

**210.380 MHz SAW Filter**

**Model: TB0241A**

**Part No: MA05597**

**REV NO.: 1**

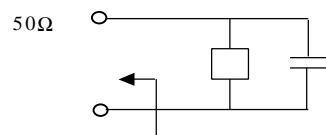
**A. MAXIMUM RATING:**

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

**B. ELECTRICAL CHARACTERISTICS:**

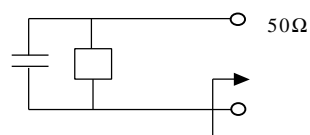
Item	Unit	Min.	Type.	Max.	Note
Center frequency, <b>Fc</b>	MHz	-	210.38	-	
Minimum Insertion Loss, <b>IL</b>	dB	-	8	9	
Amplitude Ripple in Fc 0.3MHz, <b>AR</b>	MHz	-	1.2	1.5	
Phase Linearity in Fc 0.63MHz, <b>RMS</b>	deg	-	3	4	
Attenuation:(Reference level from min IL)					
Fc 0.63MHz	dB	-	-	5	
Fc -40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

Source impedance



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

Load impedance

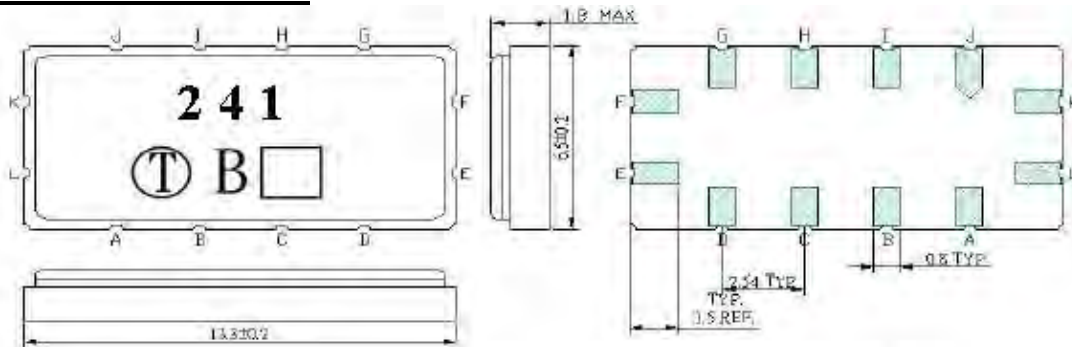


$$Z_{OUT}=176\Omega // 15pF$$

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**C. OUTLINE DRAWING:**

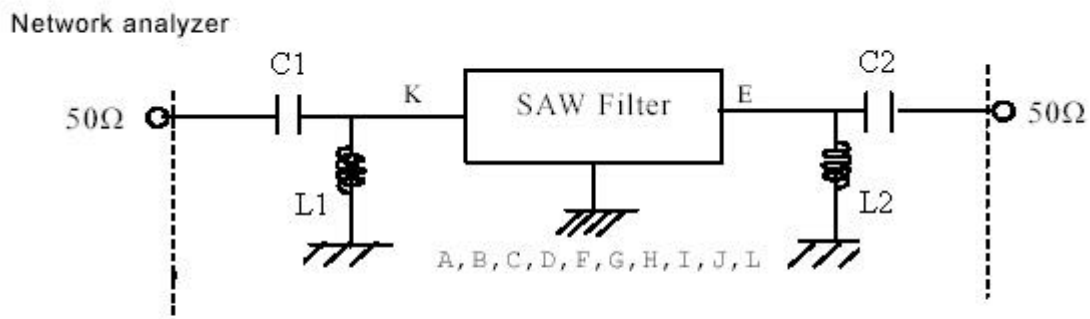


Unit: mm

- 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

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**E. FREQUENCY CHARACTERISTICS:**



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

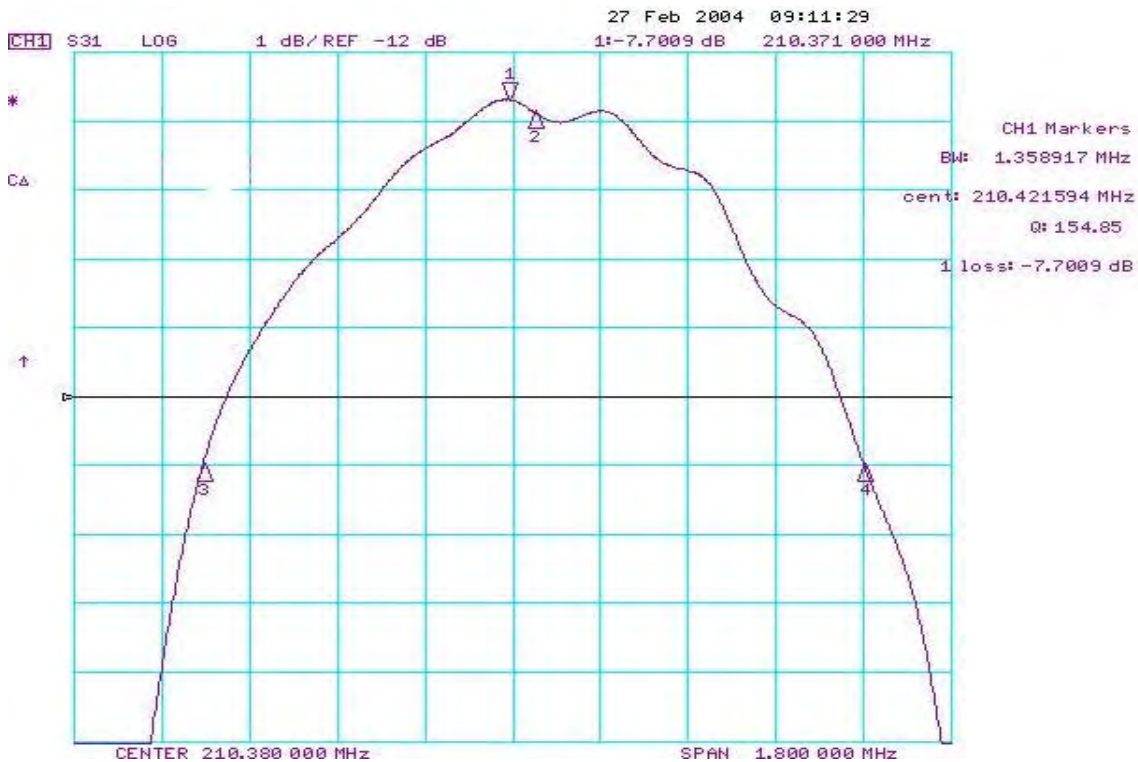


Fig-2 1 S21 Response Horizontal:180KHz/Div. Vertical: 1 dB/Div