

**SAW Filter 230MHz**

**Model: TB0837A**

**Part No: MP02098**

**REV NO.: 1.1**

**A. MAXIMUM RATING:**

1. Operating Temperature: -40 °C ~ +85 °C
2. Storage Temperature: -40 °C ~ +85 °C
3. Input power: 10dBm

**B. CHARACTERISTICS :**

Ambient Temperature: 25 °C

| Characteristics  | Value |      |      | Note |
|--|-------|------|------|------|
|  | Min.  | Typ. | Max. |      |
| Center frequency $F_c$ MHz                                 | -     | 230  | -    | -    |
| Minimum Insertion loss I.L. dB                             | -     | 10.0 | 13.0 | -    |
| Passband ripple ( $F_c \pm 5.0\text{MHz}$ ) dB             | -     | 0.5  | 1.00 | -    |
| 1 dB Bandwidth MHz   | 10.0  | 13.4 | -    | -    |
| 40 dB Bandwidth MHz  | -     | 21.2 | 24.0 | -    |
| Temp. Coefficient ppm/°C                                   | -     | -94  | -    | -    |
| Attenuation:( Reference level from minimum insertion loss) |       |      |      | dB   |
| 1) 50MHz ~ 135MHz dB                                       | 50    | 64   | -    | -    |
| 2) 165MHz ~ 175MHz dB                                      | 40    | 62   | -    | -    |
| 3) 175MHz ~ 210MHz dB                                      | 40    | 54   | -    | -    |
| 4) 250MHz ~ 265MHz dB                                      | 40    | 54   | -    | -    |
| 5) 265MHz ~ 275MHz dB                                      | 40    | 55   | -    | -    |
| 6) 325MHz ~ 400MHz dB                                      | 50    | 53   | -    | -    |

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**C. FREQUENCY CHARACTERISTICS:**

1.S21 Response: (span : 150MHz)

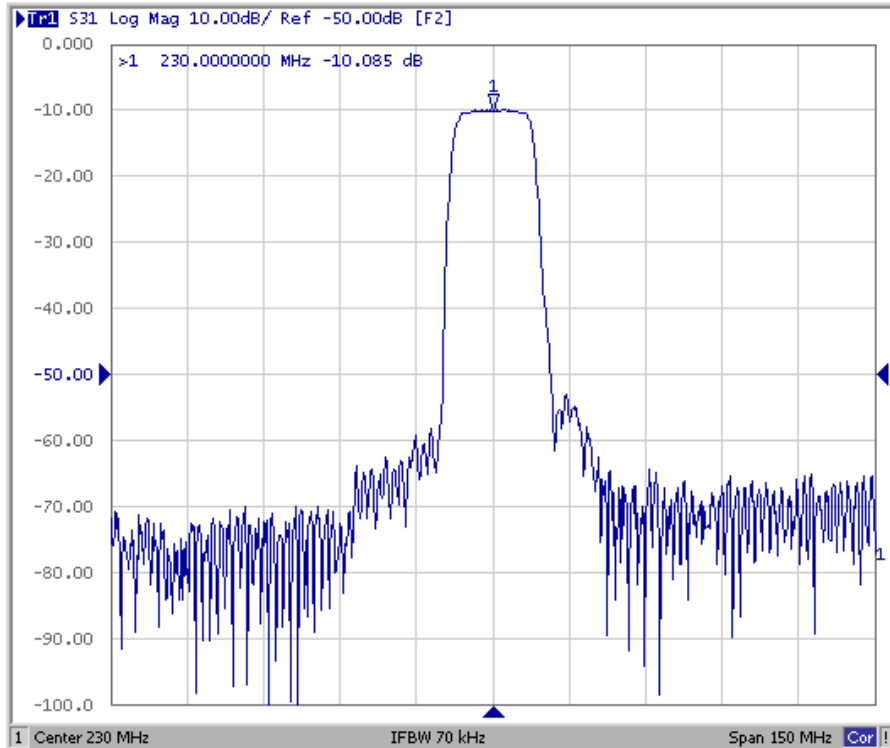


Fig1. Horizontal:15MHz/Div Vertical: 10dB/Div

2. Group-Delay Ripple: (span : 3MHz)

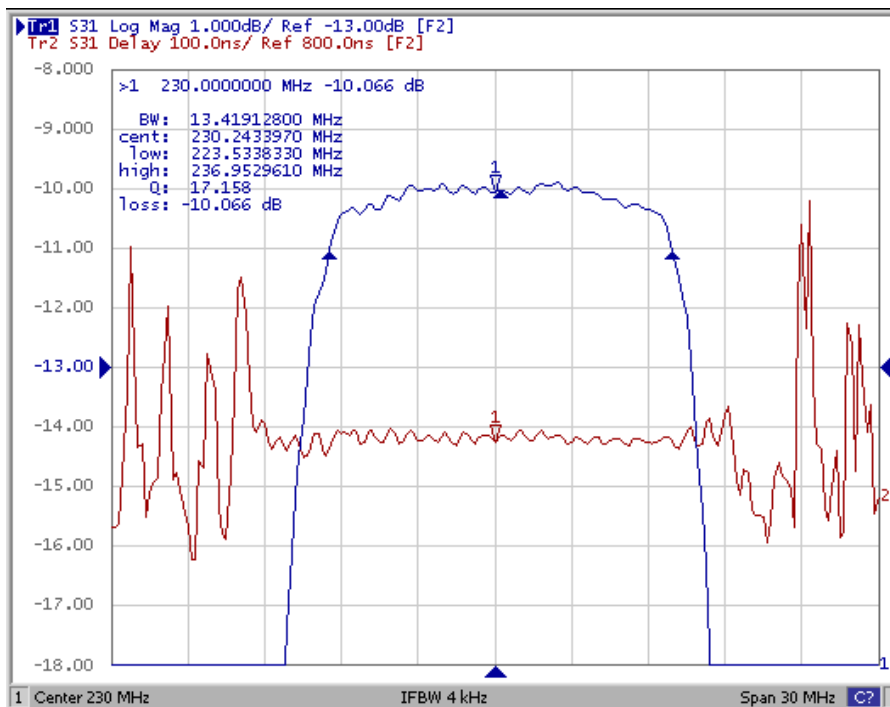
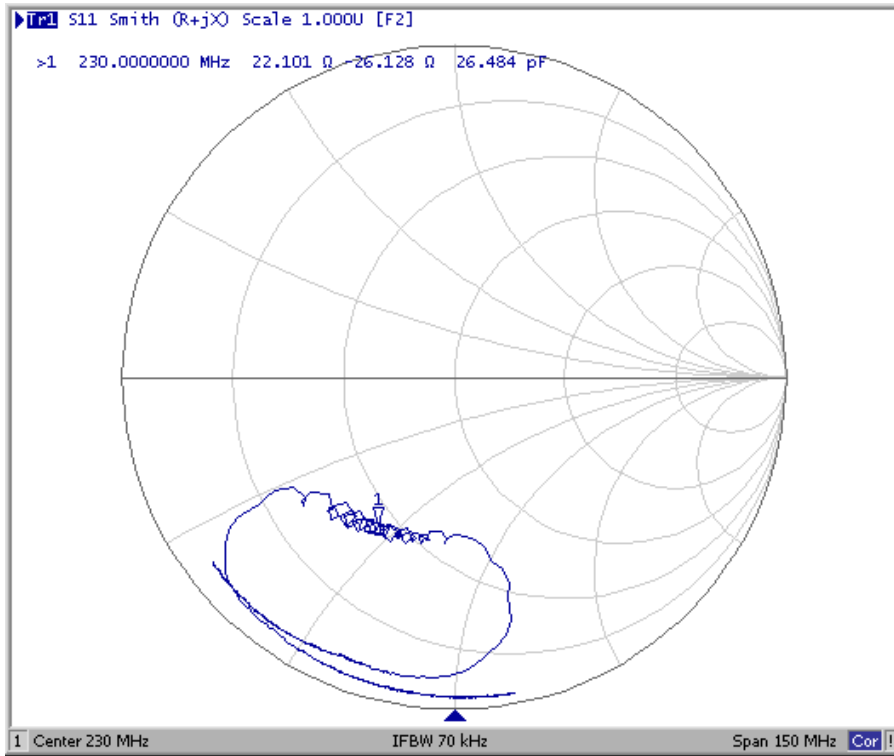


Fig2. Horizontal: 3MHz/Div Vertical: 100nec/Div

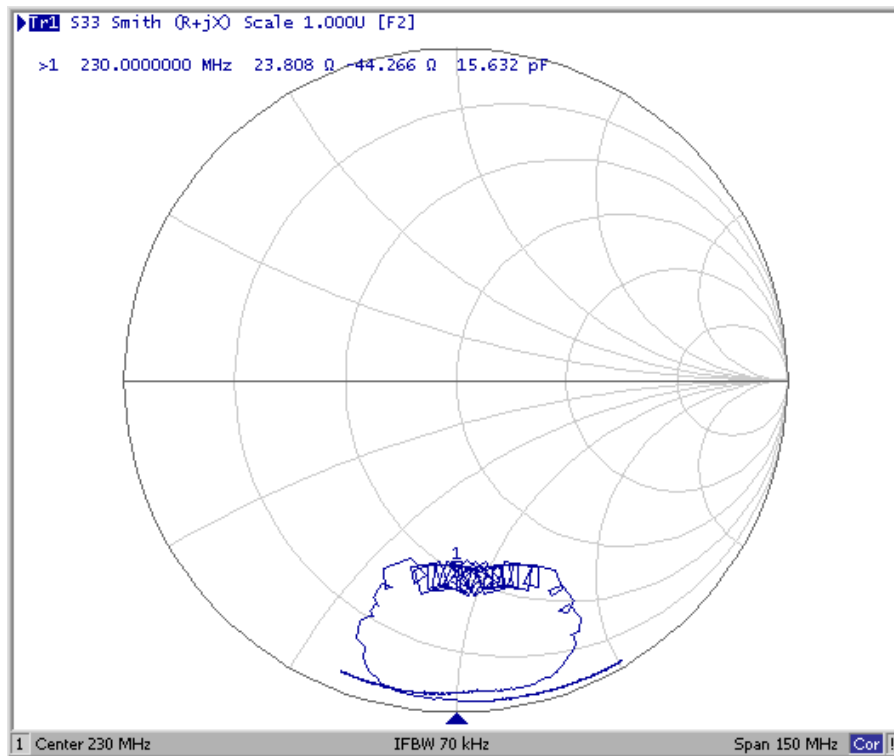
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3. S11 Smith Chart: (span : 150MHz)



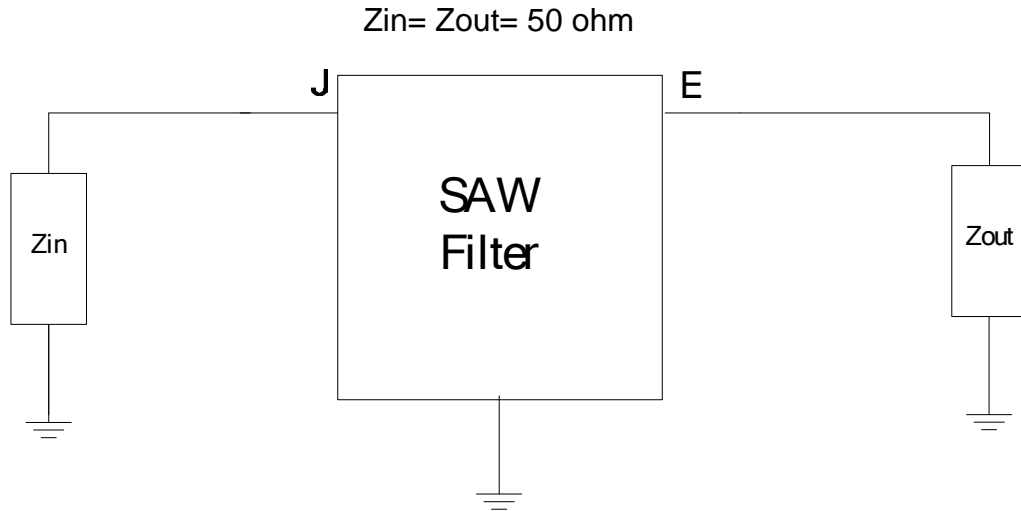
4. S22 Smith Chart (span : 150MHz)



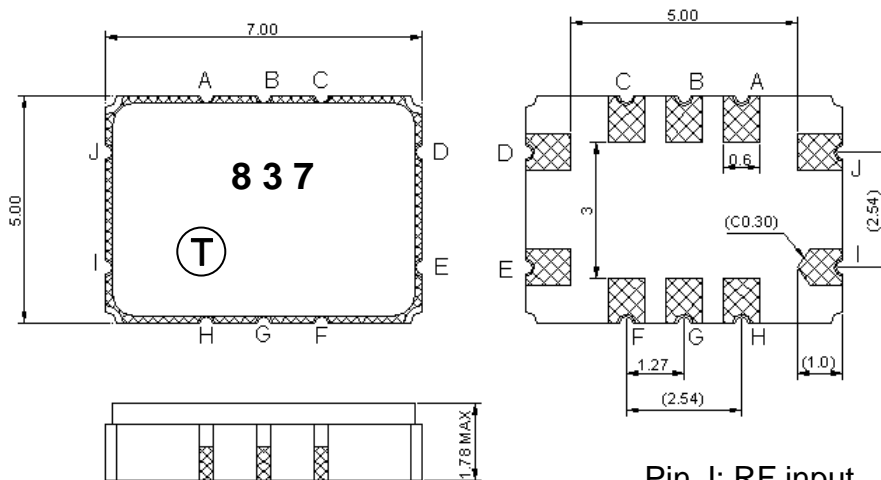
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**E. MEASUREMENT CIRCUIT:**

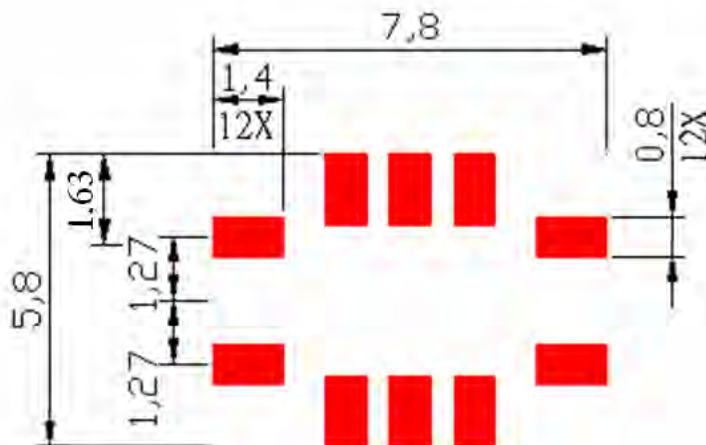


**F. OUTLINE DRAWING:**



Pin J: RF input  
 Pin E: RF output  
 Pin H, G, F, D, C, B, A: Ground

**G. PCB FOOTPRINT**



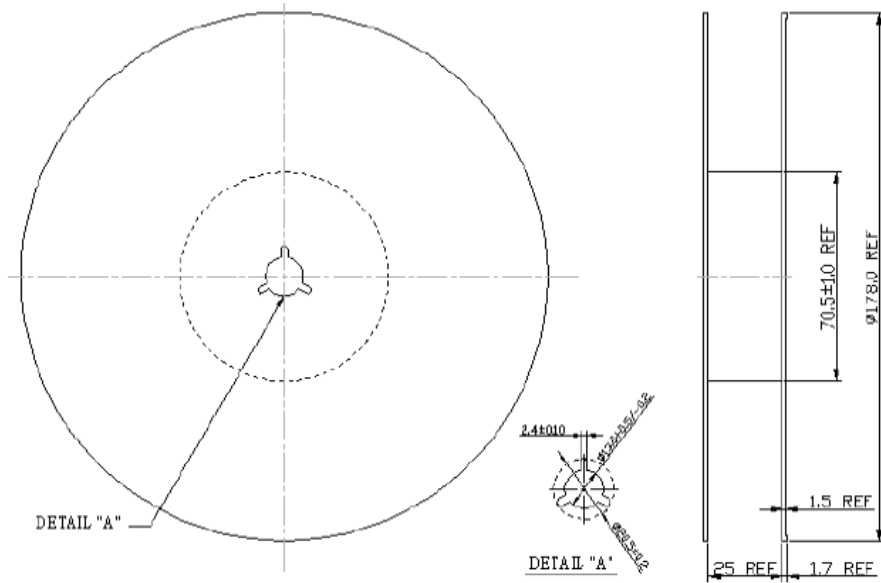
Unit: mm

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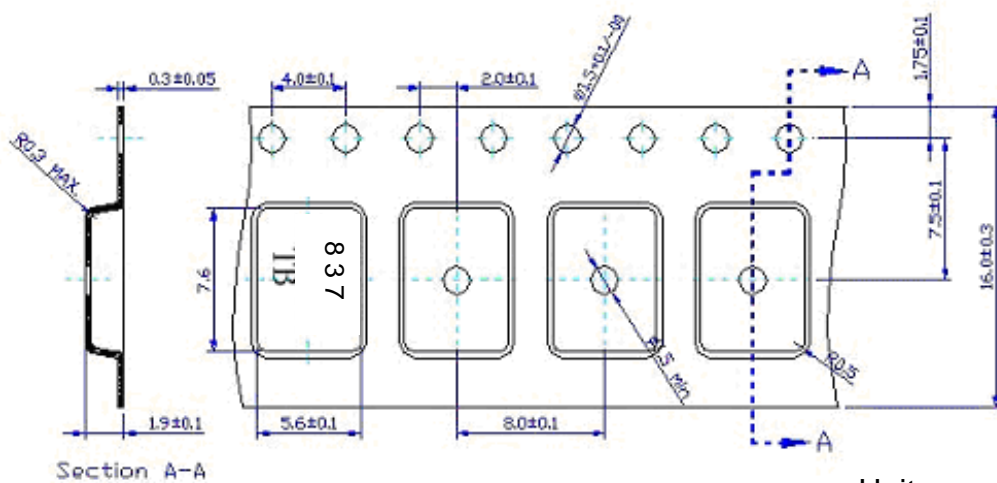
**H. PACKING:**

**1. REEL DIMENSION**



Unit: mm

**2. TAPE DIMENSION**



Unit: mm

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**I. RECOMMENDED REFLOW PROFILE:**

