



SPECIFICATION

Surface Acoustic Wave Filter

USER

USER PART No.

SEMCO PART No. **SFHG42YA002**

DOC. No. SMS-51-L-SFT FX-73

DATE June 10, 2014

REVISION Preliminary

WISOL					
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1. REVISION HISTORY

000	June 10, 2014	All Page	Make specification
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2. DEFINITION

2-1. PART No.

S F H G 4 2 Y A 0 0 2

①	②	③	④	⑤	⑥
No.	EXPLANATION				
①	SAW Filter				
②	Design Type				
③	Center Frequency :1842.5MHz(1805.6 ~ 1879.4)				
④	Input:50ohm,Output:100ohm				
⑤	Package size: 1.1×0.9mm ²				
⑥	Design Revision (02 : Molding Type)				

2-2. APPLICATION : Band-Pass Filter for LTE Band III Rx etc (WCDMA Band III)

3. PRECAUTIONS

3-1. This device should not be used in any type of fluid such as water, oil, organic solvent, etc.

3-2. This is a hermetic device.

MSL(Moisture Sensitive Level) is the '2a' level.

3-3. Ultrasonic cleaning shall be avoided.

3-4. Isopropyl Alcohol and Ethyl Alcohol can be used for cleaning. Contact us before using other cleaning solvents than above

3-5. This is an electrostatic sensitive device.

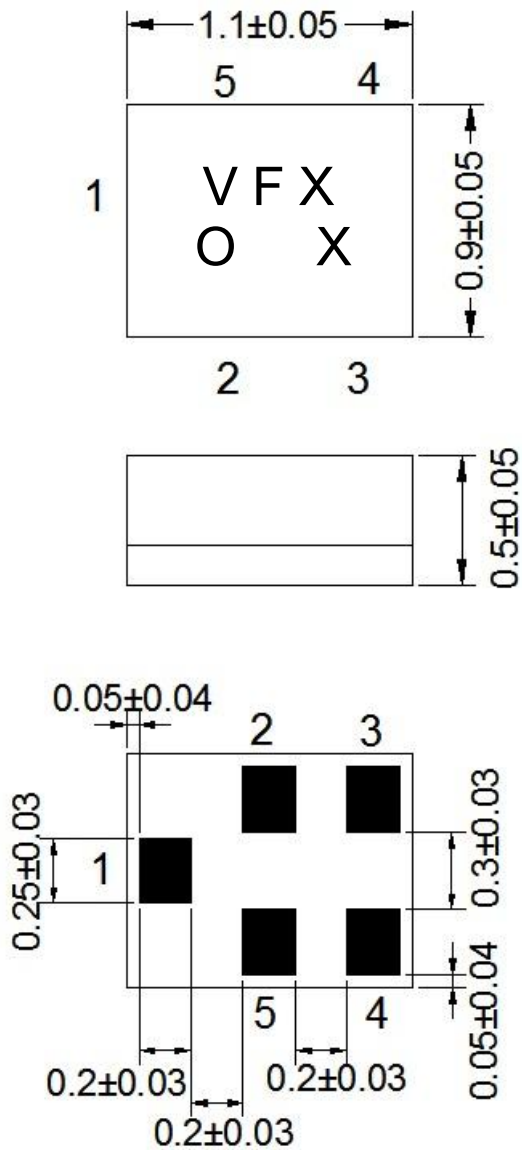
Please avoid static voltage during operation and storage.

3-6. Sudden change of temperature shall be avoided, deterioration of the characteristics can occur.

3-7. If any malfunction due to designing or manufacturing which is out of specification occurs within one year after the products have been delivered, the maker should exchange the defective products.

4. OUTLINE DRAWING & DIMENSIONS

[Unit: mm]



No.	Function
2, 5	Ground
1	Unbalanced Input
3, 4	Balanced Output

6-2. ELECTRICAL CHARACTERISTICS

6-2-1. TABLE

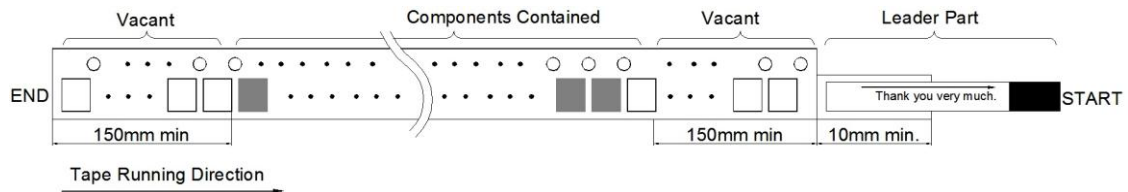
Ta = - 30 ~ +85℃

Item	FREQUENCY RANGE [MHz]	UNIT	SPECIFICATION		
			Min.	Typ. (25℃)	Max.
Insertion Loss	1805.6 ~ 1879.4	dB	-	2.1	3.8
	1807.4 ~ 1877.6		-	2.1	3.3
Inband Ripple	1805.6 ~ 1879.4	dB	-	0.7	2.6
	1807.4 ~ 1877.6		-	0.7	2.1
Input VSWR	1805.6 ~ 1879.4	-	-	2.1	2.4
Output VSWR	1805.6 ~ 1879.4	-	-	2.0	2.4
Absolute Attenuation	DC ~ 1710	dB	40	46	-
	1710.6 ~ 1784.4	dB	35	46	-
	1712.4 ~ 1782.6		40	46	-
	1940 ~ 2400	dB	28	34	-
	2400 ~ 2500	dB	40	50	-
	2500 ~ 6000	dB	38	48	-
Termination Impedance		Input: Unbalanced 50 ohm Output: Balanced 100 ohm // 18nH			

6-2-2. TEST FIXTURE

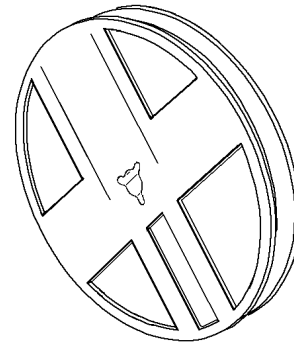
[X-Ray Top View]

1-3-3. Leader part and vacant position specifications.

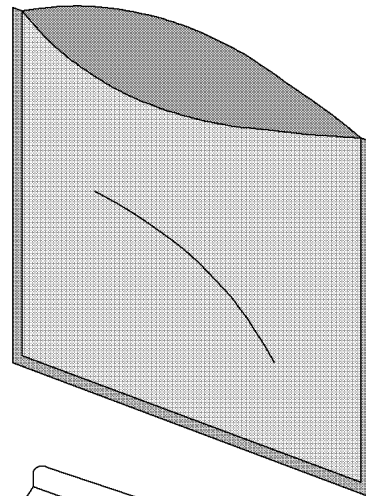


11-4. INNER BOX(Reel Packing) STRUCTURE

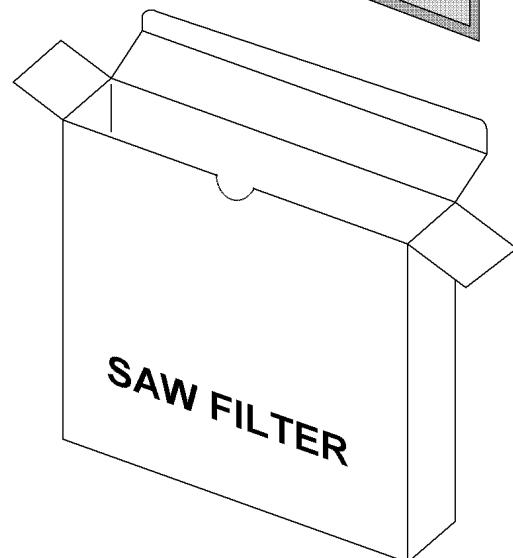
Material: Polycarbonate



Material : Polyethylene + Aluminium
Size : 310×370mm²



Material : Paper
Size: (D)260×(W)37×(H)265mm³



13. RoHS DATA


Test Report No. F690101/LF-CTSAYAA13-31939

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Sample No. : AYAA13-31939.001
Sample Description : SAW FILTER
Item No./Part No. : N/A
Materials : N/A

Heavy Metals

Test Items	Unit	Test Method	MDL	Results
Cadmium (Cd)	mg/kg	With reference to IEC 62321:2008, ICP	0.5	N.D.
Lead (Pb)	mg/kg	With reference to IEC 62321:2008, ICP	5	N.D.
Mercury (Hg)	mg/kg	With reference to IEC 62321:2008, ICP	2	N.D.
Hexavalent Chromium (Cr VI)	mg/kg	With reference to IEC 62321:2008, UV-VIS	1	N.D.
Antimony (Sb)	mg/kg	With reference to EPA 3052(1996), US EPA 6010B(1996), ICP	10	N.D.

Flame Retardants-PBBs/PBDEs

Test Items	Unit	Test Method	MDL	Results
Monobromobiphenyl	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Dibromobiphenyl	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Tribromobiphenyl	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Tetrabromobiphenyl	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Pentabromobiphenyl	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Hexabromobiphenyl	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Heptabromobiphenyl	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Octabromobiphenyl	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Nonabromobiphenyl	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Decabromobiphenyl	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Monobromodiphenyl ether	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Dibromodiphenyl ether	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Tribromodiphenyl ether	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Tetrabromodiphenyl ether	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Pentabromodiphenyl ether	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Hexabromodiphenyl ether	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Heptabromodiphenyl ether	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Octabromodiphenyl ether	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Nonabromodiphenyl ether	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.

NOTE:

- (1) N.D. = Not detected. (<MDL)
- (2) mg/kg = ppm
- (3) MDL = Method Detection Limit
- (4) - = No regulation
- (5) Negative = Undetectable / Positive = Detectable
- (6) ** = Qualitative analysis (No Unit)
- (7) * = Boiling-water-extraction:
 Negative = Absence of CrVI coating
 Positive = Presence of CrVI coating; the detected concentration in boiling-water-extraction solution is equal or greater than 0.02 mg/kg with 50 cm² sample surface area.

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