70.0MHz IF SAW Filter

Part No: MA09580

Model: TB0460A

A. MAXIMUM RATING:

1. Operating Temperature: -30 °C ~ 80 °C
2. Storage Temperature: -40 °C ~ +85 °C
3. Input Power Level: 10dBm

B. CHARACTERISTICS:

1. Ambient Temperature: 25 °C

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Value</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min.</td>
<td>Typ.</td>
<td>Max.</td>
</tr>
<tr>
<td>Center frequency $F_C$ MHz</td>
<td>69.8</td>
<td>70</td>
</tr>
<tr>
<td>Minimum Insertion loss I.L. dB</td>
<td>-</td>
<td>11</td>
</tr>
<tr>
<td>1 dB Bandwidth MHz</td>
<td>-</td>
<td>11.57</td>
</tr>
<tr>
<td>3 dB Bandwidth MHz</td>
<td>-</td>
<td>12.57</td>
</tr>
<tr>
<td>40 dB Bandwidth MHz</td>
<td>-</td>
<td>16.00</td>
</tr>
<tr>
<td>Passband Ripple (Fc±5MHz) dB</td>
<td>-</td>
<td>0.46</td>
</tr>
<tr>
<td>Group Delay Ripple (Fc±5MHz) nsec</td>
<td>-</td>
<td>30</td>
</tr>
<tr>
<td>Phase linearity (Fc±5MHz) (p-p) deg</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td>Attenuation: (Reference level from minimum insertion loss) dB</td>
<td>36</td>
<td>53</td>
</tr>
<tr>
<td>2) $F_c$±15 MHz ... $F_c$±30 MHz dB</td>
<td>36</td>
<td>53</td>
</tr>
<tr>
<td>Temp Coefficient ppm/° C</td>
<td>-94</td>
<td>-</td>
</tr>
</tbody>
</table>
C. FREQUENCY CHARACTERISTICS:

1. S21 Response

![Graph of S21 response with frequency characteristics.](image)

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

2. Passband Ripple

![Graph of passband ripple with frequency characteristics.](image)

Fig.2 Horizontal : 1.5MHz/Div Vertical: 1dB/Div
3. Group Delay Ripple

![Graph showing Group Delay Ripple with horizontal and vertical scales.

Fig.3 Horizontal : 2.5MHz/Div  Vertical: 50 nS/Div]

4. Phase linearity

![Graph showing Phase linearity with horizontal and vertical scales.

Fig.4 Horizontal : 2.5MHz/Div  Vertical: 10 deg/Div]
70.0MHz IF SAW Filter  
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REV NO.: 1  

D. OUTLINE DRAWING: 

Pin configuration 
#K  RF Input  
#L  RF Input ground  
#E  RF Output  
#F  RF Output ground  
#A,B,C,D,G,H,I,J  To be ground  

E. TEST FIXTURE: 

50 ohm  
L1=120nH  
C1=130pF  
L2=56nH
70.0MHz IF SAW Filter  
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F. PCB FOOTPRINT
70.0MHz IF SAW Filter
Part No: MA09580

Model: TB0460A
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G. PACKING:
1. REEL DIMENSION

2. TAPE DIMENSION

Direction of Feed