Specification for monolithic crystal filter: \textbf{MQF 21.4 - 2000/27}

1. General

1.1. Package:

1.2. Type name: MQF 21.4-2000/27

1.3. Number of poles: 10

1.4. Operating temperature range: -45°C to +85°C

1.5. Storage temperature range: -55°C to +105°C

2. Electric values

2.1. Nominal centre frequency \( f_0 \): 21.4 MHz

2.2. Pass band

2.2.1. Centre frequency \( f_c \): 21.4 MHz ± 430 Hz

2.2.2. Bandwidth between 6 dB - frequencies: \( \geq f_c \pm 10.0 \) kHz

2.2.3. Ripple: \( \leq 1.0 \) dB at \( f_c \pm 7.5 \) kHz

2.2.4. Group delay distortion: \( \leq 110 \) µs at \( f_c \pm 8.5 \) kHz

2.2.5. Insertion loss: \( \leq 4.5 \) dB

( measured on smallest attenuation in pass band )

2.3. Stop band

2.3.1. \( f_o \pm 17.5 \) kHz \( \geq 60 \) dB

2.3.2. \( f_o \pm 25 \) kHz \( \geq 90 \) dB

2.3.3. Alternate attenuation: \( \geq 90 \) dB

2.4. Terminating impedance (input and output): 50 Ω // 0 pF

2.5. Out band intermodulation

test tones frequencies: \( f_o \pm 100 / \pm 200 \) kHz IM: > 74 dB (i.e. IP3 > 30 dBm)

test tones frequencies: \( f_o \pm 250 / \pm 500 \) kHz IM: > 84 dB (i.e. IP3 > 35 dBm)

input power: -7 dBm

3. Marking: manufacturer, date code

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4. Environment conditions: Corresponding to Vectron standard CF001

Edited by: date: ______________________ name: ______________________