

SEP. 15, 2000

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7/2 MK

SPECIFICATION

MODEL: 6361HS

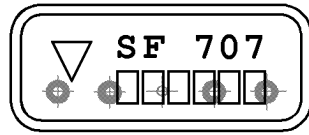
SURFACE ACOUSTIC WAVE FILTER

PRELIMINARY

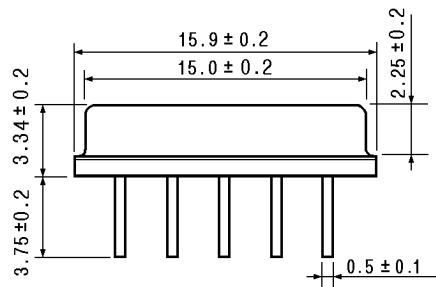
SAMSUNG ELECTRO-MECHANICS CO., LTD.
314. MAETAN3-DONG, PALDAL-KU,
SUWON-SI, KYUNGKI-DO, KOREA, 442-743

1. OUTLINE DRAWING AND DIMENSION

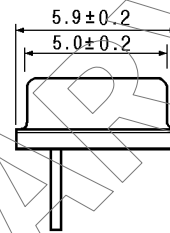
[Unit : mm]



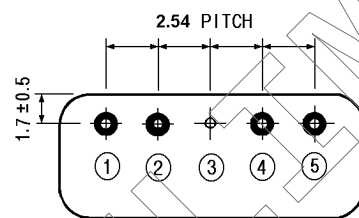
[TOP VIEW]



[SIDE VIEW]



[RIGHT SIDE VIEW]



[BOTTOM VIEW]

PIN NO.	FUNCTION
①	INPUT
②	GROUND
③	GROUND
④	OUTPUT
⑤	OUTPUT

2. MARKING

SF 903
 ▽ 6361HS

Color : Black/Red Ink or LASER Marking

Model No. : 6361HS (S-type Package)

Lot No. : 903

Pin No. 1: ▽

3. PERFORMANCE**3-1. APPLICATION**

IF Filter for Digital Cable TV

3-2. MAXIMUM RATING

(Ta = 25℃)

CHARACTERISTICS		RATING	UNITS
Input signal voltage		5	V _{p-p}
DC voltage	between inputs	3	V
	between outputs		
	between others	15	
AC voltage : 50~60 Hz		10	V _{p-p}
Operating temperature range		-25 ~ +65	℃
Storage temperature range		-25 ~ +85	℃

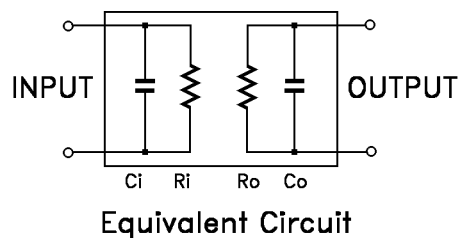
3-3. ELECTRICAL CHARACTERISTICS

3-3-1. TABLE

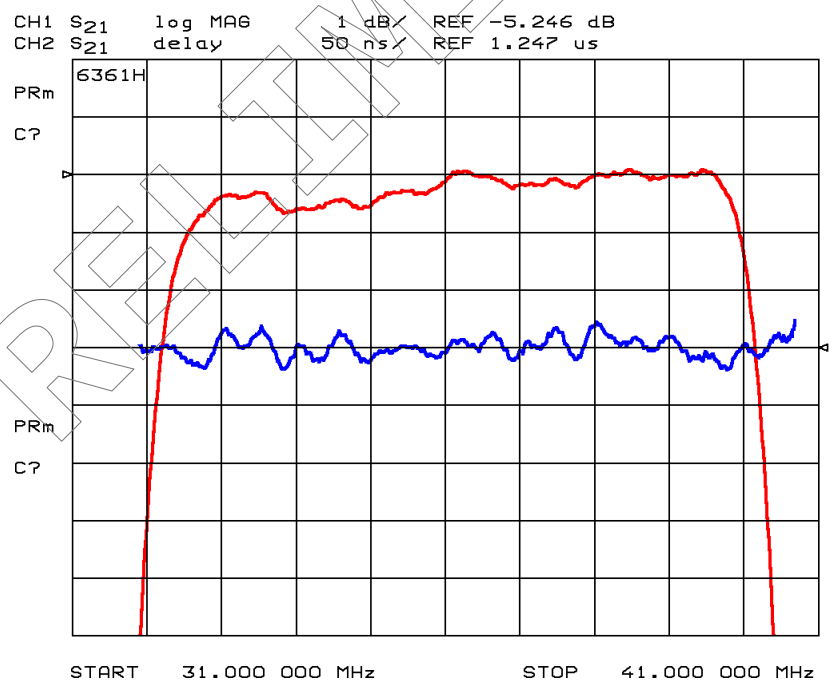
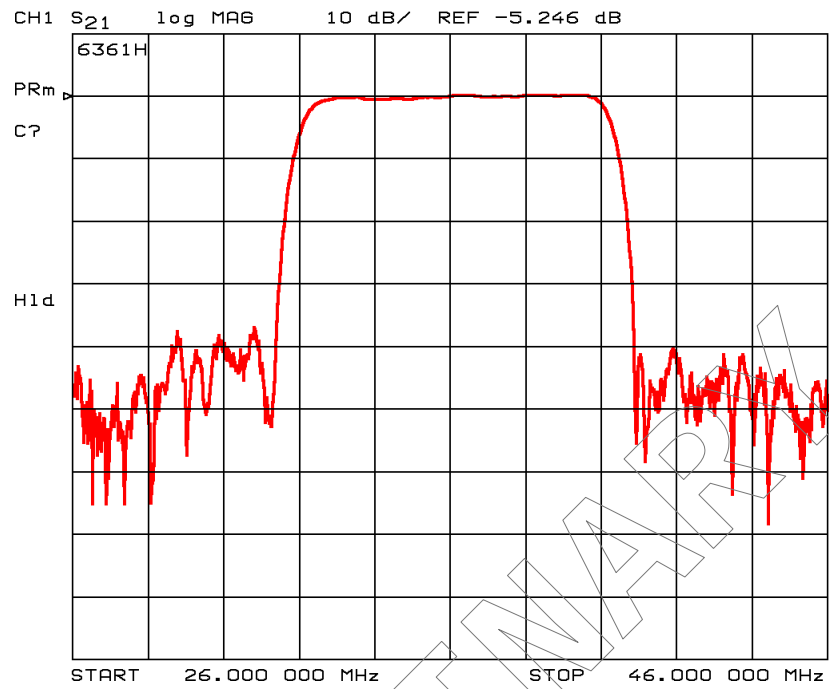
Ta=25℃

CHARACTERISTICS		Freq. (MHz)	Specification				Test Fixture
			Min.	Typ.	Max.	Units	
Insertion Loss(α)		36.125	3.5	5.0	6.5	dB	No. 1
Pass Bandwidth	α -1dB		-	7.4	-	MHz	
	α -3dB		-	7.9	-		
	α -30dB		-	9.3	-		
Relative Attenuation (Ref.: α)		31.25	37	45	-	dB	
		32.13	2.5	4.0	5.5		
		32.32	0.7	2.2	3.7		
		39.93	0.0	1.5	3.0		
		40.13	1.4	2.9	4.4		
		47.25	45	49	-		
	lower sidelobe upper sidelobe	25.0 ~ 31.25 40.9 ~ 50.0	32 32	36 38	- -		
Amplitude Ripple(peak-peak)		32.65 ~ 39.6	0.0	1.0	1.3		
Group Delay Ripple(max-min)		32.32 ~ 39.93	-	70	-	nsec	
Temperature Coefficient of Frequency Response			-	-72	-	ppm/℃	No. 2
Impedance	R _i /C _i					kΩ/pF	
	R _o /C _o					kΩ/pF	

Impedance equivalent circuit is shown below.

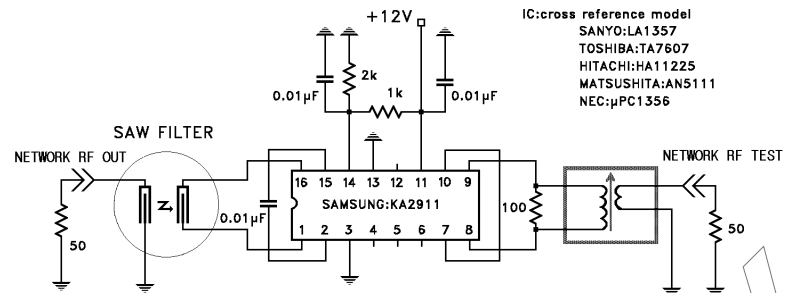


3-3-2. GRAPH

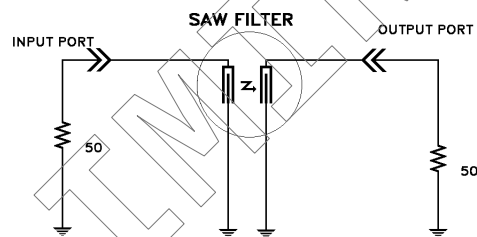


3-3-3. TEST FIXTURE

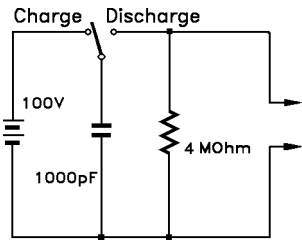
No. 1



No. 2



4. RELIABILITY

ITEM	TEST CONDITION	LIMIT
4-1. LIFE TEST		
High Temperature Operation	Ta=+70±2℃, 500h, DC 3V, Output ports load.	insertion loss : initial ±1.5dB amplitude response : pass bandwidth α -1dB,-3dB,-30dB initial ±0.5MHz (with test fixture on No. 1)
High Temperature Exposure	Tstg=+85±2℃, 500h	
Low Temperature Exposure	Ta=-40±2℃, 500h	
Moisture Resistance	Ta=+40±2℃, RH 90~95%, 500h	
Salt Spray	After soldering, 5% salt solution, 24h	
4-2. HEAT CYCLE, SOLDERING TEST		
Temperature Cycle	(-20℃,30min→25℃,5min→80℃,30min→25℃,5min) 5 cycle.	Same as 4-1.
Solderability	Immerse the pins in melt solder at 230±5℃ for 2+1-0 sec.	More than 90% of total area of the pins should be covered with solder
Heat Resistivity for Melt Solder	Immerse the pins in melt solder at 260±5℃ for 10+2-0 sec.	Same as 4-1.
4-3. MECHANICAL TEST		
Vibration	Amplitude=2mm, 20↔60Hz, sweep time 1 minute, 3 direction each 8h.	Same as 4-1.
Drop	On concrete plate from 1m high, 3 times.	
Lead Bend	90° bending with 450g weight, 2 times.	Should not be broken.
Lead Pull	After bending lead parallel to header base, pull with 1kg force for 1 minute.	Should not be lost or broken.
4-4. SURGE TEST		
Surge Test	10 times between any leads 	Same as 4-1.

5. REVISION

Date	Page	Revision	Reason
PRELIMINARY			