Specification for crystal filter: QF 6.990…….7.010-0280/06

1. General
1.1. Package

1.2. Type name: QF 6.990…….7.010-0280/06
1.3. Number of poles: 5
1.4. Operating temperature range: -30°C to +85°C
1.5. Storage temperature range: -45°C to +85°C

2. Electric values
2.1. Nominal centre frequency fo [ MHz ]: 6.990, 6.992, 6.994, 6.996, 6.998, 7.000, 7.002, 7.004, 7.006, 7.008, 7.010
2.2. Pass band
2.2.1. Centre frequency fc at 25°C . 3°C: fo .180Hz
2.2.2. Bandwidth between 3 dB - frequencies: > fc .1.4 kHz
2.2.3. Ripple at fc .0.8 kHz: < 1.0 dB ( < 0.5 dB peak to peak )
2.2.4. Insertion loss: < 3.0 dB
( measured on smallest attenuation in pass band )

2.3. Stop band
2.3.1. fc .5.5 kHz > 60 dB
2.3.2. Alternate Attenuation > 70 dB ( except spurious )

2.4. Nominal input power level +10 dBm
2.4.1. Maximal input power level +25 dBm

2.5. Terminating impedance R//C ( input and output ): 50 . // 0 pF

3. Marking ( i. e. ): manufacturer, date code
QF 6.990-0280/06
4. Environment conditions:

vibration: 9.8 g, 20-2000 Hz, duration 60 sec. each axis.
shock: 40g, 11 ms, ½ sine; change of
temperature: -30…..+70 Deg. C with exposure time rate at 5 Deg. C / min.

5. Air reflow temperature conditions

<table>
<thead>
<tr>
<th>conditions</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>average ramp-up rate (30°C to 217°C)</td>
<td>less than 3°C/second</td>
</tr>
<tr>
<td>&gt; 100°C</td>
<td>between 300 and 600 seconds</td>
</tr>
<tr>
<td>&gt; 150°C</td>
<td>between 240 and 500 seconds</td>
</tr>
<tr>
<td>&gt; 217°C</td>
<td>between 30 and 150 seconds</td>
</tr>
<tr>
<td>peak temperature</td>
<td>max. 260°C</td>
</tr>
<tr>
<td>time within 5°C of peak temperature</td>
<td>between 10 and 30 seconds</td>
</tr>
<tr>
<td>cool-down rate (starting at peak temperature to 50°C)</td>
<td>less than 6°C / second</td>
</tr>
<tr>
<td>time from 30°C to peak temperature</td>
<td>no more than 300 seconds</td>
</tr>
</tbody>
</table>

Chip-mount air reflow profile

Edited by: ______________________________ date: ______________________________ name: ______________________________