



# TAI-SAW TECHNOLOGY CO., LTD.

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## Approval Sheet For Product Specification

Issued Date: Oct. 15, 2001

Product Name: SAW Filter 947.5 MHz SMD 3.0 SQ for GSM

TST Parts No.:TA947FG

Customer Parts No.:\_\_\_\_\_

Company:_____
Division:_____
Approved by :_____
Date:_____

Checked by:\_\_\_\_\_ Bob Chau

Approval by:\_\_\_\_\_ Vincent Lee

Date:\_\_\_\_\_ Oct.15,2001



# 台灣嘉碩科技股份有限公司

TAI-SAW TECHNOLOGY CO., LTD.

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## SAW Filter 947.5 MHz for Mobile Communication

MODEL NO.: TA947FG ~ Low Loss type ~

REV. NO.:2

### A. MAXIMUM RATING:

1. Input Power Level: 10 dB<sub>m</sub>
2. DC voltage: 0 V
3. Operating Temperature: -30°C to +85°C
4. Storage Temperature: -40°C to +85°C

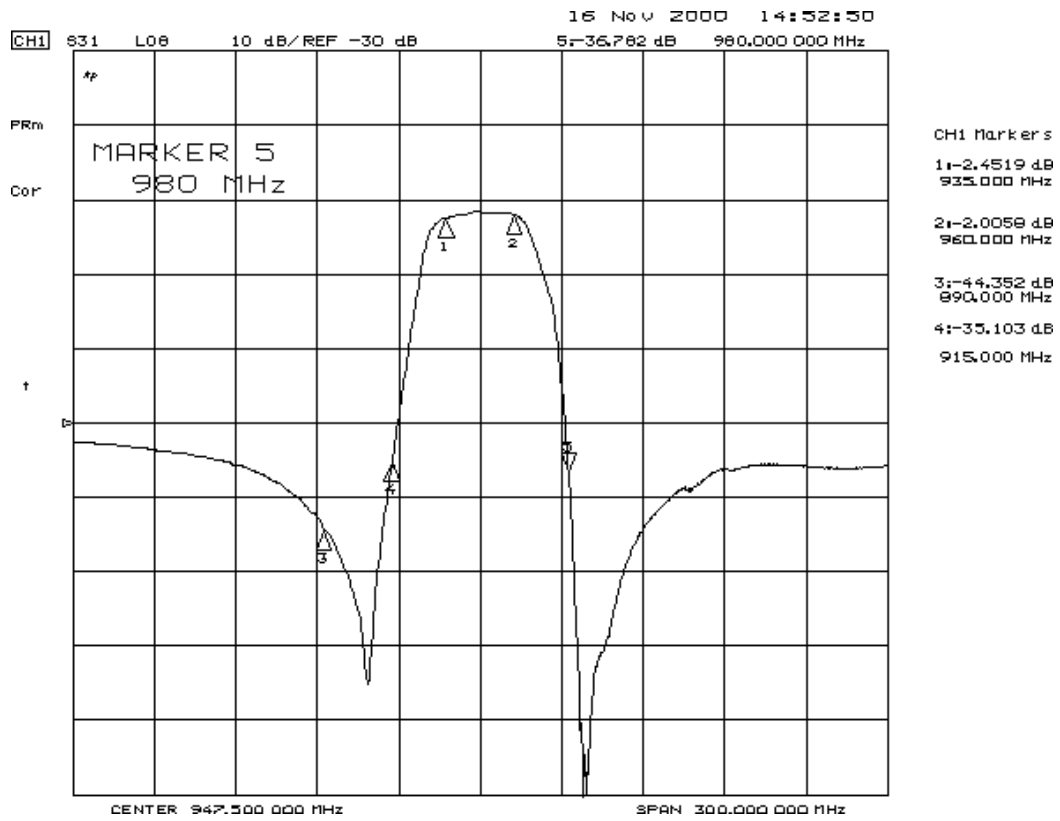
RoHS Compliant  
Lead free  
Lead-free soldering

### B. ELECTRICAL CHARACTERISTICS:

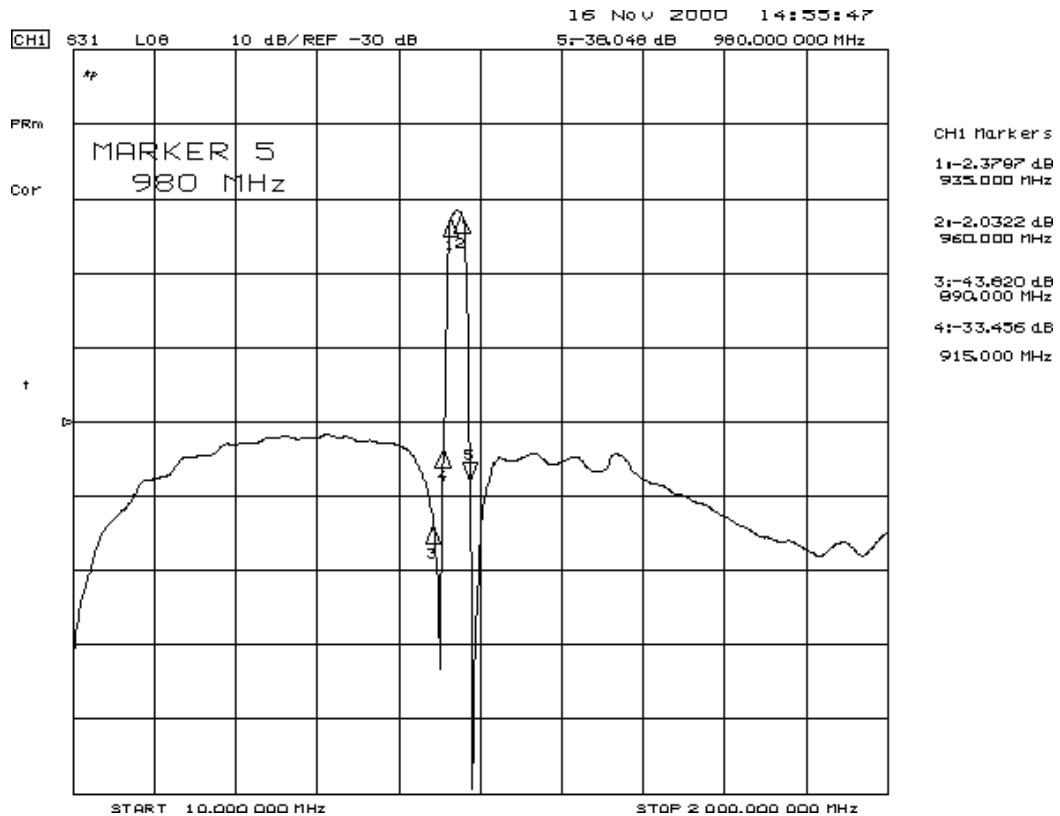
Characteristics		Min.	Typ.	Max.
<b>Center frequency</b>	<b>F<sub>c</sub></b> (dB)	-	947.5	-
<b>Insertion loss</b> within 935 ~960 MHz	<b>IL</b> (dB)	-	2.4	3.0
<b>Amplitude ripple</b> (p-p) within 935 ~ 960 MHz	(dB)	-	1.0	2.0
<b>Attenuation</b> (Reference level from 0 dB)				
10 ~ 890	MHz (dB)	28.0	32.0	-
890 ~ 915	MHz (dB)	20.0	35.0	-
980 ~ 1025	MHz (dB)	15.0	30.0	-
1025 ~ 2000	MHz (dB)	30.0	34.5	-
<b>VSWR</b> within	935 ~960 MHz	-	1.9	2.5
<b>Source impedance</b>	Z <sub>s</sub> (Ω)	-	50	-
<b>Load impedance</b>	Z <sub>L</sub> (Ω)	-	50	-

Note1. No matching network required for operation at 50 Ω

### C. Frequency Characteristics :

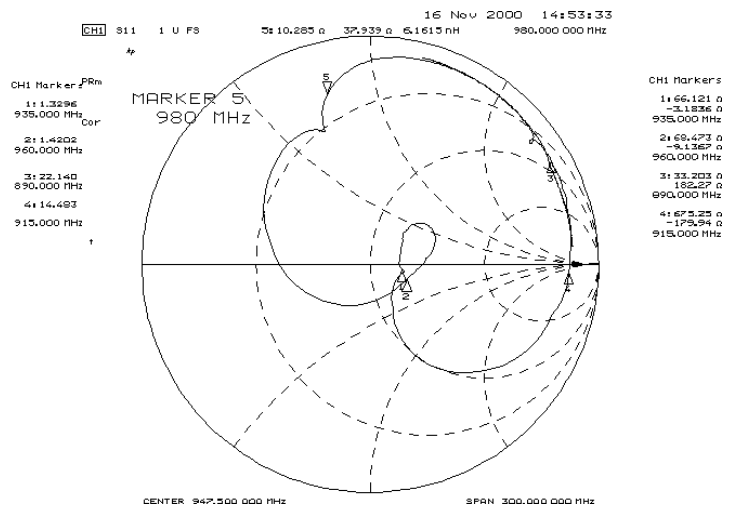
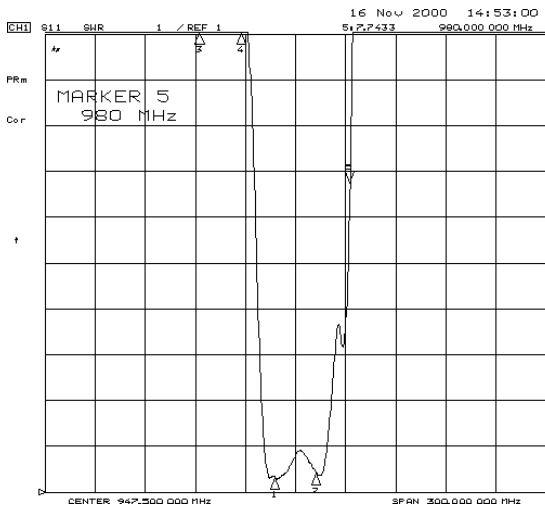


(wideband)

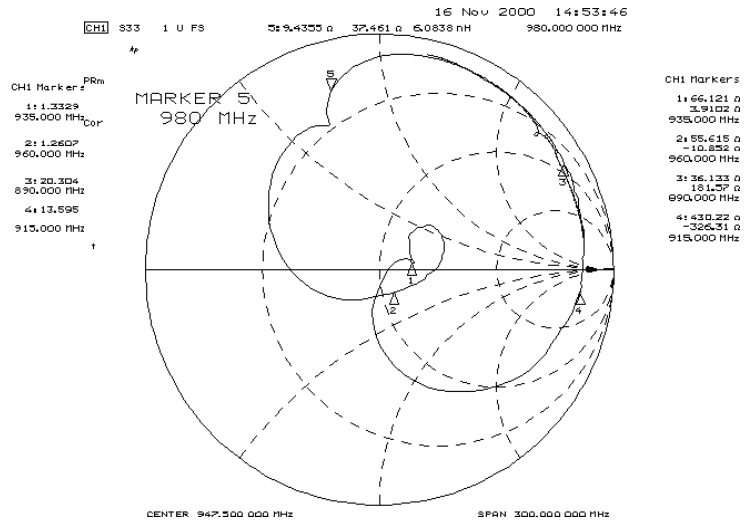
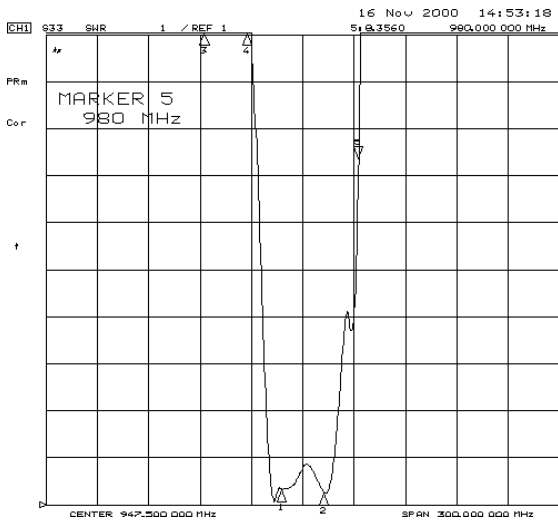


## D. Reflections Functions :

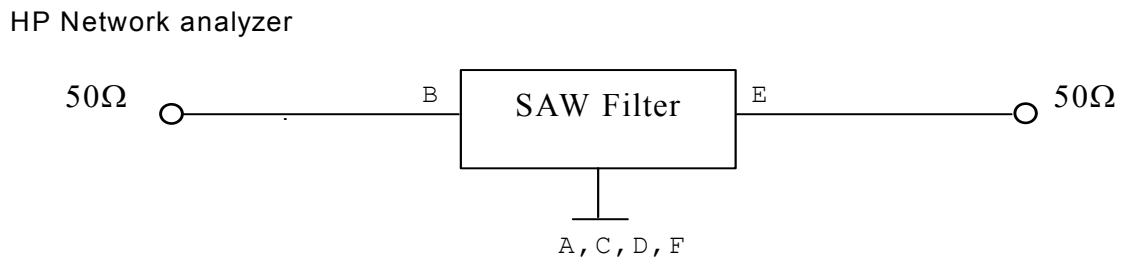
### S11 VSWR



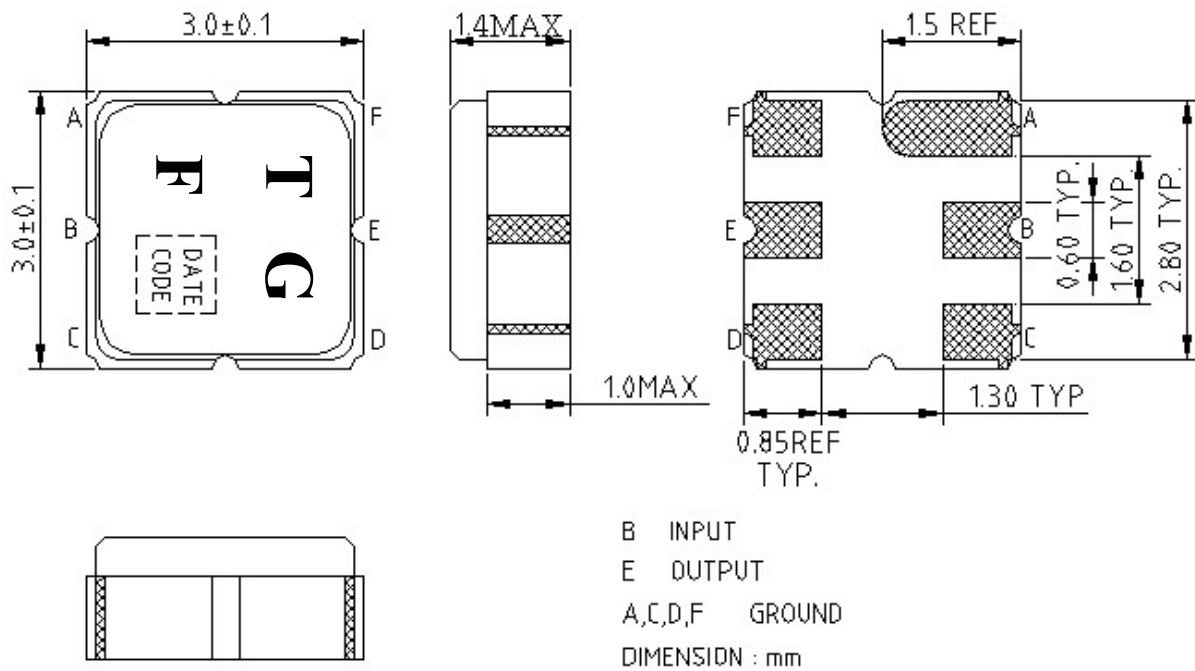
### S22 VSWR



**E. MEASUREMENT CIRCUIT:**



**F. OUTLINE DRAWING:**





## G. Reflow Profile:

1. Preheating shall be fixed at 140 ~ 160 °C for 60 ~ 90 seconds.
2. Ascending time to preheating temperature 150 °C shall be 30 seconds min.
3. Heating shall be fixed at 200 °C for 50 ~ 60 seconds and at 230±10 °C peak.

