374.0MHz SAW Filter
Part No: MA04269

A. MAXIMUM RATING:
1. Input Power Level: 10 dBm
2. Operating Temperature: -10°C to 85°C
3. Storage Temperature: -40°C to 85°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, Fc</td>
<td>MHz</td>
<td>-</td>
<td>374</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Insertion Loss, IL</td>
<td>dB</td>
<td>-</td>
<td>8.5</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Passband width, BW3</td>
<td>MHz</td>
<td>17</td>
<td>19.5</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Amplitude Ripple in Fc±7MHz</td>
<td>dB</td>
<td>-</td>
<td>0.6</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Group delay ripple in Fc±7MHz</td>
<td>nS</td>
<td>-</td>
<td>39</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Triple transit suppression</td>
<td>dB</td>
<td>30</td>
<td>37</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Attenuation:(Ref level from Min IL)</td>
<td>dB</td>
<td>45</td>
<td>53</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Fc -100 to –33MHz</td>
<td>dB</td>
<td>40</td>
<td>56</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Fc –33 to –22MHz</td>
<td>dB</td>
<td>30</td>
<td>48</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Fc -22 to –16.5MHz</td>
<td>dB</td>
<td>30</td>
<td>41</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Fc +16.5 to +22MHz</td>
<td>dB</td>
<td>35</td>
<td>43</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fc +22 to +43 MHz</td>
<td>dB</td>
<td>40</td>
<td>45</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Fc +43 to +80MHz</td>
<td>dB</td>
<td>40</td>
<td>45</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>
C. FREQUENCY CHARACTERISTICS:

(1) Wide band of Response:

![Wide band of Response chart]

Fig.1 S21 Response  REF. : -40dB  Horizontal: 3MHz/Div  Vertical: 10dB/Div

(2) Passband of Response:

![Passband of Response chart]

Fig.2 S21 Response  Horizontal: 3MHz/Div  Vertical: 1dB/Div, 50nS
D. MEASUREMENT CIRCUIT:

(1) 50Ω unbalanced:

\[ L_2 = 27 \text{nH}, \quad L_1 = 22 \text{nH}, \quad C_1 = 7 \text{PF} \]

(2) 200Ω balanced:

\[ C_1 = C_2 = 27 \text{PF}, \quad C_3 = C_4 = 15 \text{PF} \]
\[ L_1 = 27 \text{NH}, \quad L_2 = 27 \text{NH} \]

(3) 250Ω balanced:

\[ C_1 = C_2 = 26 \text{PF}, \quad C_3 = C_4 = 9 \text{PF} \]
\[ L_1 = 29 \text{NH}, \quad L_2 = 41 \text{NH} \]
E. OUTLINE DRAWING:

#B,C : Input, Input Ground or bal. Input
#G,F : Output, Output Ground or bal. Output
#D,H : Case Ground
#A,E : Ground
Unit: mm
**F. PACKING:**

1. **REEL DIMENSION**

![Reel Dimension Diagram](image)

2. **TAPE DIMENSION**

![Tape Dimension Diagram](image)
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G. RECOMMENDED REFLOW PROFILE: