

**SAW Filter 433.920MHz**

**Model: TA0944C**

**Part No: MP07645**

**Rev No: 1**

**A. MAXIMUM RATING:**

**Electrostatic Sensitive Device (ESD)**

1. Input Power Level: 10 dB<sub>m</sub>
2. DC voltage: 3 V
3. Operating Temperature: -40°C to 85°C
4. Storage Temperature: -40°C to +85° C

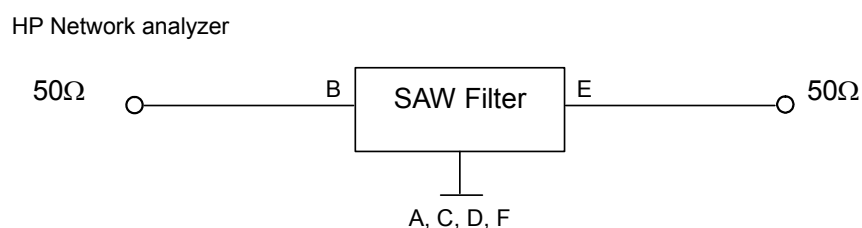
**B. CHARACTERISTICS:**

| Item                                   | Unit | Min. | Typ.   | Max. |
|----------------------------------------|------|------|--------|------|
| Center frequency Fc                    | MHz  | -    | 433.92 | -    |
| Insertion loss (433.12 ~ 434.72MHz) IL | dB   | -    | 1.8    | 2.9  |
| Amplitude ripple (433.12 ~ 434.72MHz)  | dB   | -    | 0.4    | 1.0  |
| VSWR (433.12 ~ 434.72MHz)              | -    | -    | 1.6    | 2.0  |
| Attenuation (Reference level from 0dB) |      |      |        |      |
| 10.0 ~ 380.0MHz                        | dB   | 58   | 61     | -    |
| 380.00 ~ 423.420MHz                    | dB   | 46   | 50     | -    |
| 443.42 ~ 453.420MHz                    | dB   | 25   | 30     | -    |
| 453.42 ~ 460.0MHz                      | dB   | 35   | 40     |      |
| 460.00 ~ 700.0MHz                      | dB   | 50   | 54     |      |
| 700.00 ~ 1000.0MHz                     | dB   | 42   | 46     |      |
| Source impedance Z <sub>S</sub>        | Ω    | -    | 50     | -    |
| Load impedance Z <sub>L</sub>          | Ω    | -    | 50     | -    |

Notes:

1. No matching network required for operation at 50Ω.
2. For SiO<sub>2</sub> coating.

**C. MEASUREMENT CIRCUIT:**

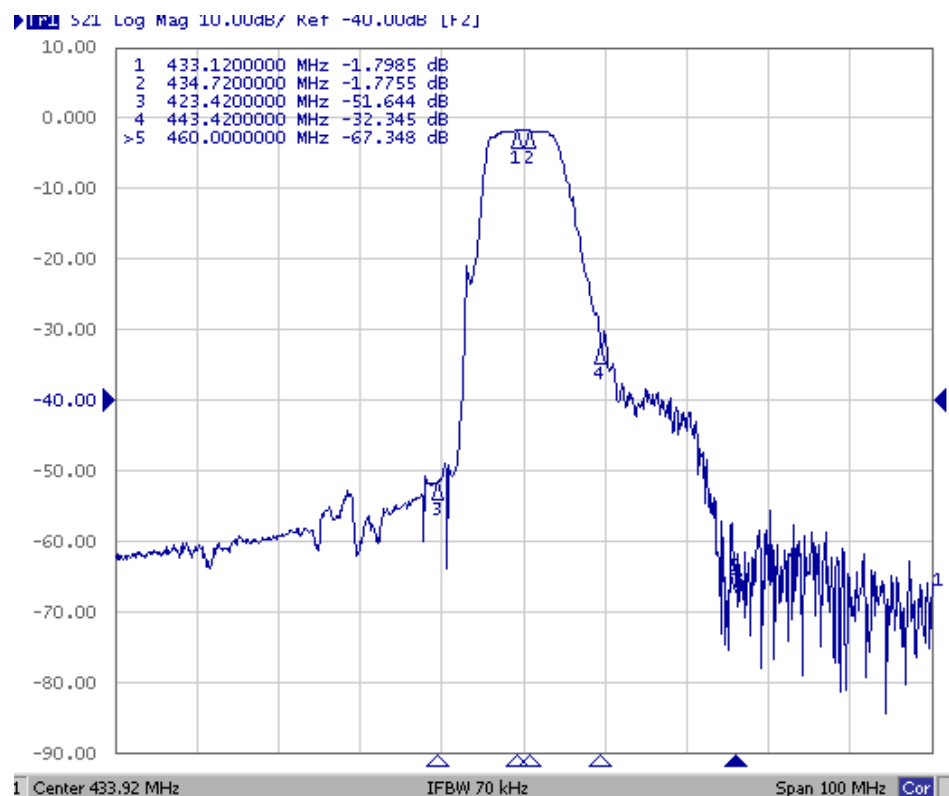
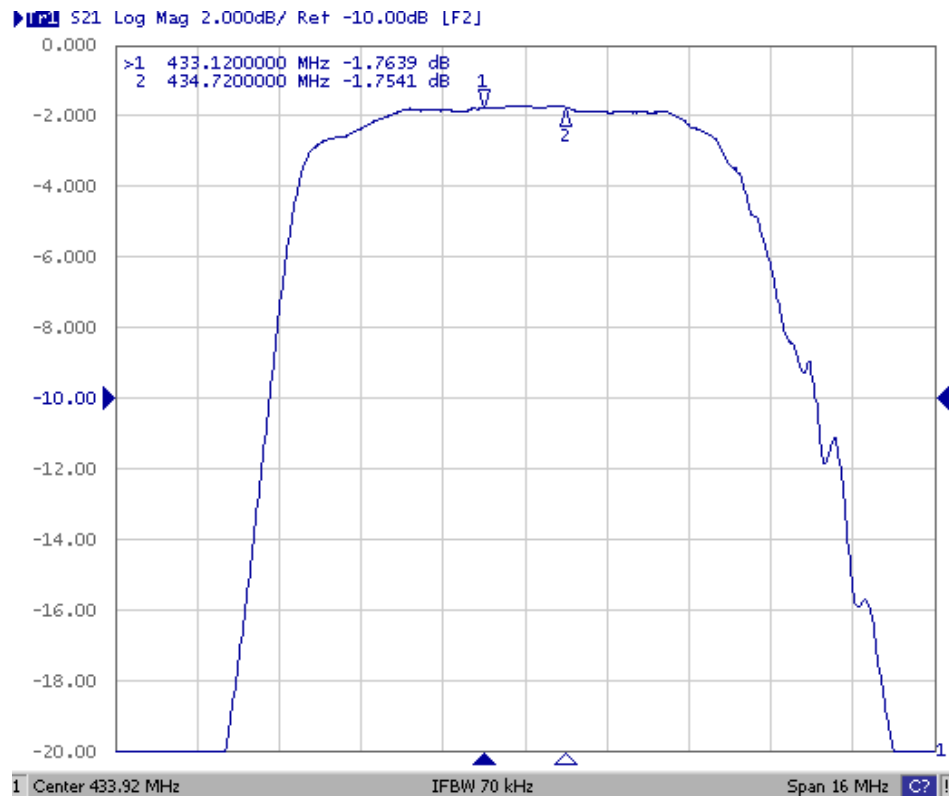


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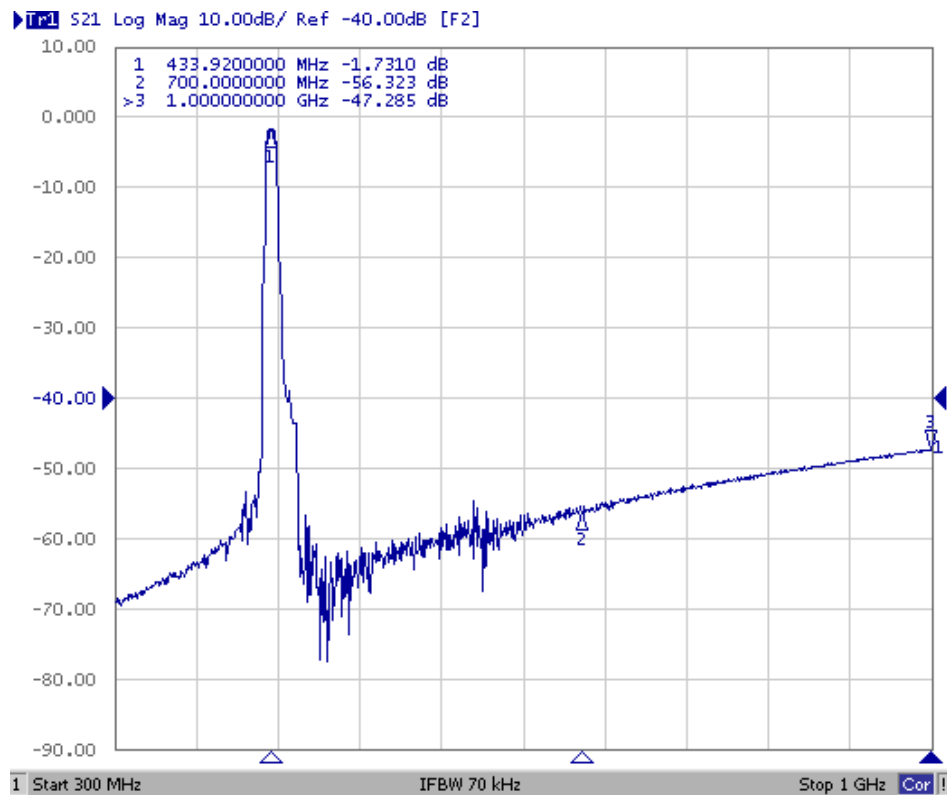
#### **D. FREQUENCY CHARACTERISTICS:**

##### **1. Transfer function**

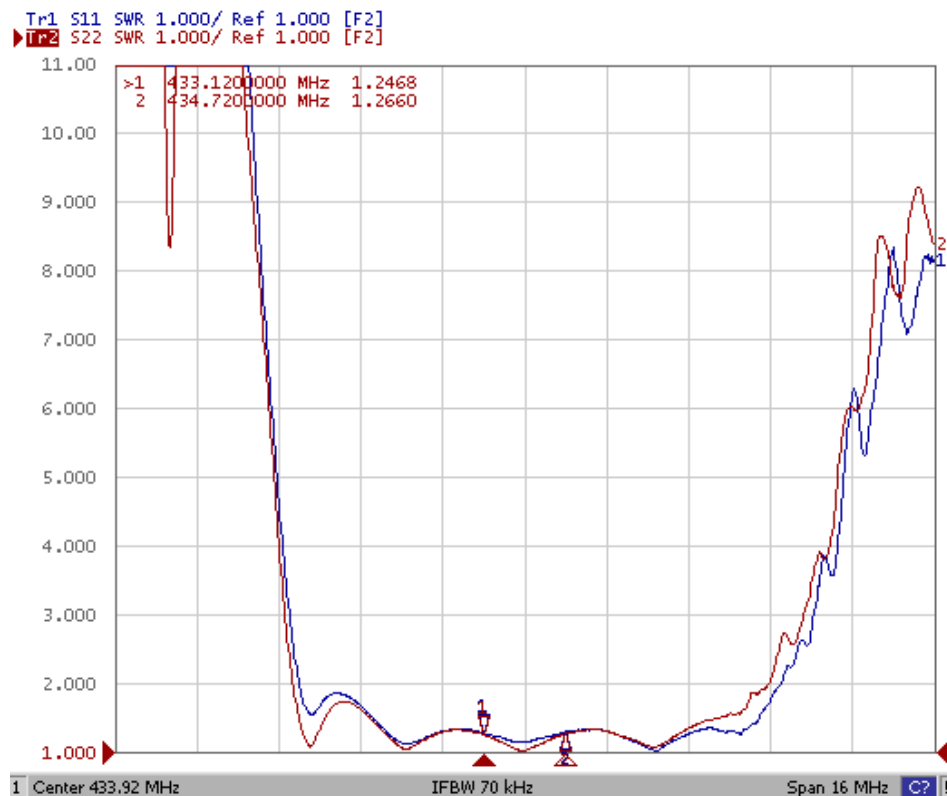


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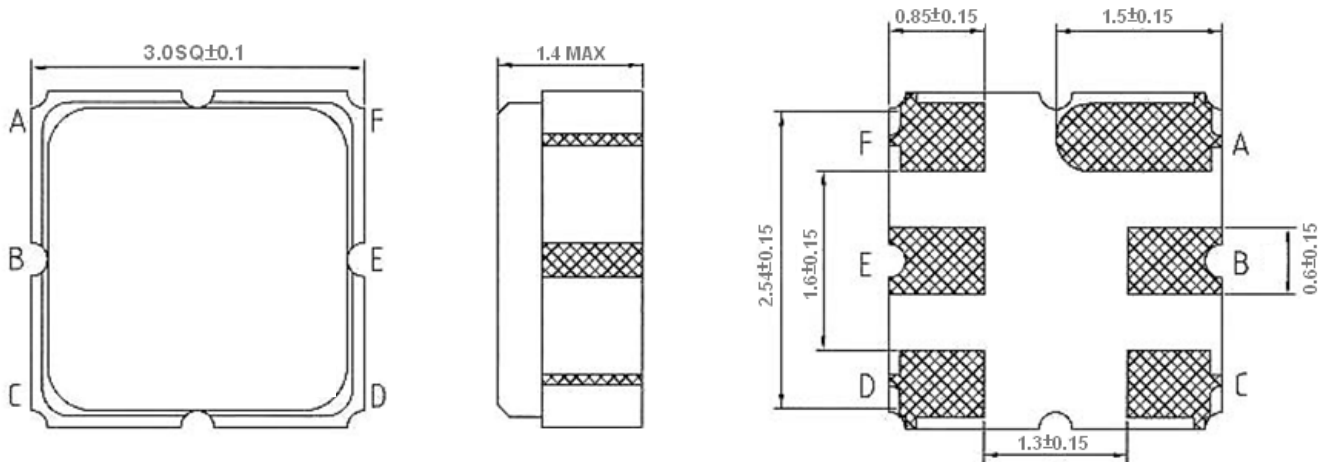
## 2. Reflection Functions



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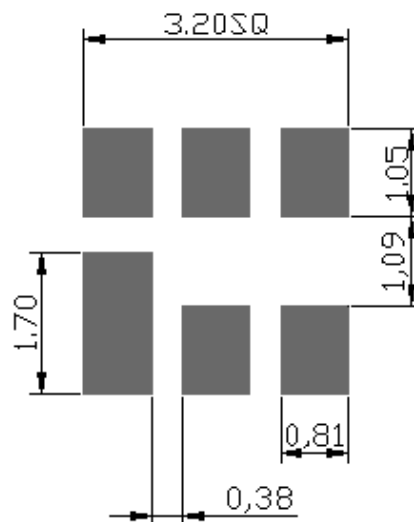
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**E. OUTLINE DRAWING:**



B: Input  
E: Output  
A, C, D, F: Ground  
Unit: mm

**F. PCB FOOTPRINT:**





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**H. RECOMMENDED REFLOW PROFILE:**

1. Preheating shall be fixed at 150 ~ 180°C for 60 ~ 90 seconds.
2. Ascending time to preheating temperature 150°C shall be 30 seconds min.
3. Heating shall be fixed at 220°C for 50 ~ 80 seconds and at 260°C +0/-5°C peak (20 ~ 40 sec).
4. Time: 2 times.

