## A. MAXIMUM RATING:

1. Operating temperature range: -40°C to 80°C
2. Storage temperature range: -40°C to 85°C
3. Input Power Level: 10dBm
4. Maximum DC Voltage: 10V

## B. CHARACTERISTICS:

<table>
<thead>
<tr>
<th>Electrical Parameters</th>
<th>Sign</th>
<th>Units</th>
<th>Min.</th>
<th>Typ.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center Frequency</td>
<td>Fc</td>
<td>MHz</td>
<td>69.9</td>
<td>70</td>
<td>70.1</td>
</tr>
<tr>
<td>Insertion Loss</td>
<td>IL</td>
<td>dB</td>
<td>-</td>
<td>9.2</td>
<td>11.5</td>
</tr>
<tr>
<td>-1dB Pass Bandwidth</td>
<td>BW1</td>
<td>MHz</td>
<td>0.8</td>
<td>0.92</td>
<td>-</td>
</tr>
<tr>
<td>-3dB Pass Bandwidth</td>
<td>BW3</td>
<td>MHz</td>
<td>1.1</td>
<td>1.2</td>
<td>-</td>
</tr>
<tr>
<td>-40dB Pass Bandwidth</td>
<td>BW40</td>
<td>MHz</td>
<td>-</td>
<td>2.2</td>
<td>2.3</td>
</tr>
<tr>
<td>Amplitude Ripple Fc ± 0.30MHz</td>
<td>AR</td>
<td>dB</td>
<td>-</td>
<td>0.7</td>
<td>1.0</td>
</tr>
<tr>
<td>Group Delay Time Deviation in Pass Band Fc ± 0.30MHz</td>
<td>GDV</td>
<td>nsec</td>
<td>-</td>
<td>350</td>
<td>400</td>
</tr>
<tr>
<td>Relative Attenuation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DC ~ 65MHz</td>
<td>dB</td>
<td>UR</td>
<td>45</td>
<td>55</td>
<td>-</td>
</tr>
<tr>
<td>75MHz ~ 200MHz</td>
<td>dB</td>
<td>UR</td>
<td>45</td>
<td>55</td>
<td>-</td>
</tr>
<tr>
<td>Source and Load Impedances</td>
<td>RS/RL</td>
<td>Ω</td>
<td>50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
C. FREQUENCY CHARACTERISTICS:

1. Wide band Response: (span 10MHz)

![Graph of wide band response]

*Fig1. Horizontal: 1MHz/Div Vertical: 10dB/Div*

2. Pass band Response:

![Graph of pass band response]

*Fig2. Horizontal: 0.2MHz/Div Vertical: 1dB/Div*
3. Group Time Delay response:

![Graph showing group delay response.]

**Fig3.** Horizontal: 0.2MHz/Div Vertical: 100ns/Div

D. MATCHING CIRCUIT:

![Matching circuit diagram.]

L1 = 330 ~ 480nH, C1 = 82pF, L2 = 330 ~ 480 nH, C2 = 82pF, Z\text{IN} = 50\Omega, Z\text{OUT} = 50\Omega
SAW Filter: 70MHz (BW = 0.8MHz) (SMD 13.3 × 6.5mm) Model: TB0693A
Part No: MP02147

E. OUTLINE DRAWING:

Pin A: RF input
Pin B: RF input ground
Pin G: RF output
Pin H: RF output ground
Pin C, D, E, F, J, K, M, N: Ground
Unit: mm

F. PCB FOOTPRINT:
G. PACKING:

1. REEL DIMENSION

2. TAPE DIMENSION
H. RECOMMENDED REFLOW PROFILE:

![Graph showing the recommended reflow profile with time (Sec) on the x-axis and temperature (Deg C) on the y-axis. The graph indicates a heating phase, a holding phase, and a cooling phase.](image-url)