



TAI-SAW TECHNOLOGY CO., LTD.

No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,
Taoyuan, 324, Taiwan, R.O.C.

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Product Specifications Approval Sheet

Product Description: SAW Filter 978 MHz SMD 3.0X3.0 mm

TST Part No.: TA1410A

Customer Part No.: _____

Customer signature required
Company: _____
Division: _____
Approved by : _____
Date: _____

Checked by: _____ Bob Chau 

Approved by: _____ Francis Chen 

Date: _____ 10, 17, 2011

1. Customer signed back is required before TST can proceed with sample build and receive orders.
2. Orders received without customer signed back will be regarded as agreement on the specifications.
3. Any specifications changes must be approved upon by both parties and a new revision of specifications shall be released to reflect the changes.



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SAW Filter 978 MHz

MODEL NO.:TA1410A

REV. NO.:1

A. MAXIMUM RATING:

1. Input Power Level: 10 dBm
2. DC Voltage : 3V
3. Operating Temperature: -40°C to +85°C
4. Storage Temperature: -40°C to +85°C

RoHS Compliant
Lead free
Lead-free soldering

Electrostatic Sensitive Device (ESD)

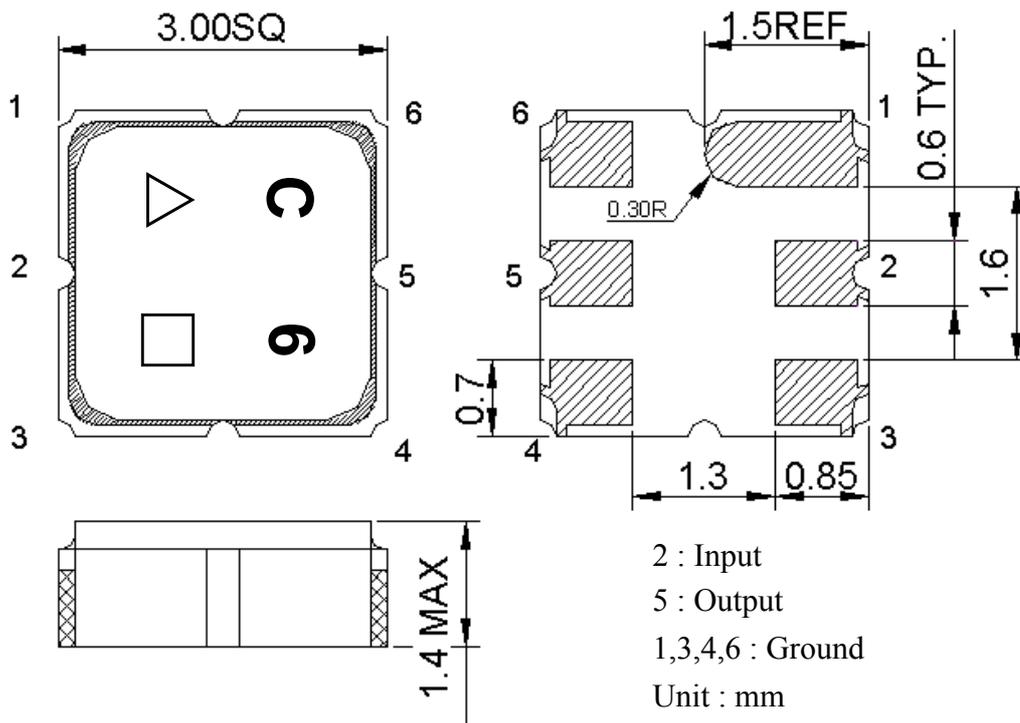
B. ELECTRICAL CHARACTERISTICS:

Terminating source impedance (single ended) : $Z_s = 50 \Omega$

Terminating load impedance (single ended) : $Z_L = 50 \Omega$

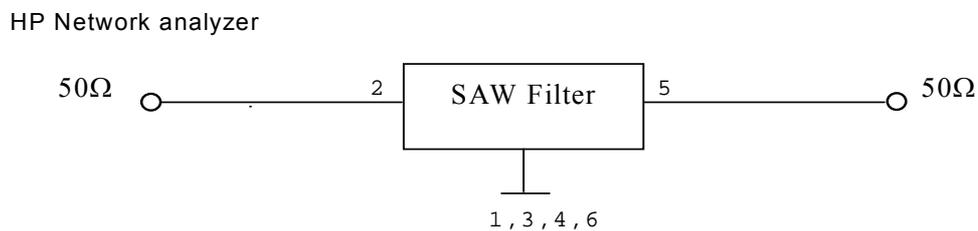
Item	Unit	Min.	Typ.	Max.	Note
Center Frequency Fc	MHz	-	978	-	-
Insertion Loss (967 ~ 989 MHz)	dB	-	2.2	3.5	-
Amplitude Variation (967 ~ 989 MHz)	dB	-	1.2	2.5	-
Amplitude Variation over 3 MHz	dB	-	0.7	1.3	-
VSWR (967 ~ 989 MHz)		-	1.75	2.4	-
Group Delay Variation over 3 MHz	ns	-	20	25	-
Attenuation (reference level from 0 dB)					
DC~949 MHz	dB	30	36	-	-
949~953 MHz	dB	15	30	-	-
1003~1007 MHz	dB	15	50	-	-
1007~2000 MHz	dB	30	37	-	-
Temperature Coefficient of Frequency	ppm/°C	-	-36	-	-

C.OUTLINE DRAWING:

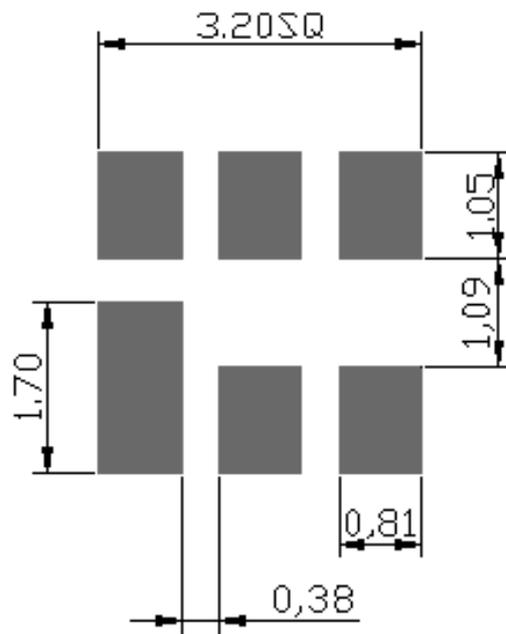


- △ : Year Code (2009->9, 2010->0, ..., 2018->8)
- : Date Code (W01->A, W02->B, ... W27->a, ..., W52->z)

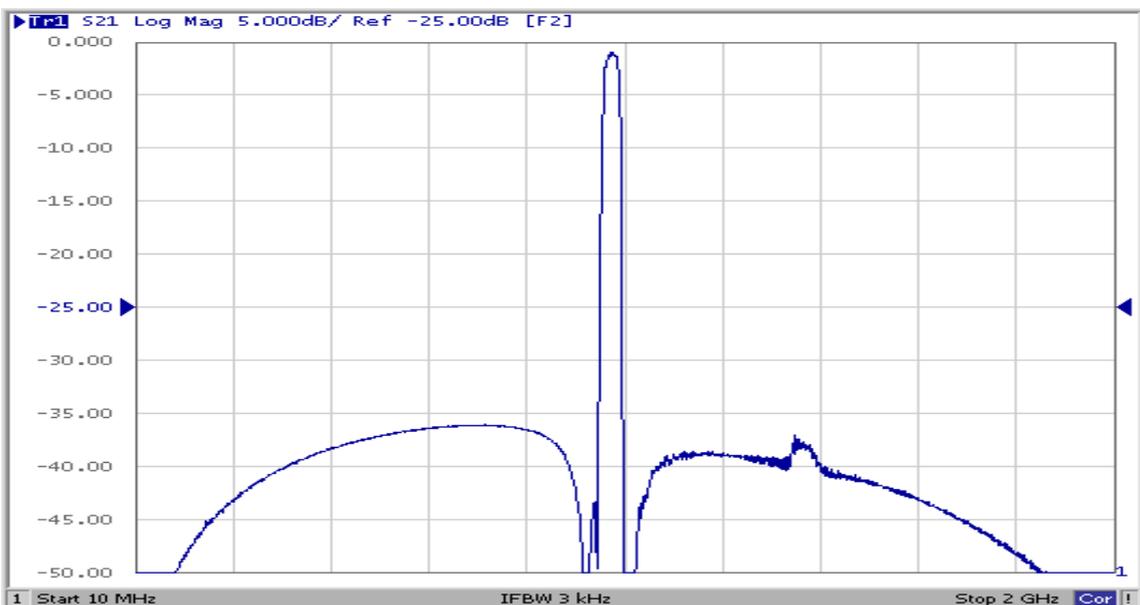
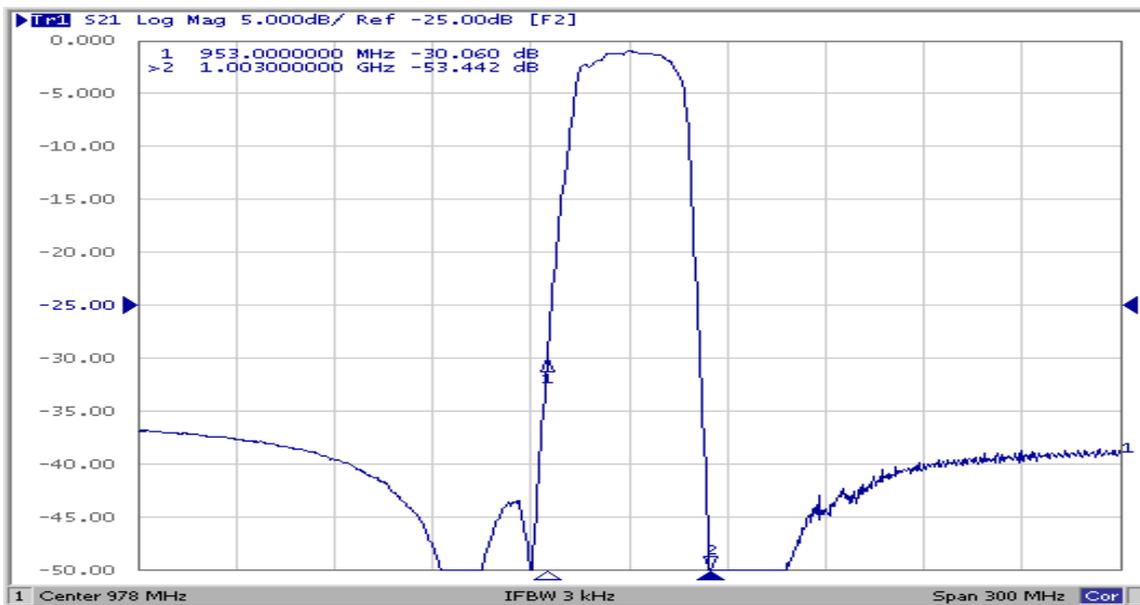
D. MEASUREMENT CIRCUIT:



E. PCB Footprint:

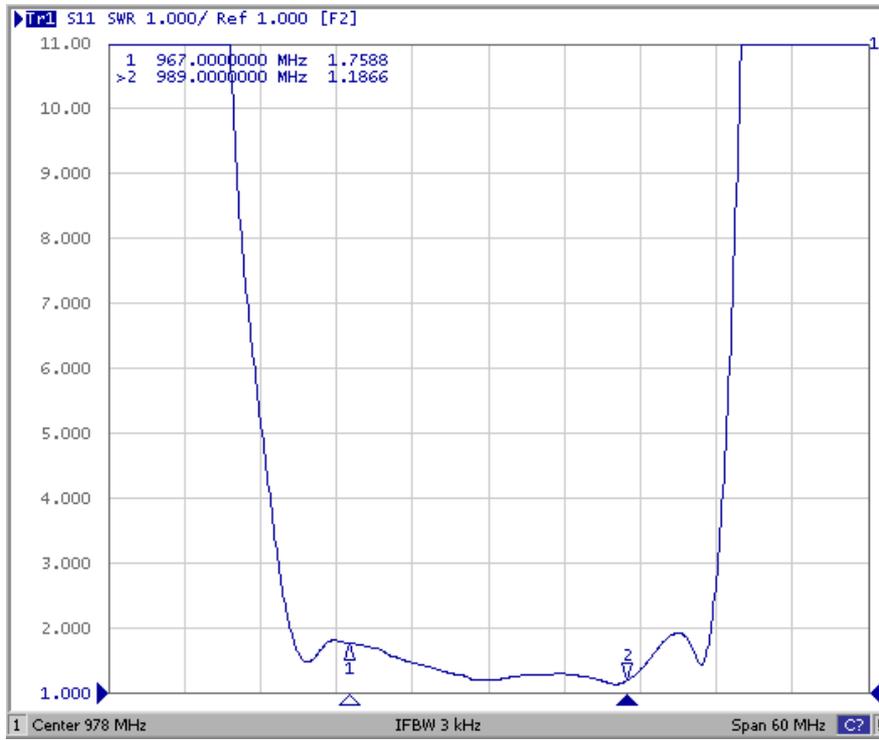


F. Frequency Characteristics :

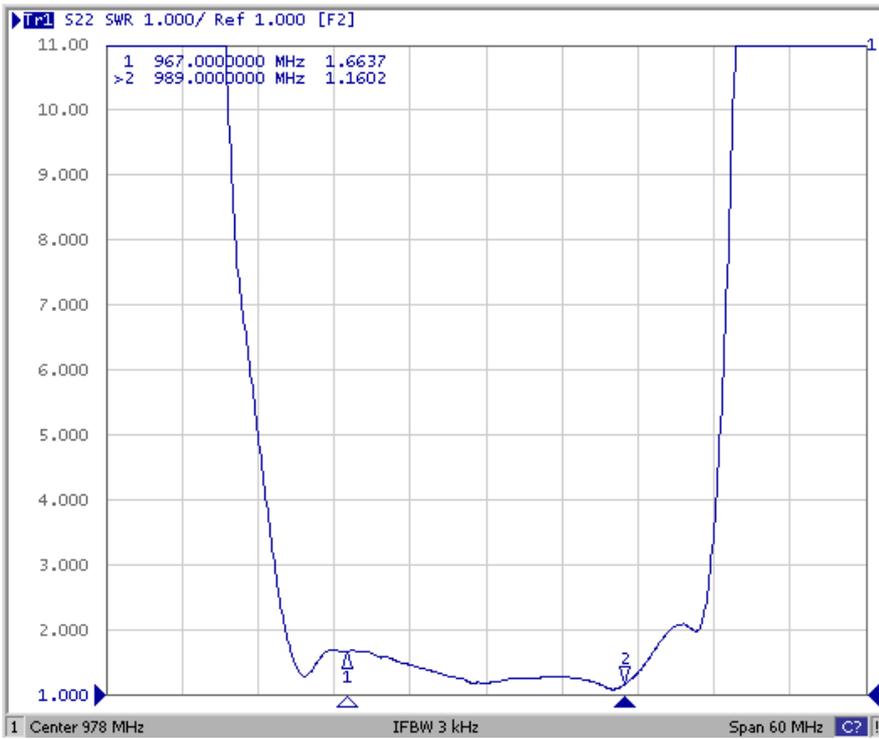


Reflection Functions :

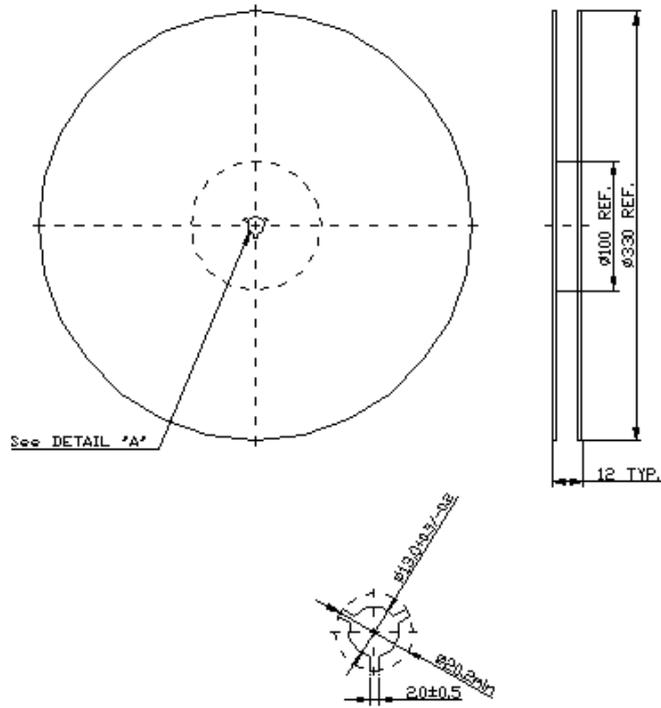
S11



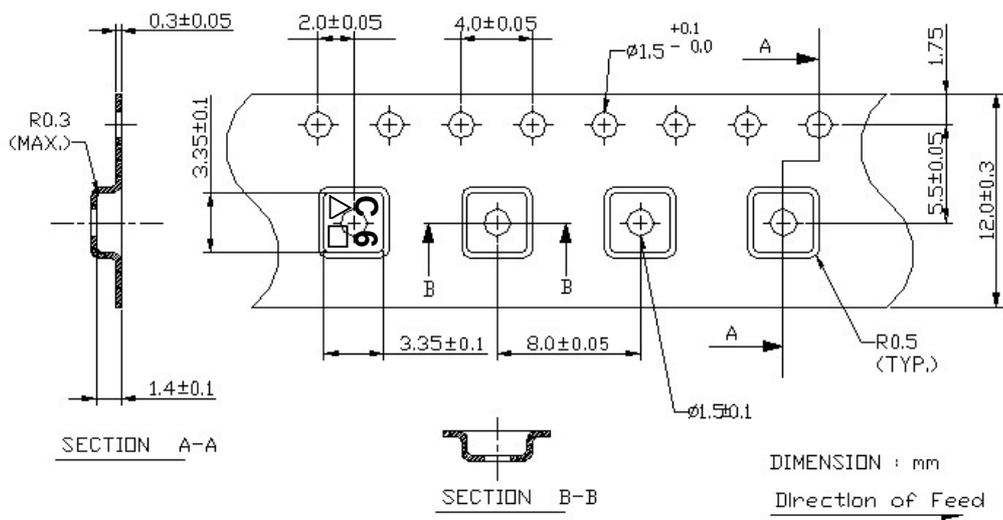
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G. PACKING:
1. REEL DIMENSION



2. TAPE DIMENSION



H. RECOMMENDED REFLOW PROFILE :

1. Preheating shall be fixed at 150~180°C for 60~90 seconds.
2. Ascending time to preheating temperature 150°C shall be 30 seconds min.
3. Heating shall be fixed at 220°C for 50~80 seconds and at 245~260°C peak (min. 10sec).
4. Time : 2 times.

