A. MAXIMUM RATING:

1. Operating Temperature: -10°C ~ +80°C
2. Storage Temperature: -40°C ~ +85°C
3. Input Power Level: 10dBm

B. CHARACTERISTICS:

Ambient Temperature: 25°C

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Value</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Min.</td>
<td>Typ.</td>
</tr>
<tr>
<td>Center frequency Fc MHz</td>
<td>-</td>
<td>190</td>
</tr>
<tr>
<td>Maximum Insertion loss IL dB</td>
<td>-</td>
<td>5.3</td>
</tr>
<tr>
<td>3dB Bandwidth MHz</td>
<td>4.60</td>
<td>6.80</td>
</tr>
<tr>
<td>Passband Ripple (Fc ± 2MHz) MHz</td>
<td>-</td>
<td>0.60</td>
</tr>
<tr>
<td>Group Delay Ripple (Fc ± 2MHz) nS</td>
<td>-</td>
<td>30</td>
</tr>
<tr>
<td>Attenuation: (Reference level from Max. IL)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>From Fc ± 5MHz to Fc ± 7.5MHz dB</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>From Fc ± 7.5MHz to Fc ± 12.5MHz dB</td>
<td>25</td>
<td>35</td>
</tr>
<tr>
<td>From Fc ± 12.5MHz to Fc ± 100MHz dB</td>
<td>36</td>
<td>40</td>
</tr>
<tr>
<td>Temp Coefficient ppm/°C</td>
<td>-</td>
<td>-18</td>
</tr>
</tbody>
</table>
C. TEST FIXTURE:

D. OUTLINE DRAWING:

A: RF Balanced input
G: RF Balanced Input ground
E: RF Balanced Output
C: RF Balanced Output ground
B, D, E, F, H: To be ground

Unit: mm
E. FREQUENCY CHARACTERISTICS:

1. S21 Response

![Graph of S21 response with labels and axes.]

Fig. 1. Horizontal: 6MHz/Div, Vertical: 10dB/Div

2. Pass band Ripple and Group Delay Ripple

![Graph of pass band ripple and group delay ripple with labels and axes.]

Fig. 2. Horizontal: 1MHz/Div; Vertical: 1dB/Div
SAW Filter 190.0MHz
Part No: MP03498
Model: TB0529A
Rev No: 1

Fig. 3. Horizontal: 1MHz/Div, Vertical: 100nS/Div

F. PCB FOOTPRINT:
G. PACKING:

1. REEL DIMENSION

2. TAPE DIMENSION

Direction of Feed