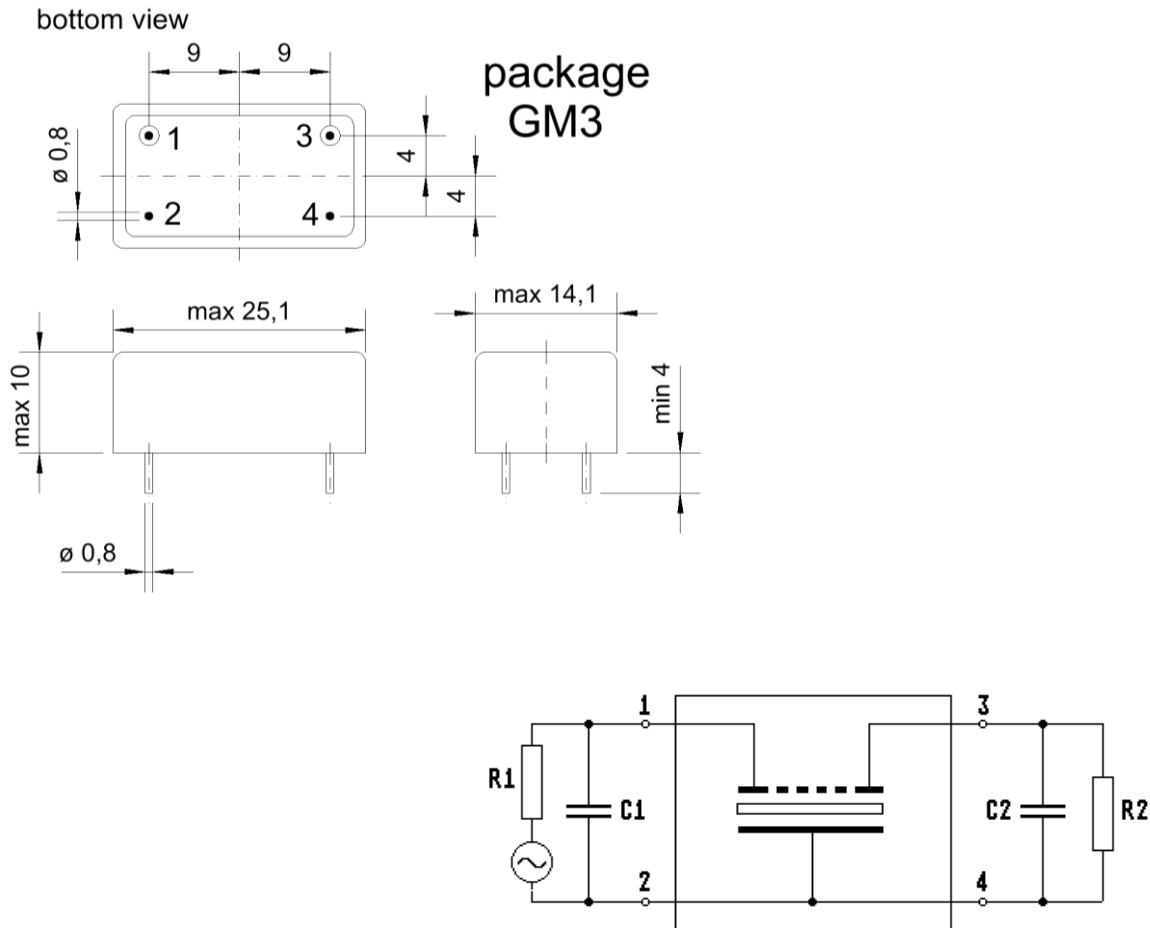


Specification for monolithic crystal filter

**MQF 40.048-0800/06**

1. General

1.1. Package:



- |                                   |                    |
|-----------------------------------|--------------------|
| 1.2. Type name:                   | MQF 40.048-0800/06 |
| 1.3. Number of poles:             | 4                  |
| 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 1 dB - frequencies:                                 | $> f_0 \pm 4.0$ kHz                  |
| 2.2.2. Ripple:   | $< 1.0$ dB at $f_0 \pm 4.0$ kHz      |
| 2.2.3. Change of group delay between different samples of the same delivery: | $< 300$ $\mu$ s at $f_0 \pm 4.0$ kHz |
| 2.2.4. Insertion loss:<br>( measured on smallest attenuation in pass band )  | $< 4.0$ dB                           |

### 2.3. Stop band

- 2.3.1.  $f_0 \pm 76$  kHz > 60 dB
  - 2.3.2. 39.942 MHz .....40.0 MHz > 80 dB
  - 2.3.3.  $f_0 + 76$  kHz.....+250 MHz > 60 dB
  - 2.3.4. Spurious responses: > 40 dB
- 2.4. Terminating impedance ( input and output ): 50  $\Omega$  // 0 pF

### 2.5. Intermodulation

- 2.5.1. Out band - intermodulation
- frequency 1:  $f_0 \pm 30$  kHz
  - frequency 2:  $f_0 \pm 60$  kHz
  - input power level at pin 1( input ): -6 dBm
  - IM: > 71 dB down from both -6 dBm test tones ( related to pin 3 )

- 2.5.2. Inband - intermodulation
- frequency 1:  $f_0 + 1.0$  kHz
  - frequency 2:  $f_0 - 1.0$  kHz
  - input power level at pin 3 ( output ): 0 dBm
  - IM: > 50 dB down from both 0 dBm test tones ( related to pin 1 )

- 2.6. Maximum input power level: 0 dBm
- 2.7. Maximum input power level: + 20 dBm ( without damage )
3. Environment conditions: Corresponding to Vectron standard CF001

5. Marking: manufacturer, date code  
MQF 40.048-0800/06

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Edited by: \_\_\_\_\_ date: \_\_\_\_\_ name: \_\_\_\_\_