A. **MAXIMUM RATING:**

1. Operating Temperature: -0°C ~ +70°C
2. Storage Temperature: -40°C ~ +85°C
3. Input power: 10dBm

B. **CHARACTERISTICS:**

Ambient Temperature: 25°C

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Value</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center frequency Fc MHz</td>
<td>- 153.6 -</td>
<td></td>
</tr>
<tr>
<td>Minimum Insertion loss IL dB</td>
<td>- 9.5 13.0 -</td>
<td>-</td>
</tr>
<tr>
<td>1dB BW MHz</td>
<td>20 23.18 -</td>
<td></td>
</tr>
<tr>
<td>Passband Ripple (Fc ± 10.0MHz) dB</td>
<td>- 0.45 1.0 -</td>
<td>-</td>
</tr>
<tr>
<td>Attenuation (Reference to Minimum Insertion loss)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>139.6MHz dB</td>
<td>10 19.5 -</td>
<td>-</td>
</tr>
<tr>
<td>168.6MHz dB</td>
<td>10 26 -</td>
<td>-</td>
</tr>
<tr>
<td>Temp Coefficient ppm/K</td>
<td>- -94 -</td>
<td>-</td>
</tr>
</tbody>
</table>

**Matching:**

1. The input of the filter will be matched to 50Ω
2. The output of the filter will be matched to 50Ω
SAW Filter 153.60MHz
Part No: MP03477

C. FREQUENCY CHARACTERISTICS:

1. S21 Response: (span: 80MHz)

![Graph of S21 Response](image1)

Fig. 1. Horizontal: 8MHz/Div, Vertical: 10dB/Div

2. Group-Delay Ripple: (span: 40MHz)

![Graph of Group-Delay Ripple](image2)

Fig. 2. Horizontal: 4MHz/Div, Vertical: 100nsec/Div
3. S11 Smith Chart: (span: 80MHz)

![S11 Smith Chart Image]

4. S22 Smith Chart (span: 80MHz)

![S22 Smith Chart Image]
D. MEASUREMENT CIRCUIT:

\[ Z_{in} \text{ and } Z_{out} \text{ are } 50 \, \Omega. \]
\[ L_1 = 82 \, \text{nH}, C_1 = 27 \, \text{pF}, L_2 = 33 \, \text{nH} \]

E. OUTLINE DRAWING:

- J: RF input
- D: RF output
- K, E: Case Ground
- A, B, C, F, G, H: Ground

Unit: mm

F. PCB FOOTPRINT:
G. PACKING:

1. REEL DIMENSION

2. TAPE DIMENSION
H. RECOMMENDED REFLOW PROFILE:

![Graph showing recommended reflow profile]