Specification for monolithic crystal filter:  

**MQF 70.0 - 2200/07**

1. General

1.1. Package:

1.2. Type name: MQF 70.0-2200/07

1.3. Number of poles: 4

1.4. Operating temperature range (OTR): -40°C to +85°C

1.5. Storage temperature range: -45°C to +85°C

2. Electric values

2.1. Nominal centre frequency \( f_0 \): 70.0 MHz

2.2. Center frequency shift in OTR: \(< \pm 25\text{ppm referred to } +25°C\)

2.3. Pass band

2.3.1. Bandwidth between 3 dB - frequencies: \(> f_0 \pm 11.0 \text{ kHz}\)

2.3.2. Ripple in pass band (peak to peak): \(< 1.0 \text{ dB}\)

2.3.3. Insertion loss: \(< 5.0 \text{ dB}\)

( measured on smallest attenuation in pass band )
2.4. Stop band

2.4.1. fo ± 25 kHz > 15 dB
2.4.2. fo ± 40 kHz > 30 dB
2.4.3. fo ± 65 kHz > 50 dB
2.4.4. Alternate attenuation > 65 dB (except spurious)

2.5. Terminating impedance R/C (input and output): 820 Ω // 1.0 pF

2.5.1. Coupling capacitance Cc: 4.0 pF

2.6. Input power level for reference measurement: -10 dBm

2.6.1. Maximum input power level without destruction: 0 dBm

2.7. Out band Intermodulation

2.7.1. Test tone frequencies: fo ± 100 kHz / fo ± 200 kHz
2.7.2. Input power level (at pin 1): -10 dBm (each tone)
2.7.3. 3rd order Intermodulation (IP3 > +25 dBm) > 70 dB down from both -10 dBm input test tones

3. Marking:

• M70A10
  yyww

4. Environment conditions:

a. vibration: MIL-STD-810G, method 514.6 procedure I
b. shock: MIL-STD-810G, method 516.6 procedure I + IV + V

5. Filters are Pb-free and 2002/95/EC RoHS compliant

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Edited by: ___________________ date: ________________ name: ___________________