



TAI-SAW TECHNOLOGY CO., LTD.

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Approval Sheet For Product Specification

Issued Date:

Product Name: Low-Loss 140MHz IF SAW Filter (BW=10 MHz)

TST Parts No.: TB0203A

Customer Parts No.: _____

Company: _____

Division: _____

Approved by : _____

Date: _____

Checked by: _____ Vincent-WT Chiu

Approval by: _____ Francis Chen

Date: _____ 06 Nov. 2003



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Low-Loss 140 MHz IF SAW Filter (SMD 13.3×6.5 mm)

Model No.: TB0203A

Rev. No.:2

A. Maximum Rating:

RoHS Compliant
Lead free
Lead-free soldering

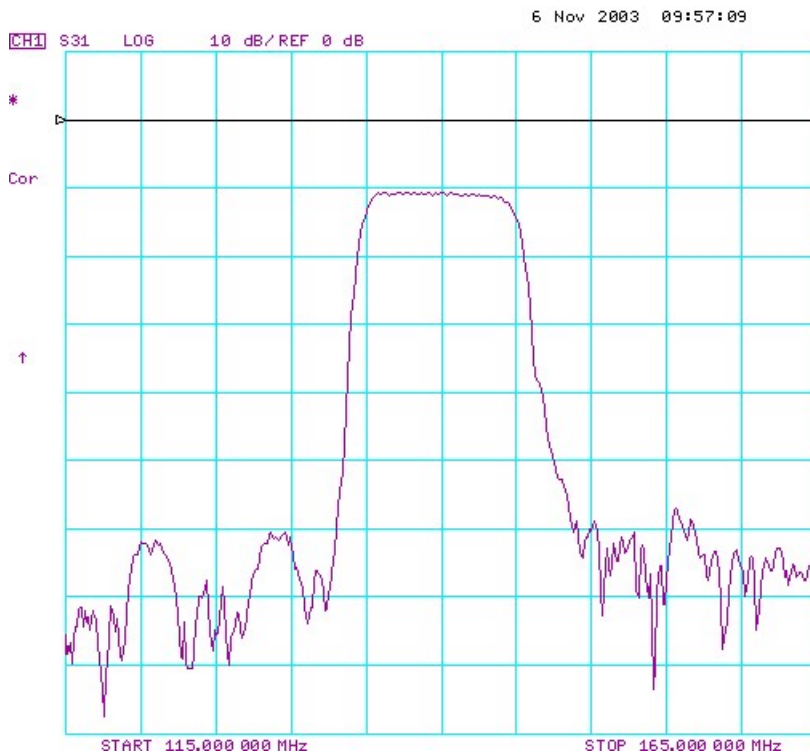
1. Input Power Level: +20 dB_m
2. Operating Temperature: -10°C to +70°C
3. Storage Temperature: -40°C to +85°C

B. Electrical Characteristics:

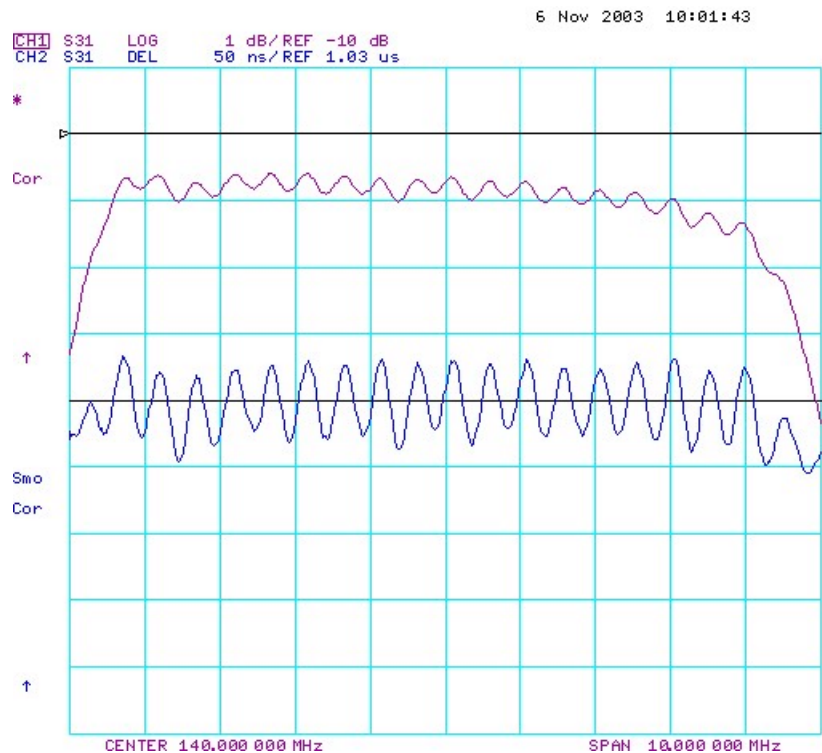
Parameters	Unit	Min.	Typical	Max.
Center frequency, F_c	MHz	139.6	140	140.4
Insertion Loss, IL	dB	-	10.5	11.5
1.5 dB Bandwidth	MHz	8.9	9.3	-
3 dB Bandwidth	MHz	9.4	9.9	-
35 dB Bandwidth	MHz	-	13.5	14.5
Relative Attenuation:				
10 to 132 MHz	dB	45	50	
149 to 260 MHz	dB	40	47	
Amplitude ripple within $F_c \pm 3.6$ MHz	dB	-	0.65	1.0
Group Delay ripple within $F_c \pm 3.6$ MHz	nsec	-	60	150
Substrate Material	-	-	YZ-LN	-
Temperature Coefficient of frequency	ppm/ °C	-	-94	-

C. Frequency Characteristics:

(1) Frequency Response



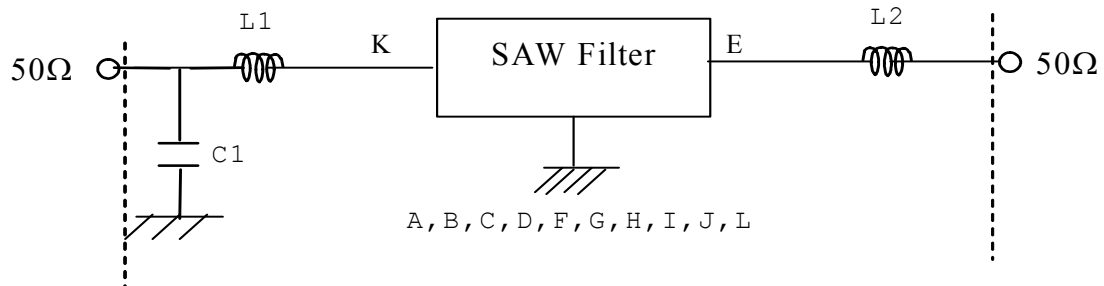
(2) Passband response and Group Delay Variation



D. Measurement Circuit:

Source and load impedance: $50\ \Omega$

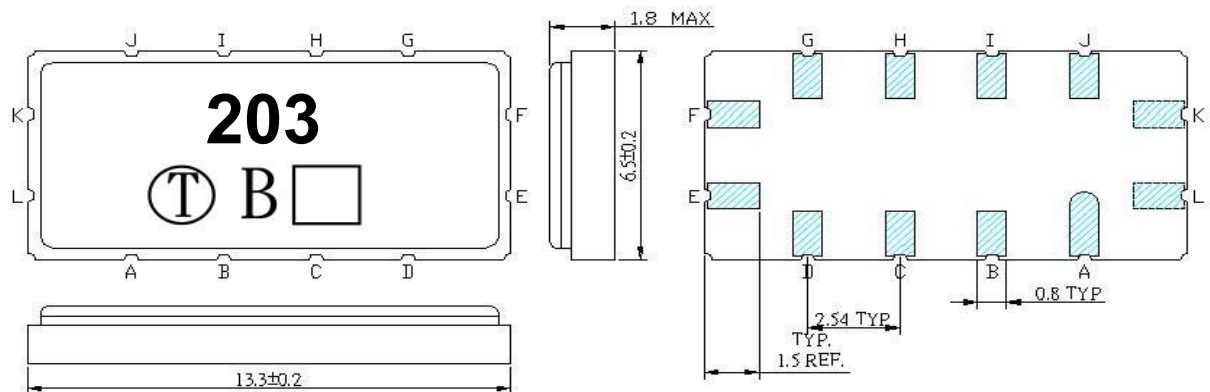
Network analyzer



Input: $L1=82\text{H}$, $Q>40$; $C1=33\text{ pF}$

Output: $L2=56\text{ nH}$, $Q>40$

E. Outline Drawing:



Unit: mm

Pin K: RF Input

Pin E: RF Output

Pin L: Input Ground

Pin F: Output Ground

Pin A, B, C, D, G, H, I, J: To be Ground

□: Date code