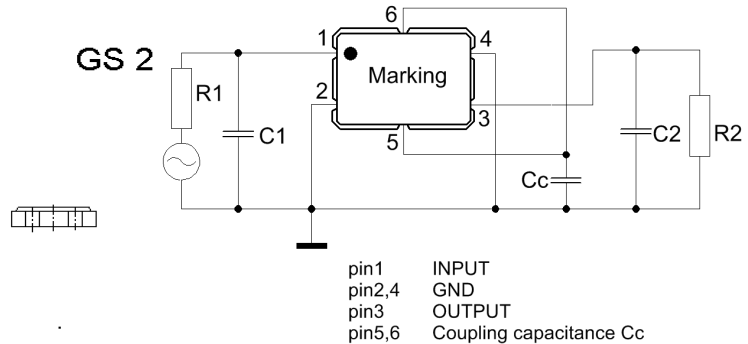
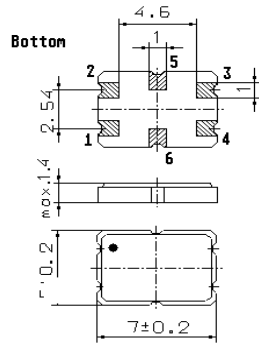


Specification for monolithic crystal filter:

MQF 70.0 - 5000 / 21

1. General

1.1. Package:

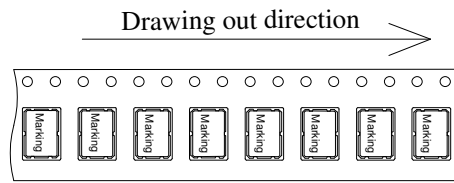


- 1.2. Type name: MQF 70.0-5000/21
 1.3. Number of poles: 4
 1.4. Operating temperature range: -40°C to +85°C
 1.5. Storage temperature range: -45°C to +85°C

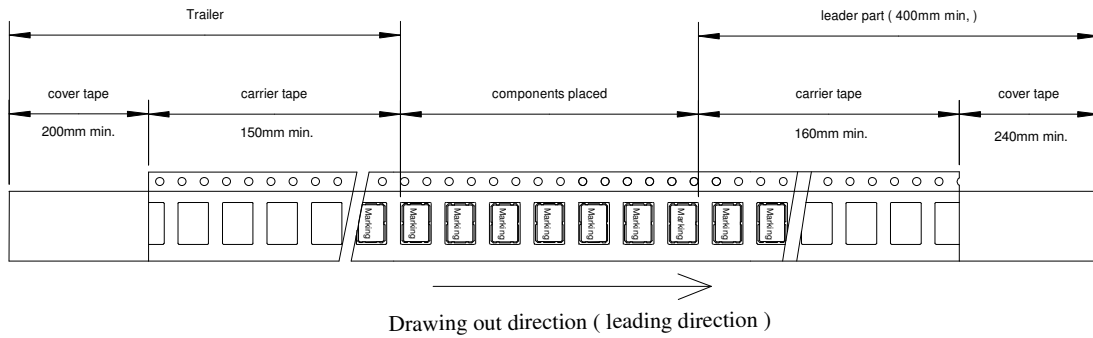
2. Electric values

- 2.1. Nominal centre frequency f_0 : 70.0 MHz
- 2.2. **Pass band**
- 2.2.1. Bandwidth between 3 dB - frequencies: $> f_0 \pm 25.0$ kHz
 2.2.2. Ripple: < 1.0 dB at $f_0 \pm 20.0$ kHz
 2.2.3. Insertion loss: < 3.0 dB
 (measured on smallest attenuation in pass band)
- 2.3. **Stop band**
- 2.3.1. $f_0 \pm 60$ kHz > 20 dB
 2.3.2. $f_0 \pm 95$ kHz > 40 dB
 2.3.3. Alternate attenuation $f_0 \pm 910$ kHz > 65 dB (except spurious)
- 2.4. Terminating impedance R/C (input and output): $1500 \Omega // 0.4$ 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. **Outband Intermodulation**
- 2.6.1. frequency 1, 2: $f_0 \pm 100 / 200$ 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 on the case: • 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:
 $> 100^\circ\text{C}$ for maximum 600 seconds
 $> 200^\circ\text{C}$ for maximum 180 seconds
 $> 260^\circ\text{C}$ for maximum 30 seconds
 (peak temperature)
 cool - down time: 2 hours

7. Packing:

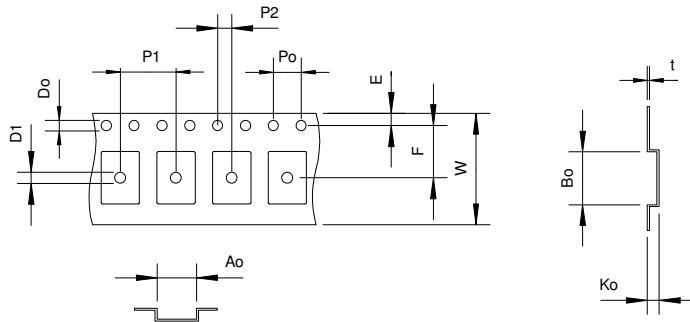


Tape dimension (mm)



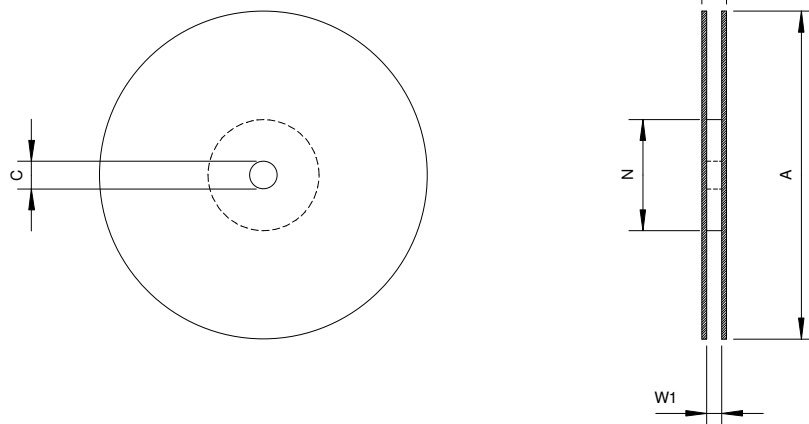
Tape (all dimensions in mm)

- 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: ø 178 ± 2
- C: ø 13 ± 0.5
- N: ø 60 ± 1
- W1: 17.5 ± 1.5
- W2: 21.5 ± 1.5



Edited by: _____ date: _____ name: _____