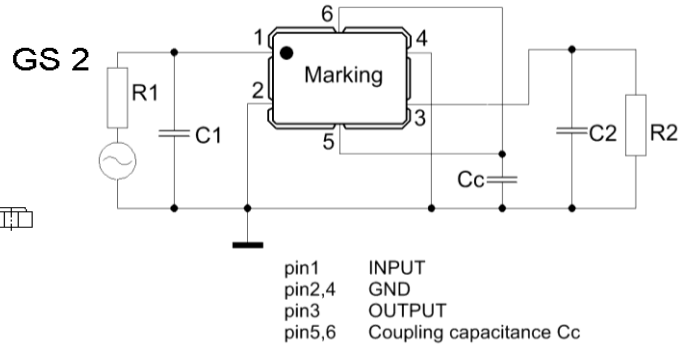
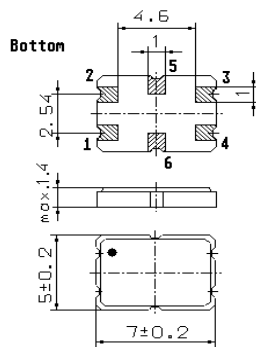


Specification for monolithic crystal filter:

MQF 70.0 - 5000 / 21

1. General

1.1. Package:



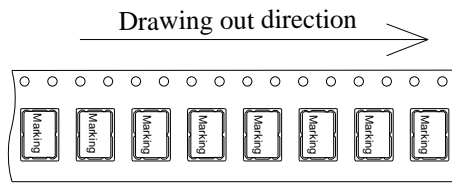
- | | |
|-----------------------------------|------------------|
| 1.2. Type name: | MQF 70.0-5000/21 |
| 1.3. Number of poles: | 4 |
| 1.4. Operating temperature range: | -40°C to +85°C |
| 1.5. Storage temperature range: | -45°C to +85°C |

2. Electric values

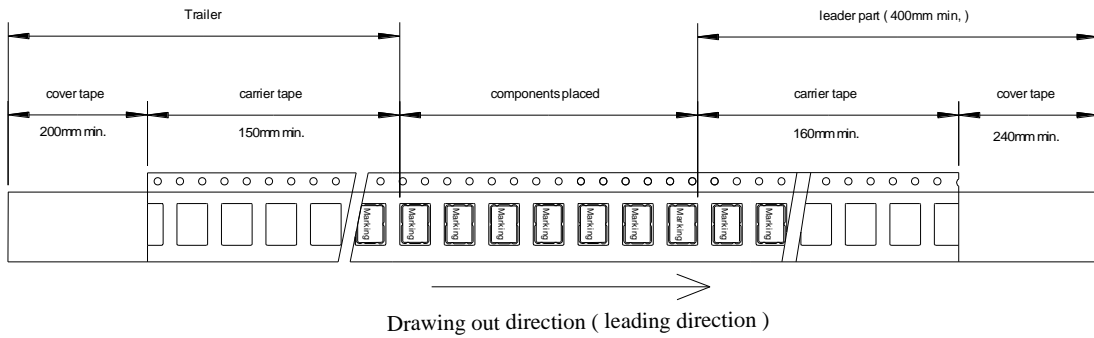
- | | |
|---|---|
| 2.1. Nominal centre frequency fo: | 70.0 MHz |
| 2.2. Pass band | |
| 2.2.1. Bandwidth between 3 dB - frequencies: | > fo ± 25.0 kHz |
| 2.2.2. Ripple: | < 1.0 dB at fo ± 20.0 kHz |
| 2.2.3. Insertion loss:
(measured on smallest attenuation in pass band) | < 3.0 dB |
| 2.3. Stop band | |
| 2.3.1. fo ± 60 kHz | > 20 dB |
| 2.3.2. fo ± 95 kHz | > 40 dB |
| 2.3.3. Alternate attenuation fo ± 910 kHz | > 65 dB (except spurious) |
| 2.4. Terminating impedance R//C (input and output): | 1500 Ω // 0.4 pF |
| 2.4.1. Coupling capacitance | 1.6 pF |
| 2.5. Input power level for reference measurement: | +0 dBm |
| 2.5.1. Maximum input power level without destruction: | +10 dBm |
| 2.6. Out band Intermodulation | |
| 2.6.1. frequency 1, 2: | fo ± 100 / 200 kHz |
| 2.6.2. Input power level: | -10 dBm |
| 2.6.3. Intermodulation (IP3 > +25 dBm) | > 70 dB down from both -10dBm input tones |
| 3. Marking: | • M70A7
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 | |
| 6. Reflow soldering for Pb-free assembly: | |

- > 100°C for maximum 600 seconds
- > 200°C for maximum 180 seconds
- > 260°C for maximum 30 seconds
(peak temperature)
- cool - down time: 2 hours

7. Packing:

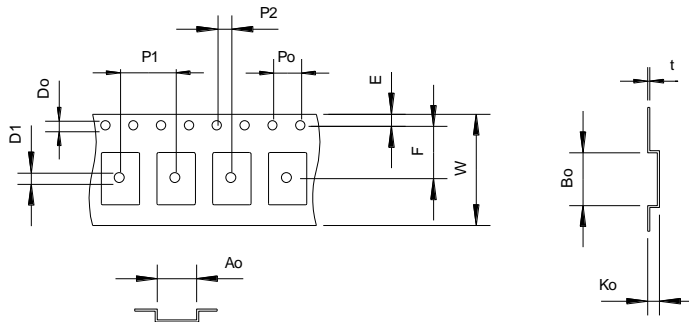


Tape dimension (mm)



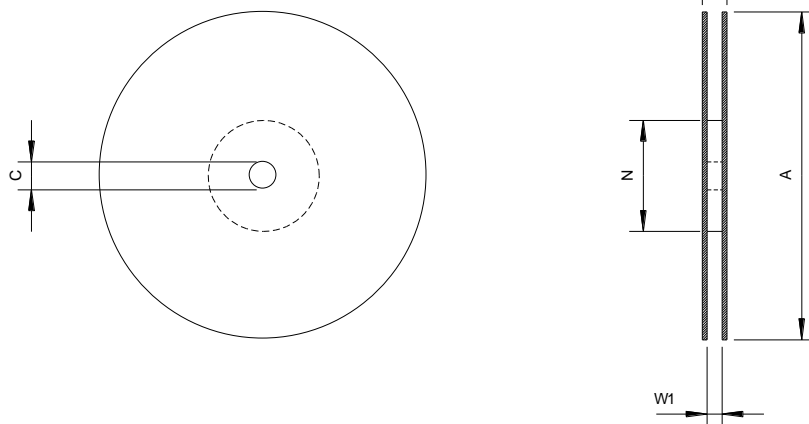
Tape (all dimensions in mm)

- W: 16.0 ± 0.1
- Po: 4.0 ± 0.1
- P1: 8.0 ± 0.1
- P2: 2.0 ± 0.1
- Do: $1.5 +0.1 / -0$
- D1: $1.6 +0.1 / -0$
- E: 1.75 ± 0.1
- F: 7.5 ± 0.1
- Ko: 1.7 ± 0.1
- Ao: 5.6 ± 0.1
- Bo: 7.6 ± 0.1
- t: 0.3 ± 0.05



Reel (all dimension in mm)

- A: $\varnothing 178 \pm 2$
- C: $\varnothing 13 \pm 0.5$
- N: $\varnothing 60 \pm 1$
- W1: 17.5 ± 1.5
- W2: 21.5 ± 1.5



Edited by: _____ date: _____ name: _____