Specification for monolithic crystal filter: MQF 21.4-1200/30

1. General

1.1. Package:

1.2. Type name: MQF 21.4-1200/30
1.3. Number of poles: 4
1.4. Operating temperature range: -20°C to +50°C
1.5. Storage temperature range: -55°C to +105°C

2. Electric values

2.1. Nominal centre frequency fo: 21.4 MHz
2.2. Pass band
2.2.1. Bandwidth between 3 dB - frequencies: \(\geq fo \pm 6.0\) kHz
2.2.2. Ripple: \(\leq 1.0\) dB at \(fo \pm 4.8\) kHz
2.2.3. Insertion loss: \(\leq 3.0\) dB
   ( measured on smallest attenuation in pass band )
2.2.4. Return loss ( at \(fo \pm 4.8\) kHz): \(\geq 9.5\) dB
2.3. Stop band
2.3.1. \(fo \pm 25\) kHz \(\geq 50\) dB
2.3.2. \(fo \pm 200\) kHz \(\geq 80\) dB
2.3.3. Alternate attenuation: \(\geq 60\) dB ( except spurious )
2.4. Terminating impedance ( input and output ): 50 \(\Omega\) // 0 pF
2.5. Intermodulation
   test tones 1, 2: \(fo \pm 200\) kHz / \(fo \pm 400\) kHz
   input power level: -10 dBm
   3-rd order intermodulation distortion: \(> 85\) dB ( down from either of the two -10 dBm input test tones )

3. Marking: manufacturer, date code
   MQF 21.4-1200/30

4. Environment conditions: Corresponding to Vectron standard CF001