Specification for monolithic crystal filter: **MQF 45.0-0700/12**

1. General
   1.1. Package:
      - **bottom view**
      - **package GM3**

      We recommend to solder the whole bottom on the PCB-GND to guarantee the best possible attenuation in stop band.

1.2. Type name: MQF 45.0-0700/12
1.3. Number of poles: 10
1.4. Operating temperature range (OTR): -40°C to +85°C
1.5. Storage temperature range: -55°C to +85°C

2. Electric values
   2.1. Nominal centre frequency fo: 45.0 MHz

   2.2. Pass band
      2.2.1. Centre frequency fc at +25°C and -10 dBm input power: 45.0 MHz ± 450 Hz
      2.2.2. Center frequency shift (Δfc) in OTR referred to +25°C: < ± 20 ppm
      2.2.3. Bandwidth between 3 dB-frequencies: > fc ± 3.5 kHz
      2.2.4. Ripple in pass band: < 2.0 dB (peak to peak)
      2.2.5. Insertion loss: < 8.5 dB
         (measured on smallest attenuation in pass band)

   2.3. Stop band
      2.3.1. fc ± 7.0 kHz > 45 dB
      2.3.2. fc ± 8.33 kHz > 60 dB
      2.3.3. fc ± 11.5 kHz > 80 dB
      2.3.4. fc ± 910 kHz > 70 dB
      2.3.5. Alternate attenuation: > 70 dB

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

   2.5. Maximum input power level:
      -5 dBm / +10 dBm (operating / non-damaged)
      +20 dBm in stop band

3. Marking:
   - manufacturer, date code
   - MQF 45.0-0700/12

4. Environment conditions: Corresponding to Vectron MIL standard

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Edited by: ____________________________  date: ____________________________  name: ____________________________