**SAW Filter 201.02MHz**

**Part No:** MP01168

**Model:** TB0592A

**REV NO.:** 2

### A. MAXIMUM RATING:
1. Operating Temperature: 0°C to 70°C
2. Storage Temperature: -40°C to 85°C
3. Input power Level: 10dBm

### B. CHARACTERISTICS:
1. Ambient Temperature: 25°C
2. Terminating Source Impedance: Single ended 50 ohm or Balanced 200 ohm
3. Terminating Load Impedance: Single ended 50 ohm or Balanced 200 ohm

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit</th>
<th>Min.</th>
<th>Typ.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center frequency, Fc</td>
<td>MHz</td>
<td>-</td>
<td>201.02</td>
<td>-</td>
</tr>
<tr>
<td>Insertion Loss, IL</td>
<td>dB</td>
<td>-</td>
<td>4.3</td>
<td>6.0</td>
</tr>
<tr>
<td>3 dB Bandwidth</td>
<td>kHz</td>
<td>-</td>
<td>358</td>
<td>-</td>
</tr>
<tr>
<td>Passband Ripple (Fc ± 80kHz)</td>
<td>dB</td>
<td>-</td>
<td>±0.36</td>
<td>±1.0</td>
</tr>
<tr>
<td>Absolute group delay</td>
<td>μS</td>
<td>-</td>
<td>2.30</td>
<td>-</td>
</tr>
<tr>
<td>Group Delay Variation (Fc ± 80kHz)</td>
<td>μS</td>
<td>-</td>
<td>1.08</td>
<td>1.50</td>
</tr>
</tbody>
</table>

**Attenuation:** (Reference level from minimum insertion loss) dB

| Fc ±200kHz … Fc ±300kHz | dB  | 3.0 | 6.2 | -   |
| Fc±300kHz … Fc±400kHz    | dB  | 13  | 26  | -   |
| Fc±400kHz … Fc±700kHz    | dB  | 20  | 33  | -   |
| Fc±700kHz … Fc±1600kHz   | dB  | 27  | 40  | -   |
| Fc±1600kHz … Fc±3000kHz  | dB  | 30  | 38  | -   |
| Fc±3000kHz … Fc±6000kHz  | dB  | 33  | 48  | -   |
| Fc±6000kHz … Fc±35000kHz | dB  | 40  | 48  | -   |
C. FREQUENCY CHARACTERISTICS:

(1) S21 Response:

![S21 Response Graph]

Fig1. Horizontal: 0.5MHz/Div Vertical: 10dB/Div

(2) Passband Response:

![Passband Response Graph]

Fig2. Horizontal: 0.05MHz/Div Vertical: 2dB/Div
(3) Group Delay response

Fig3. Horizontal: 0.05MHz/Div Vertical: 2μS/Div

(4) Wide Band response

Fig4. Horizontal: 7MHz/Div Vertical: 10dB/Div
D. OUTLINE DRAWING:

Pin K : RF Input or Balanced input +
Pin A : RF Input Ground or Balanced input -
Pin E : RF Output or Balanced output +
Pin F : RF Output Ground or Balanced output -
- Pin B,C,D,G,H,J : Ground
Unit : mm
E. MATCHING CIRCUIT:

(1) Single ended input 50 ohm to Single ended output 50 ohm

Note: The matching structure will change according to different test fixture.
F. PACKING:

(1). REEL DIMENSION

(2). TAPE DIMENSION
G. RECOMMENDED REFLOW PROFILE:

![Graph showing recommended reflow profile](image-url)