SAW Filter 307.360MHz
Part No: MP03558

A. MAXIMUM RATING:

1. Operating Temperature: -30°C ~ +85°C
2. Storage Temperature: -40°C ~ +85°C
3. Input power: 10dBm

B. CHARACTERISTICS:

Ambient Temperature: 25°C

<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</td>
<td>MHz</td>
<td>-</td>
<td>307.36</td>
<td>-</td>
</tr>
<tr>
<td>Insertion Loss (Fc ± 10.0 MHz)</td>
<td>dB</td>
<td>-</td>
<td>11.4</td>
<td>16</td>
</tr>
<tr>
<td>Passband Ripple (Fc ± 10.0 MHz)</td>
<td>dB</td>
<td>-</td>
<td>0.5</td>
<td>1.0</td>
</tr>
<tr>
<td>1dB BW</td>
<td>MHz</td>
<td>20.0</td>
<td>21.4</td>
<td>-</td>
</tr>
<tr>
<td>45dB BW</td>
<td>MHz</td>
<td>-</td>
<td>31.3</td>
<td>32</td>
</tr>
<tr>
<td>Attenuation 1 @ 10 ~ 290MHz</td>
<td>dB</td>
<td>40</td>
<td>44</td>
<td>-</td>
</tr>
<tr>
<td>Attenuation 2 @ 325 ~ 550MHz</td>
<td>dB</td>
<td>40</td>
<td>43</td>
<td>-</td>
</tr>
</tbody>
</table>
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: 35MHz)

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

Fig. 2. Horizontal: 3.5MHz/Div, Vertical: 100nsec/Div
3. S11 Smith Chart: (span: 80MHz)

![S11 Smith Chart](image1)

4. S22 Smith Chart: (span: 80MHz)

![S22 Smith Chart](image2)
D. MEASUREMENT CIRCUIT:

Zin and Zout are 50 Ω.

L1 = 28.8 nH, C1 = 22 pF, L2 = 25 nH, C2 = 21 pF

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:

TB0789A v1
G. PACKING:

1. REEL DIMENSION

![Diagram of reel dimensions]

2. TAPE DIMENSION

![Diagram of tape dimensions]
H. RECOMMENDED REFLOW PROFILE:

![Graph showing temperature versus time for reflow profile.]