Specification for monolithic crystal filter: **MQF 109.35-1000/04**

1. **General**

1.1. **Package:**

![Diagram of package]

1.2. Type name: MQF 109.35-1000/04

1.3. Number of poles: 6

1.4. Operating temperature range (O.T.R.): -40°C to +85°C

1.5. Storage temperature range: -45°C to +105°C

2. **Electric values**

2.1. Nominal centre frequency fo: 109.35 MHz

2.2. **Pass band**

2.2.1. Bandwidth between 1 dB - frequencies: \( \geq \text{fo} \pm 5.0 \text{ kHz} \)

2.2.2. Ripple in the range \( \text{fo} \pm 5.0 \text{ kHz} \): < 1 dB

2.2.3. Insertion loss (at +25°C / in O.T.R.):

( measured on smallest attenuation in pass band )

\( \leq 6.0 / 6.5 \text{ dB} \)

2.3. **Stop band**

2.3.1. \( \text{fo} \pm 45 \text{ kHz} \) > 50 dB

2.3.2. \( \text{fo} \pm 50 \text{ kHz} \) > 62 dB

2.3.3. Alternate attenuation: > 70 dB (except spurious)

2.3.4. Spurious responses (in the range 0...200 MHz): ≥40 dB

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

2.5. VSWR in the range \( \text{fo} \pm 5.0 \text{ kHz} \): < 3:1 (return loss > 6 dB)

2.6. Maximum input power level:

-5 / +10 (working / non damaged)

2.7. Inband IP3 (with test tones at \( \text{fo} \pm 1 \text{ kHz} \), test tone power level at filter input: -10 dBm:

> +15 dBm (IMD > 50 dB)

3. **Marking:**

manufacturer, date code

MQF 109.35-1000/04

4. **Environment conditions:**

Corresponding to Vectron MIL standard

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Edited by: ________________________________ name: ________________________________