Specification for monolithic crystal filter: **MQF 81.45-5000/06**

1. General

1.1. Package:

Reflow soldering: three times max.

Temperature (°C):

- 260°C max.
- 260
- 217
- 0

<table>
<thead>
<tr>
<th>Time (s)</th>
<th>Temperature (°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>150s</td>
</tr>
<tr>
<td>10</td>
<td>30s</td>
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Reflow soldering: three times max.
1.2. Type name: MQF 81.45-5000/06
1.3. Number of poles: 4
1.4. Operating temperature range: -25°C to +55°C
1.5. Storage and operable temperature range: -40°C to +85°C

2. Electric values

2.1. Nominal centre frequency fo: 81.45 MHz

2.2. Pass band

2.2.1. Bandwidth between 3 dB – frequencies: > fo ± 20.0 kHz
2.2.2. Ripple (peak to peak): < 1.0 dB at fo ± 15.0 kHz
2.2.3. Insertion loss: < 4.0 dB
( measured on smallest attenuation in pass band )
2.2.4. Group delay absolute at fo: 19 µs ± 3 µs
2.2.5. Group delay variation (ripple of group delay): < 15 µs at fo ± 22.0 kHz

2.3. Stop band

2.3.1. fo ± 27.5 kHz > 3 dB
2.3.2. fo ± 34 kHz > 10 dB
2.3.3. fo ± 43 kHz > 20 dB
2.3.4. fo ± 70 kHz > 40 dB
2.3.5. fo ± 200........±1.0 MHz > 65 dB (except spurious)
2.3.6. Alternate attenuation at fo ± 5.0 MHz > 80 dB (except spurious)

2.4. Terminating impedance R//C (input and output): 560 Ω // 1.0 pF
2.5. Coupling capacitance: 5.0 pF

2.6. Maximum input power, working / non-damaged -10 dBm / + 7 dBm

2.7. Out band Intermodulation

2.7.1. Test tones 1 / 2:
   Input power level: -30 dBm
   IMD < -118 dBm (88 dB down from both of the -30dBm test tones)
   81.25 MHz / 81.05 MHz

2.7.2. Test tones 3 / 4:
   Input power level: -30 dBm
   IMD < -118 dBm (88 dB down from both of the -30dBm test tones)
   81.65 MHz / 81.85 MHz

3. Marking:
   • M8145A1
   VI yyww

4. Environment conditions:
   according to Vectron CF001

5. Filters are Pb-free and 2002/95 / EC RoHS compliant
6. Mean time between failures (MTBF) corresponding to IEC 60050 (191) > 5 years

7. Packing

maximum 1000 pcs. / reel

Tape dimension (mm)

Tape (all dimensions in mm)

Reel (all dimension in mm)

Edited by: ____________________________ date: ____________________________ name: ____________________________