SAW Filter 947.5 MHz for Mobile Communication  
Model: TA947FG  
Part No: MA04711

REV. NO.: 2

A. MAXIMUM RATING:
1. Input Power Level: 10 dBm
2. DC voltage: 0 V
3. Operating Temperature: -30°C to +85°C
4. Storage Temperature: -40°C to +85°C

B. ELECTRICAL CHARACTERISTICS:

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Min.</th>
<th>Typ.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center frequency Fc (dB)</td>
<td>-</td>
<td>947.5</td>
<td>-</td>
</tr>
<tr>
<td>Insertion loss within 935 ~ 960 MHz IL (dB)</td>
<td>-</td>
<td>2.4</td>
<td>3.0</td>
</tr>
<tr>
<td>Amplitude ripple (p-p) within 935 ~ 960 MHz (dB)</td>
<td>-</td>
<td>1.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Attenuation (Reference level from 0 dB)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 ~ 890 MHz (dB)</td>
<td>28.0</td>
<td>32.0</td>
<td>-</td>
</tr>
<tr>
<td>890 ~ 915 MHz (dB)</td>
<td>20.0</td>
<td>35.0</td>
<td>-</td>
</tr>
<tr>
<td>980 ~ 1025 MHz (dB)</td>
<td>15.0</td>
<td>30.0</td>
<td>-</td>
</tr>
<tr>
<td>1025 ~ 2000 MHz (dB)</td>
<td>30.0</td>
<td>34.5</td>
<td>-</td>
</tr>
<tr>
<td>VSWR within 935 ~ 960 MHz</td>
<td>-</td>
<td>1.9</td>
<td>2.5</td>
</tr>
<tr>
<td>Source impedance Zs (Ω)</td>
<td>-</td>
<td>50</td>
<td>-</td>
</tr>
<tr>
<td>Load impedance ZL (Ω)</td>
<td>-</td>
<td>50</td>
<td>-</td>
</tr>
</tbody>
</table>

Note1. No matching network required for operation at 50 Ω
C. FREQUENCY CHARACTERISTICS:

(wideband)
D. REFLECTION FUNCTIONS:

S11 VSWR

S22 VSWR
E. MEASUREMENT CIRCUIT:

HP Network analyzer

50Ω ——— SAW Filter ——— 50Ω

A, C, D, F

F. OUTLINE DRAWING:
G. PACKING:

1. REEL DIMENSION

2. TAPE DIMENSION
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Note:
1. Pocket position relative to sprocket hole measured as true position of pocket, not pocket hole.

G. Reflow Profile:
H. SOLDERING PROFILE

1. Preheating shall be fixed at 140 ~ 160°C for 60 ~ 90 seconds.
2. Ascending time to preheating temperature 150°C shall be 30 seconds min.
3. Heating shall be fixed at 200°C for 50 ~ 60 seconds and at 230±10°C peak.