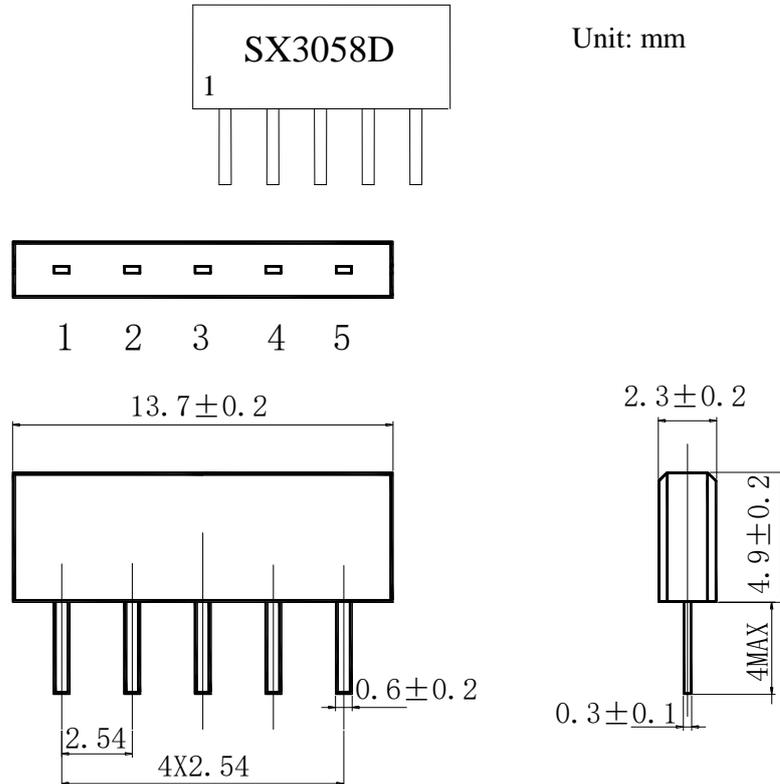




Range:

This specification shall cover the characteristics of SAW filter with Strong's P/N: SX3058D

1. Package Dimension
(SIP-5D)



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

2. Marking

SX3058D . Model

1 . Pin 1

3. Performance

3.1 Part No: SX3058D

3.2 Use: TV SAW Filter For Digital TV

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

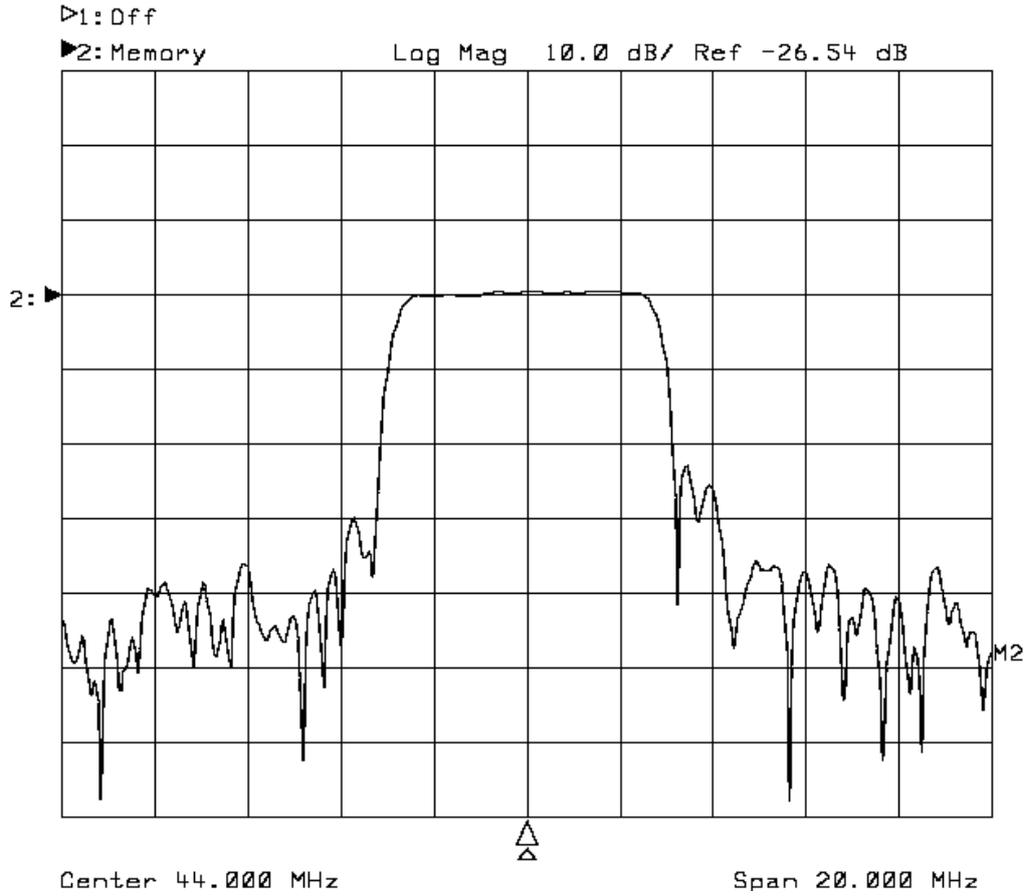
3.4 Electronic Characteristics

Reference temperature: $T_a=25^\circ\text{C}$ Terminating source impedance $Z_S=50\Omega$ Terminating load impedance $Z_L=2k\Omega//3pF$

3.4.1. Amplitude Characteristics

FREQUENCY(MHz)		VALUE			
		Min.	Typ.	Max.	
Insertion attenuation Reference level for the following data	44.00MHz	24.5	26.5	28.5	dB
	40.75MHz	25.0	34.0		dB
	41.31MHz	0.5	2.0	3.5	dB
	41.43MHz	-0.7	0.8	2.3	dB
	41.60MHz	-1.3	0.2	1.7	dB
	46.40MHz	-1.3	0.2	1.7	dB
	46.57MHz	-0.8	0.7	2.2	dB
	46.69MHz	0.3	1.8	3.3	dB
	47.25MHz	25.0	35.0		dB
	Lower sidelobe	35.00MHz-39.10MHz	33.0	42	-
39.10MHz-40.35MHz		27.0	32	-	dB
Upper sidelobe		47.65MHz-48.65MHz	23.0	30	-
	48.65MHz-55.00MHz	30.0	37	-	dB
Reflected Wave Signal Suppression		42.0	52.0	-	dB
Group delay ripple(p-p) (41.31MHz~46.69MHz)		-	30	80	ns
Impedance at 44.06MHz					
Input Impedance		-	1.9 22.2	-	K Ω pF
Output Impedance			6.1 5.7		K Ω pF
Temperature Coefficient of frequency		-	-18.0	-	ppm/K

3.5 Frequency Characteristics



4. Test Circuit

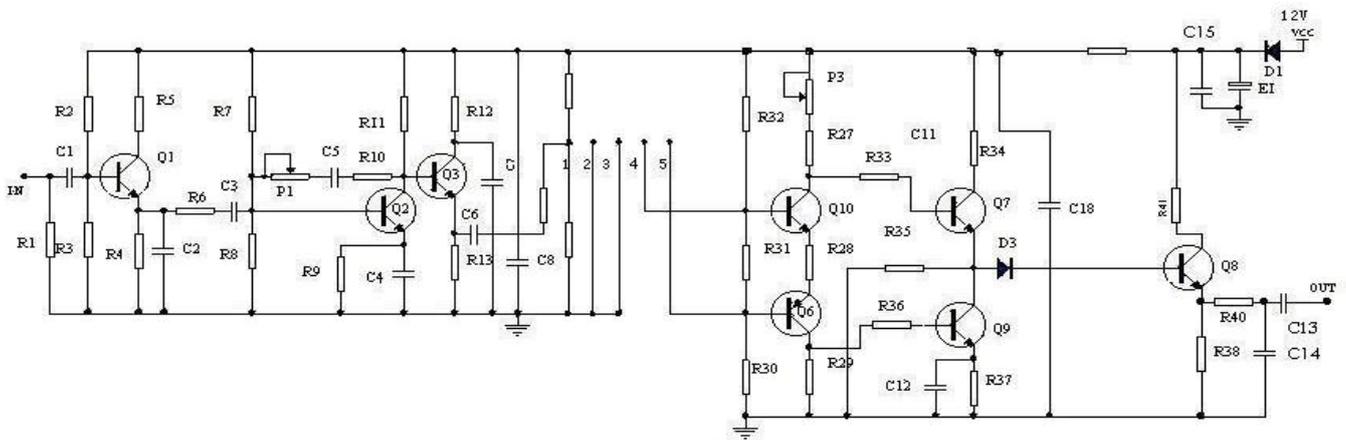


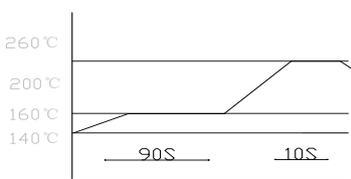
Fig.1 Test Circuit

5 ENVIRONMENTAL CHARACTERISTICS

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	The 1mm thick PCB fixed with device are immersed in solder trough of 260±5°C for 10±1 seconds. And then it shall be measured after being placed in natural condition for 2±0.5 hours.	Same as judgement of 5.1
solderability	Lead terminals are immersed in solder bath of 245±5°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 5.1

5.3 Mechanical Test

ITEM	REQUIREMENT	JUGEMENT
Vibration Fatigue and terminal Strength test	Force 10±1seconds of 19.6N applied to each terminal in axial direction. Lead terminals shall be folded up to 45°with 5N force, then folded back to their axial direction 2 times. It shall be measured after being applied vibration of amplitude of 1.5mm with 10 to 55Hz of vibration frequency to each of 3 perpendicular directions for 2 hours.	Same as judgement of 5.1
Drop test	It shall be measured after 10 times random drop from the height of 1 m onto the 20mm thicker hard wood floor.	
Mechanical Shock	The components shall remain within the electrical specifications after 1000 shocks, acceleration 392 m/s ² , duration 6 milliseconds.	

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