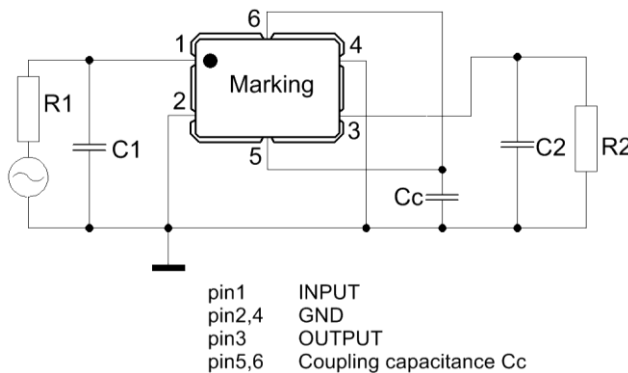
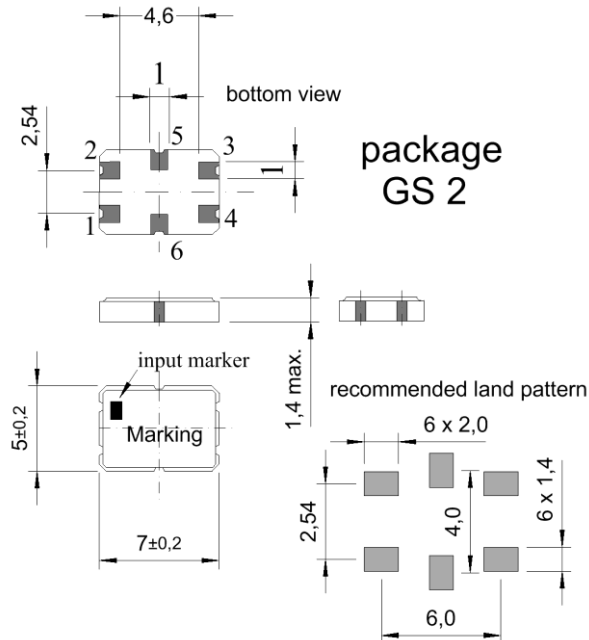


Specification for monolithic crystal filter:

**MQF 70.0 - 2200/07**

1. General

1.1. Package:



- |   |                  |
|---|------------------|
| 1.2. Type name:                           | MQF 70.0-2200/07 |
| 1.3. Number of poles:                     | 4                |
| 1.4. Operating temperature range ( OTR ): | -40°C to +85°C   |
| 1.5. Storage temperature range:           | -45°C to +85°C   |

2. Electric values

- |   |                             |
|---|-----------------------------|
| 2.1. Nominal centre frequency fo:   | 70.0 MHz                    |
| 2.2. Center frequency shift in OTR:   | < ± 25ppm referred to +25°C |
| 2.3. Pass band  |                             |
| 2.3.1. Bandwidth between 3 dB - frequencies:                                | > fo ± 11.0 kHz             |
| 2.3.2. Ripple in pass band ( peak to peak ):                                | < 1.0 dB                    |
| 2.3.3. Insertion loss:<br>( measured on smallest attenuation in pass band ) | < 5.0 dB                    |

2.4. Stop band

- 2.4.1.  $f_o \pm 25$  kHz > 15 dB
- 2.4.2.  $f_o \pm 40$  kHz > 30 dB
- 2.4.3.  $f_o \pm 65$  kHz > 50 dB
- 2.4.4. Alternate attenuation > 65 dB (except spurious)

2.5. Terminating impedance R//C ( input and output ): 820  $\Omega$  // 1.0 pF

2.5.1. Coupling capacitance Cc: 4.0 pF

2.6. Input power level for reference measurement: -10 dBm

2.6.1. Maximum input power level without destruction: 0 dBm

2.7. Out band Intermodulation

- 2.7.1. Test tone frequencies:  $f_o \pm 100$  kHz /  $f_o \pm 200$  kHz
- 2.7.2. Input power level ( at pin 1 ): -10 dBm ( each tone )
- 2.7.3. 3rd order Intermodulation ( IP3 > +25 dBm ) > 70 dB down from both -10 dBm input test tones

3. Marking: • M70A10  
yyww

4. Environment conditions:

- a. vibration: MIL-STD-810G, method 514.6 procedure I
- b. shock: MIL-STD-810G, method 516.6 procedure I + IV + V

5. Filters are Pb-free and 2002 /95 / EC RoHS compliant

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