

---

**SAW Filter 168.0MHz**

**Model: TB0727A**

**Part No: MP02660**

**REV. NO.: 1**

---

**A. MAXIMUM RATING:**

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

**B. CHARACTERISTICS:**

Item	Unit	Min.	Typ.	Max.
Center frequency, Fc	MHz	-	168	-
Insertion Loss, IL	dB	-	12.2	13.5
-1dB BW	MHz	-	20.9	-
-3dB BW	MHz	20	22.4	-
Upper -35dB Band edge	MHz	-	181.7	183
Lower -35dB Band edge	MHz	153	155.1	-
Passband ripple at Fc +/- 8MHz	dB	-	0.4	1.0
Group delay ripple at Fc +/- 8MHz	ns	-	35	160
Absolute delay	us	-	0.85	1.0
Temperature Coefficient	ppm/°C	-	-72	-
Source / Load Impedance	Ohm	-	50	-

**SAW Filter 168.0MHz**  
Part No: **MP02660**

**Model: TB0727A**  
REV. NO.: 1

**C. FREQUENCY CHARACTERISTICS:**

(1) S21 Response:(span 180MHz)

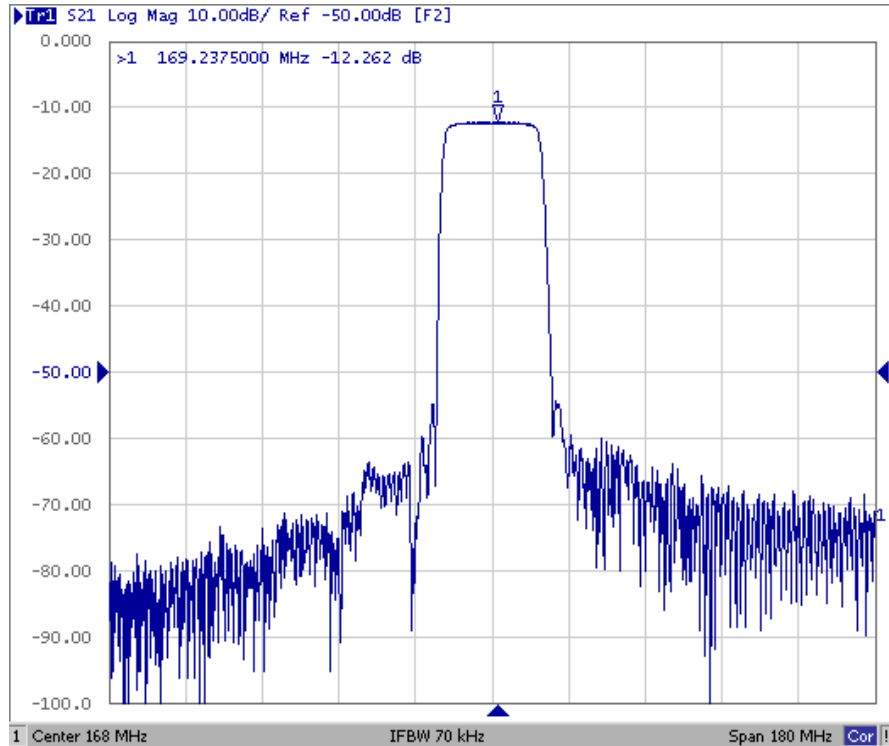


Fig1. Horizontal: 18MHz/Div Vertical: 10dB/Div

(2) Pass band Response:

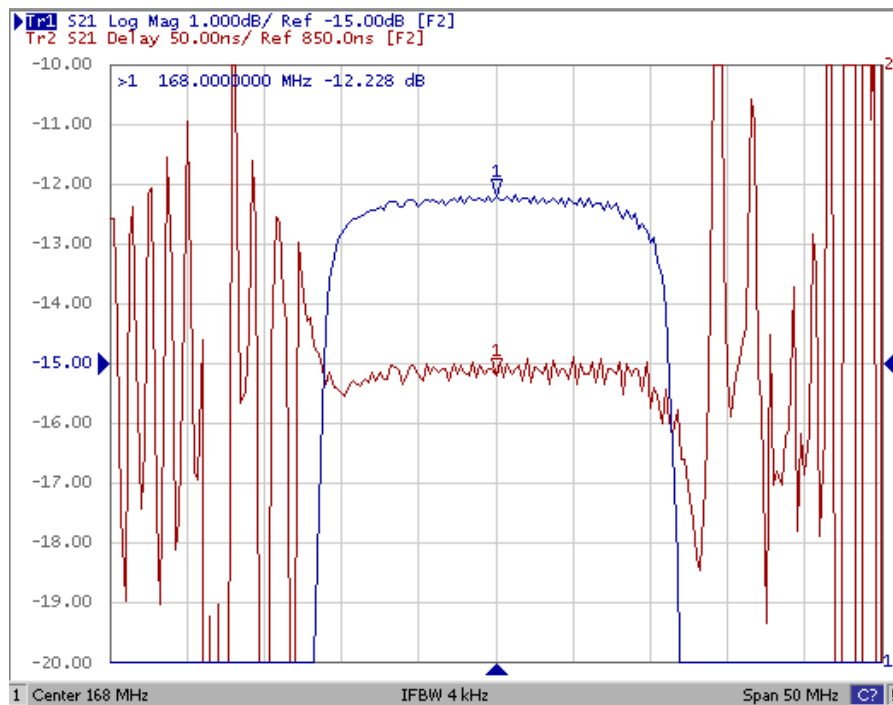
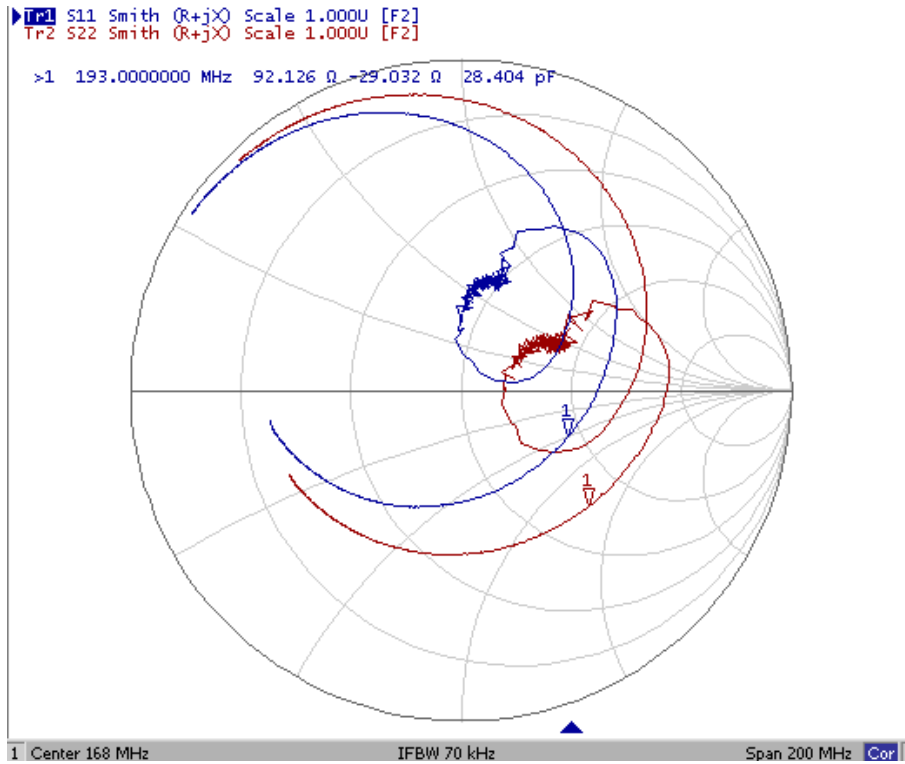


Fig2. Horizontal: 5MHz/Div Vertical: 1dB/Div. Vertical: 50ns/Div

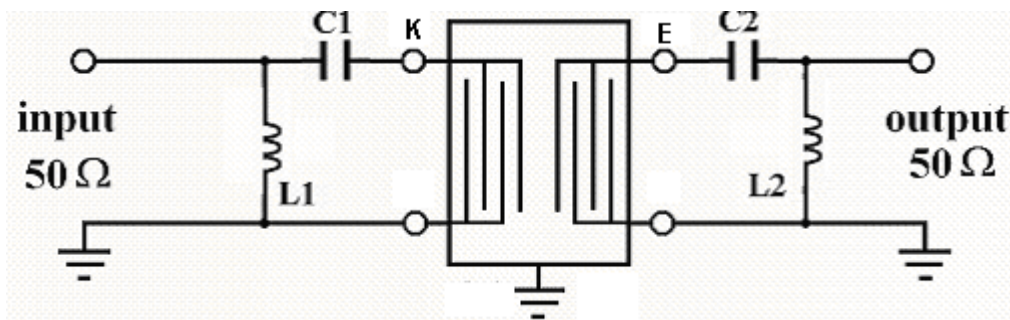
**SAW Filter 168.0MHz**  
**Part No: MP02660**

**Model: TB0727A**  
**REV. NO.: 1**

(3) Smith chart



**D. MATCHING CIRCUIT:**



L1= 27nH L2=39nH C1=82pF C2=82pF

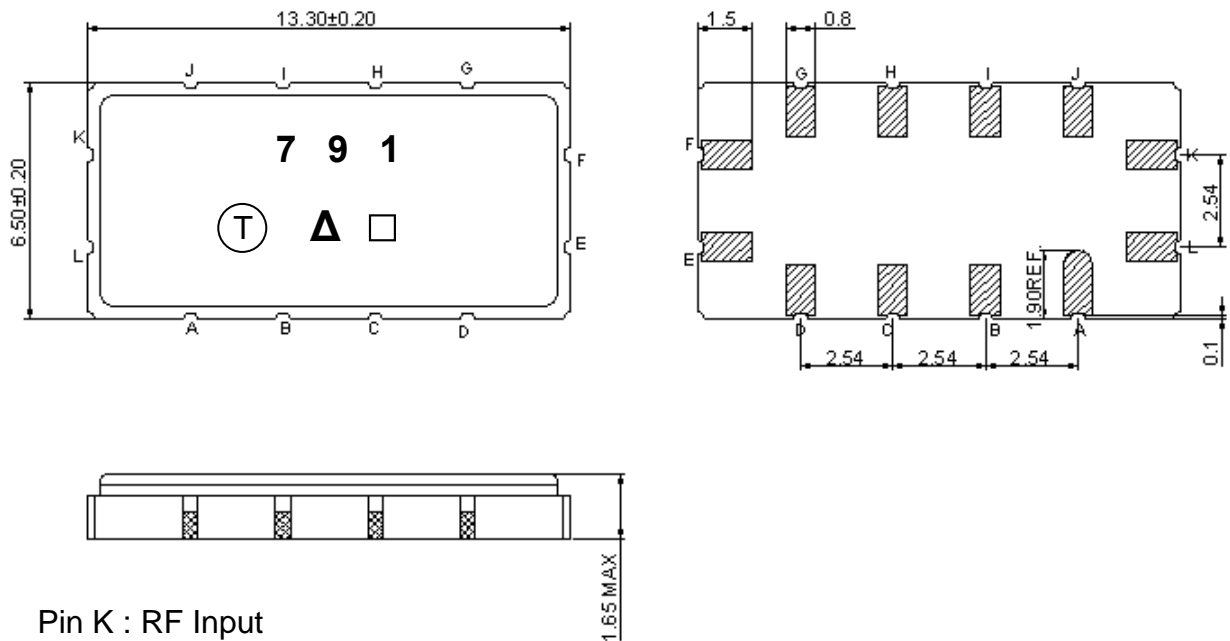
**SAW Filter 168.0MHz**

**Model: TB0727A**

**Part No: MP02660**

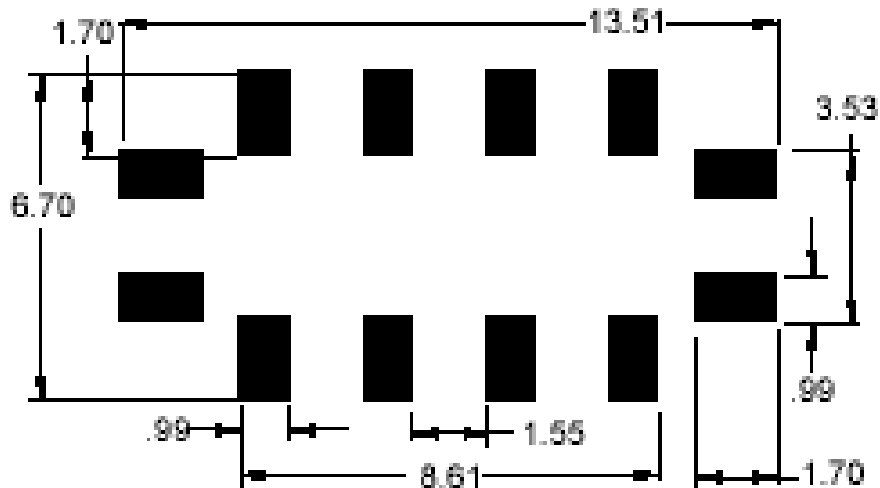
**REV. NO.: 1**

**E. OUTLINE DRAWING:**



- Pin K : RF Input
- Pin E : RF Output
- Pin A, B, C, D, F, G, H, I, J, L :  
Ground

**F. PCB FOOTPRINT:**





**SAW Filter 168.0MHz**

**Model: TB0727A**

**Part No: MP02660**

**REV. NO.: 1**

**H. RECOMMENDED REFLOW PROFILE:**

