Specification for monolithic crystal filter: **MQF 40.048-2500/09**

1. **General**

1.1. Package:

![Package Diagram]

1.2. Type name: MQF 40.048-2500/09

1.3. Number of poles: 6

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

1.5. Storage temperature range: -55°C to +90°C

2. **Electric values**

2.1. Nominal centre frequency $f_0$: 40.048 MHz

2.2. **Pass band**

2.2.1. Bandwidth between 3 dB - frequencies: $f_0 \pm 12.5$ kHz

2.2.2. Ripple in pass band: < 1.0 dB (peak to peak)

2.2.3. Insertion loss: < 3.0 dB (measured on smallest attenuation in pass band)
2.3. **Stop band**

2.3.1. fo ± 45 kHz: > 60 dB  
2.3.2. fo ± 55 kHz: > 70 dB  
2.3.3. fo ± 70 kHz: > 90 dB  
2.3.4. at 39.952 MHz > 100 dB  

2.3.4. Alternate attenuation: > 90 dB ( except spurious )  
2.3.5. Spurious responses: > 40 dB  

2.4. Maximum input power level: 0 / +20 ( working / non-damaged )  

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

2.6. 3rd order in band intermodulation with test tones at fo ± 1.0 kHz and test tone power level of 0 dBm at pin 3 ( output ). The 3rd order distortion at fo ± 3.0 kHz to be > 50 dB down from both 0 dBm tones related to pin 1.  

2.7. 3rd order out band intermodulation with test tones at fo ± 30 kHz and fo ± 60 kHz and test tone power level of -6 dBm at pin 1 ( input ). The 3rd order distortion at fo to be > 71 dB down from both -6 dBm tones related to pin 3.  

3. **Marking:**  
   manufacturer, date code  
   MQF 40.048-2500/09  

4. **Environment conditions:**  
   Corresponding to Vectron standard CF001  

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Edited by: ___________________________  
Date: _________________  
Name: ___________________________