

MAR. 22, 1999

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7/2 MJK

SPECIFICATION

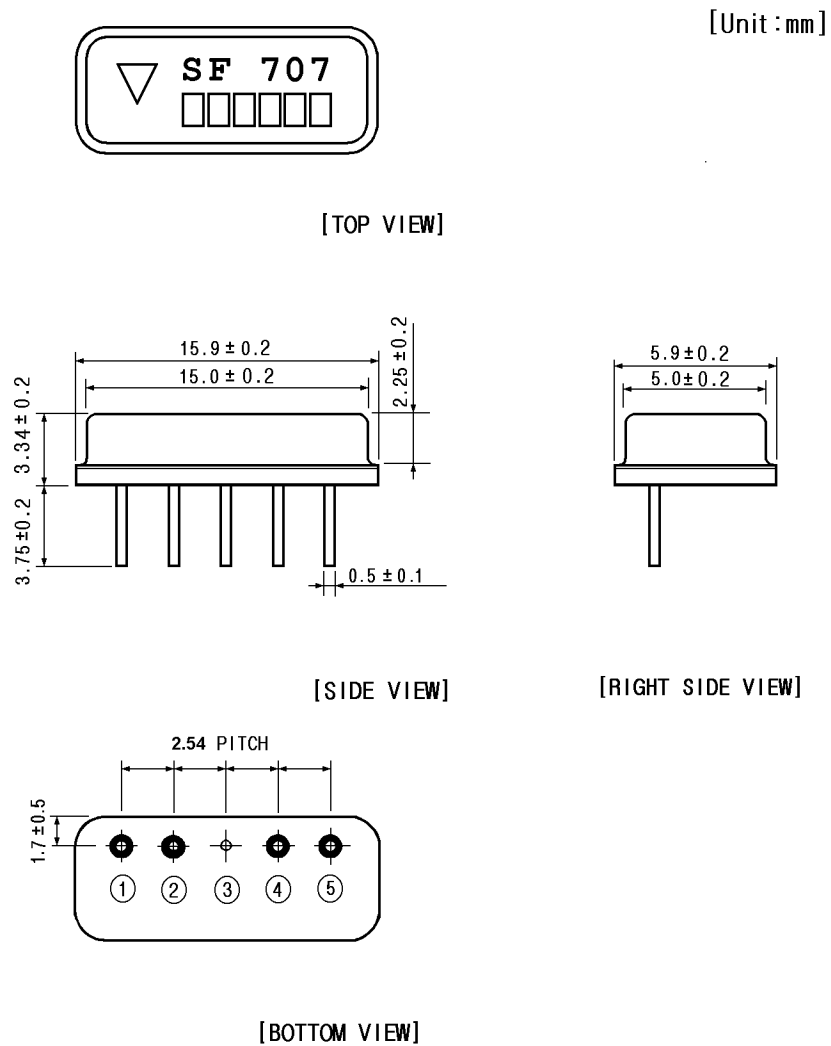
MODEL: 6389VS

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



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

2. MARKING

SF 903
▽ 6389VS

Color : Black/Red Ink or LASER Marking

Model No. : 6389VS (S-type Package)

Lot No. : 903

Pin No. 1: ▽

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

IF Filter for Video Applications

B/G, I, L/L System

Video Frequency : 33.9MHz, 38.9MHz

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		-20 ~ +70	℃
Storage temperature range		-55 ~ +85	℃

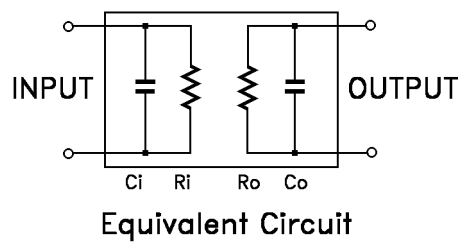
3-3. ELECTRICAL CHARACTERISTICS

3-3-1. TABLE

Ta=25℃

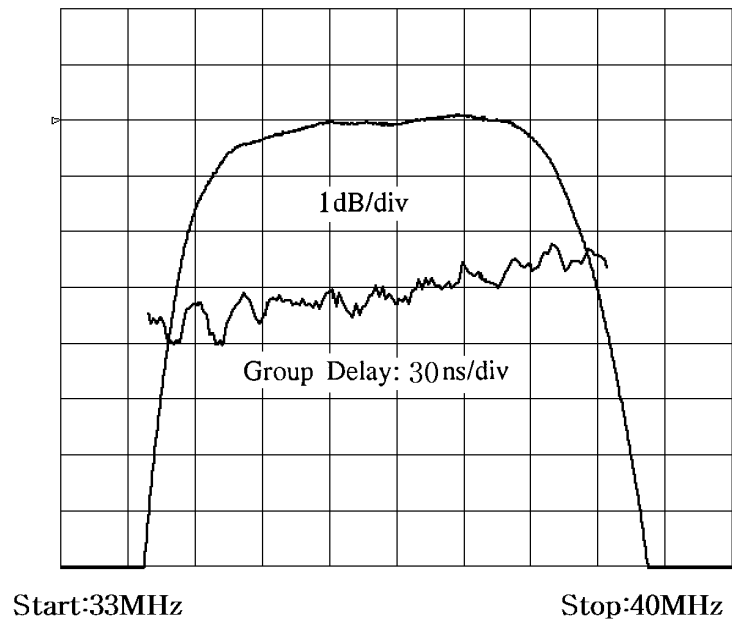
CHARACTERISTICS		Freq. (MHz)	Specification				Test Fixture
			Min.	Typ.	Max.	Units	
Insertion Loss		37.4				dB	No. 2
Relative Attenuation (Ref.: 37.4MHz)	adj.picture-1	30.9	48			dB	No. 1
	adj.picture-2	31.9					
	sound-1	32.9	44				
	sound-2	33.4	20				
	picture-1	33.9	6.3		8.7		
	picture-2	38.9	5.0		7.0		
	adj.picture-3	40.15	36				
	adj.sound-1	40.4	44				
	adj.sound-2	40.9	44				
	adj.sound-3	41.4	43				
		lower sidelobe upper sidelobe	25.0 ~ 31.9 40.4 ~ 45.0	45 40			
Group Delay Ripple(p-p)		33.9 ~ 38.9		50		ns	No. 2
Temperature Coefficient of Frequency Response				-72		ppm/℃	
Impedance	R _i /C _i					k Ω /pF	
	R _o /C _o					k Ω /pF	

Impedance equivalent circuit is shown below.

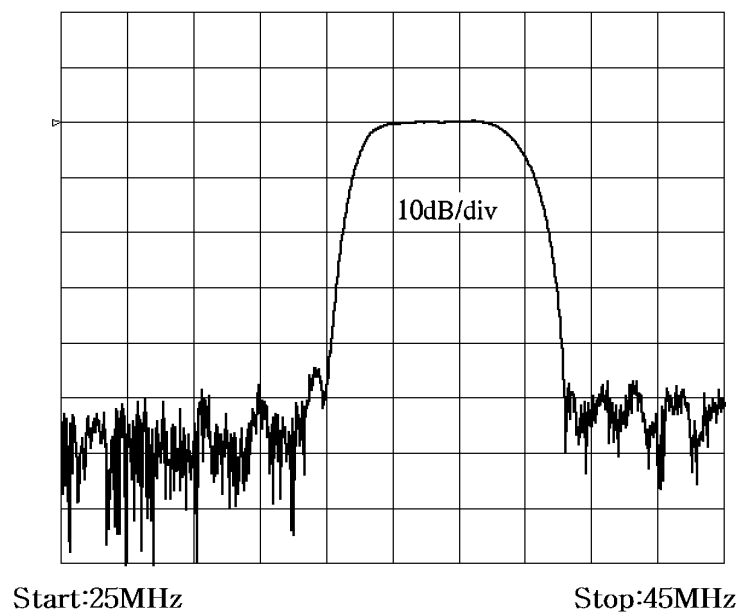


3-3-2. GRAPH

Passband Characteristics

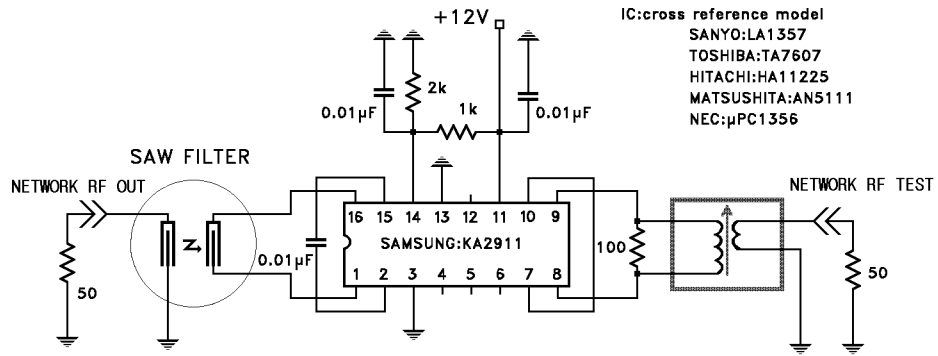


Spurious Characteristics

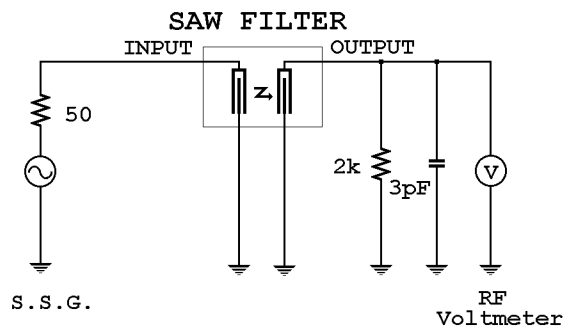


3-3-3. TEST FIXTURE

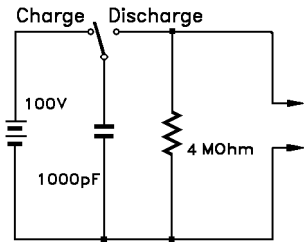
No. 1



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 : (fs,fc,peak) initial ±1.0dB (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 Charge Discharge 	Same as 4-1.

5. REVISION

Date	Page	Revision	Reason