173.075 MHz SAW Filter
Part No: MA08914

A. MAXIMUM RATING:
1. Input Power Level: 15 dBm
2. DC Voltage: 5V
3. Operating Temperature: -40°C to +85°C
4. Storage Temperature: -50°C to +95°C

B. ELECTRICAL CHARACTERISTICS:

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit</th>
<th>Min.</th>
<th>Type.</th>
<th>Max.</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center frequency</td>
<td>MHz</td>
<td>-</td>
<td>173.075</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Insertion loss at center frequency</td>
<td>dB</td>
<td>-</td>
<td>3.7</td>
<td>7.0</td>
<td>-</td>
</tr>
<tr>
<td>Ripple (173.0675 ~ 173.0825 MHz)</td>
<td>dB</td>
<td>-</td>
<td>±0.3</td>
<td>±1</td>
<td>-</td>
</tr>
<tr>
<td>Attenuation (relative to ILc)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>172.075 ~ 172.19 MHz</td>
<td>dB</td>
<td>30</td>
<td>50</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>172.19 ~ 172.975 MHz</td>
<td>dB</td>
<td>7</td>
<td>20</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>173.175 ~ 173.96 MHz</td>
<td>dB</td>
<td>7</td>
<td>20</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>173.96 ~ 174.075 MHz</td>
<td>dB</td>
<td>30</td>
<td>50</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Temperature coefficient of frequency</td>
<td>Tcf</td>
<td></td>
<td></td>
<td>-0.034 ppm/C²</td>
<td></td>
</tr>
</tbody>
</table>

Note 1. Considering -22 KHz frequency shift from -40°C to +85°C
C. OUTLINE DRAWING:

```
4 8 5

Pin configuration
#9 Input
#4 Output
#10 Balance input or input ground
#5 Balance output or output ground
#1,2,3,6,7,8 To be grounded
Unit mm
```

D. MEASUREMENT CIRCUIT:
50 Ohm Test circuit (single-ended / single-ended)

```
HP Network analyzer

50Ω IN L1=180 nH SAW Filter 50Ω OUT

C1=1.2 pF

1,2,3,6,7,8
```

E. PCB FOOTPRINT:

```
```

TB0485A v1
173.075 MHz SAW Filter
Part No: MA08914
Model: TB0485A
REV NO.: 1

F. FREQUENCY CHARACTERISTICS:

![Frequency Characteristics Chart]

1. Center: 173.075 MHz
2. TFBW: 1 kHz
3. Scan: 2 MHz

173.075 MHz SAW Filter
Part No: MA08914
Model: TB0485A
REV NO.: 1
G. PACKING:
1. REEL DIMENSION

2. TAPE DIMENSION
173.075 MHz SAW Filter  
Model: **TB0485A**  
Part No: **MA08914**  
REV NO.: **1**

**H. RECOMMENDED REFLOW PROFILE:**

![Reflow Profile Graph](image)