Specification for monolithic crystal filter: MQF 149.9725 - 2400/02

1. General

1.1. Package:

1.2. Type name: MQF 149.9725-2400/02

1.3. Number of poles: 4

1.4. Operating temperature range: -20°C to +75°C

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

2. Electric values

2.1. Nominal centre frequency fo: 149.9725 MHz

2.2. Pass band

2.2.1. Bandwidth between 1 dB - frequencies: > fo ± 7 kHz

2.2.2. Bandwidth between 3 dB - frequencies: > fo ± 12 kHz

2.2.3. Ripple in pass band ( fo ± 7 kHz ): < 1.0 dB ( peak to peak )

2.2.4. Insertion loss: < 7.0 dB ( measured on smallest attenuation in pass band )
2.3. **Stop band**

2.3.1. \( \text{fo} \pm 70 \text{ kHz} \) > 30 dB
2.3.2. \( \text{fo} \pm 100 \text{ kHz} \) > 45 dB
2.3.3. \( \text{fo} \pm 150 \text{ kHz} \) > 60 dB
2.3.4. Guaranteed attenuation ( \( \text{fo} \pm 910 \text{ kHz} \) ): > 70 dB (except spurious)
2.3.5. Spurious responses: > 30 dB

2.4. Terminating impedance (input and output): 160 \( \Omega \) // 1.5 pF
2.4.1. Coupling capacitance \( C_c \): 8.0 pF

2.5. Maximum input power (working/non-damaged): -15 dBm / -5 dBm

2.6. 3rd order intermodulation products with test tones at
\( \text{fo} \pm 15 \text{ kHz} \), input power level of test tones: -15 dBm: < -70 dBm (55 dB down from either of the two
-15 dBm test tones)

3. Environment conditions: Corresponding to Vectron standard CF001

4. Marking:

- M149A
- Date code

5. Reflow soldering conditions:

![Graph of reflow soldering conditions]

Reflow soldering: three times max.

6. Taping: tape & reel with 1000 pcs./reel maximum, reel diameter 180 mm

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Edited by: _______________________________  name: _______________________________