



TAI-SAW TECHNOLOGY CO., LTD.

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Approval Sheet For Product Specification

Issued Date: 2, 27, 2004

Product Name: SAW Filter 210.38 MHz SMD 13.3x6.5 mm

TST Parts No.:TB0241A

Customer Parts No.:_____

Company:_____

Division:_____

Approved by :_____

Date:_____

Checked by:_____ Asin Lin

Approval by:_____ Francis Chen

Date:_____ 2,27, 2004



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SAW Filter 210.38MHz

MODEL NO.: TB0241A

REV. NO.:1

A. MAXIMUM RATING:

1. Input Power Level : 10 dBm
2. D.C voltage: 3 V
3. Operating Temperature: -30°C to 80°C
4. Storage Temperature: -55°C to 125°C

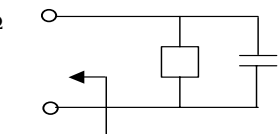
RoHS Compliant
Lead free
Lead-free soldering

B. ELECTRICAL CHARACTERISTICS:

Item	Unit	Min.	Type.	Max.	Note
Center frequency, F_c	MHz	-	210.38	-	
Minimum Insertion Loss, IL	dB	-	8	9	
Amplitude Ripple in $F_c \pm 0.3\text{MHz}$, AR	MHz	-	1.2	1.5	
Phase Linearity in $F_c \pm 0.63\text{MHz}$, RMS	deg	-	3	4	
Attenuation:(Reference level from min IL)					
$F_c \pm 0.63\text{MHz}$	dB	-	-	5	
$F_c -40$ to -20MHz	dB	50	54	-	
$F_c -20$ to -2.5MHz	dB	33	36	-	
$F_c -2.5$ to -1.25MHz	dB	27	30	-	
$F_c +1.25$ to $+2.5\text{MHz}$	dB	27	31	-	
$F_c +2.5$ to $+20\text{MHz}$	dB	33	36		
$F_c +20$ to $+40\text{MHz}$	dB	50	55		
Impedance at F_c : Input $Z_{in} = R_{in} // C_{in}$	320Ω//13.6pF				
Output $Z_{out} = R_{out} // C_{out}$	176Ω//15pF				

Source impedance

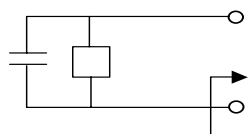
50Ω



$Z_{IN}=320\Omega // 13.6\text{pF}$

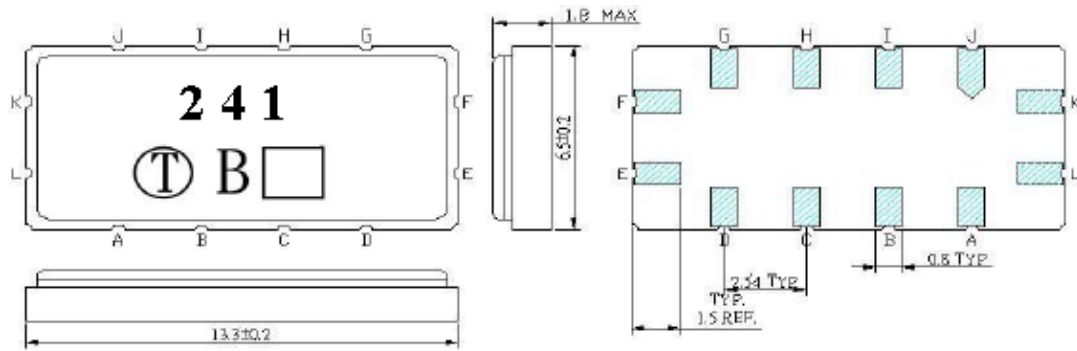
Load impedance

50Ω



$Z_{OUT}=176\Omega // 15\text{pF}$

C.OUTLINE DRAWING:

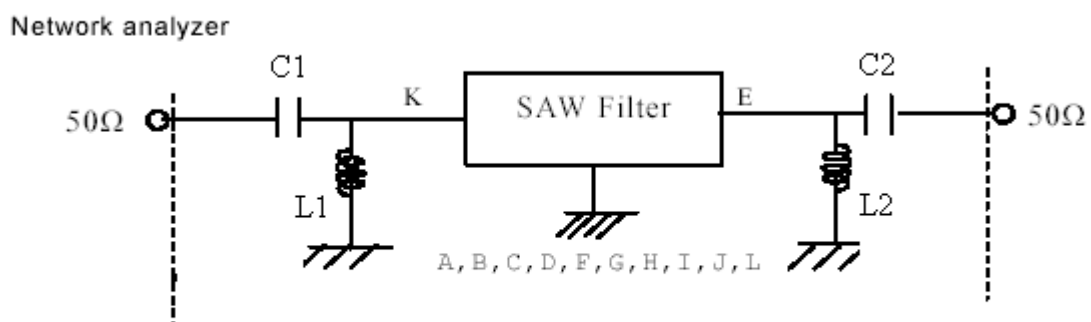


Unit: mm

-
- 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

D. MEASUREMENT CIRCUIT:

50 Ohm Test circuit



Input L1=60 nH, C1=3.9 pF
Output L2=60nH, C2=3.9 pF

E. Frequency Characteristics :



Fig-1 S21 Response Horizontal: 500KHz/Div
Vertical: 8dB/Div



Fig-2 1 S21 Response Horizontal: 180KHz/Div
Vertical: 1 dB/Div