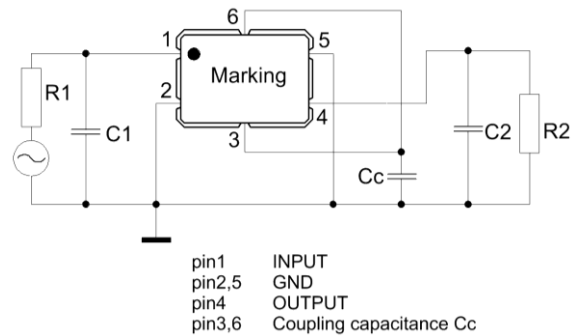
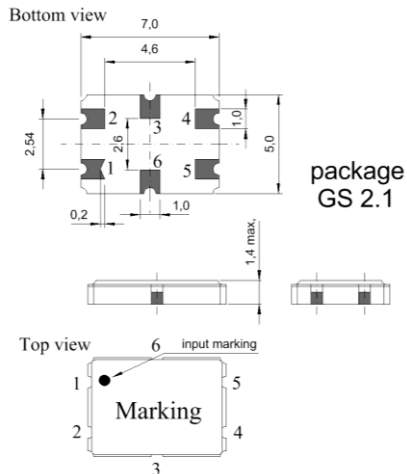


Specification for monolithic crystal filter:

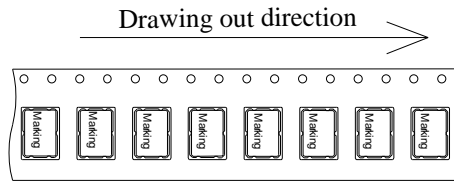
MQF 72.0 - 5000 / 02
1. General
1.1. Package:


- | | |
|-----------------------------------|------------------|
| 1.2. Type name: | MQF 72.0-5000/02 |
| 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 |

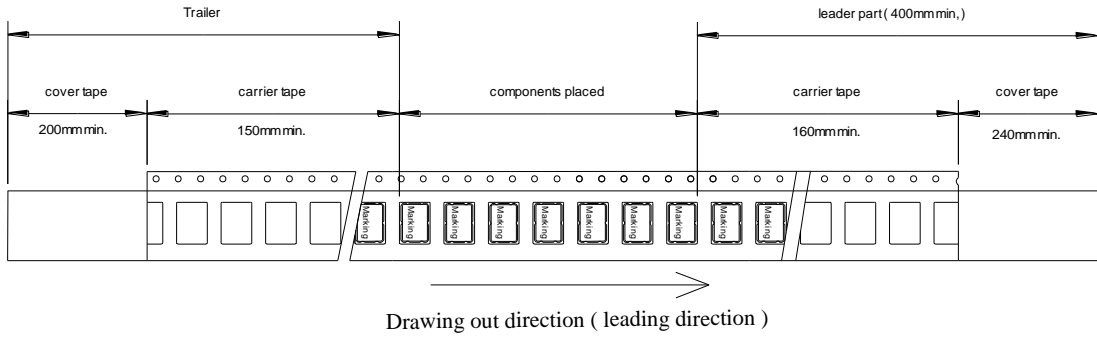
2. Electric values

- | | |
|---|---|
| 2.1. Nominal centre frequency f_0 : | 72.0 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 peak to peak |
| 2.2.3. Insertion loss: (measured on smallest attenuation in pass band) | < 3.0 dB |
| 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): | $1300 \Omega // 0.2$ pF |
| 2.4.1. Coupling capacitance C_c : | 1.6 pF |
| 2.5. Input power level for reference measurement: | -10 dBm |
| 2.5.1. Maximum input power level without destruction: | 0 dBm |
| 2. 6. Out band Intermodulation | |
| 2.6.1. Test tones frequencies: | $f_0 \pm 100$ kHz / $f_0 \pm 200$ kHz |
| 2.6.2. Input power level: | -10 dBm |
| 2.6.3. Intermodulation (IP3 $> +25$ dBm) | > 70 dB down from both -10 dBm input test tones |
| 3. Marking: | <ul style="list-style-type: none"> • M72A2 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: | <ul style="list-style-type: none"> $> 100^\circ\text{C}$ 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:

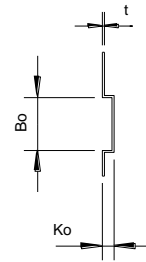
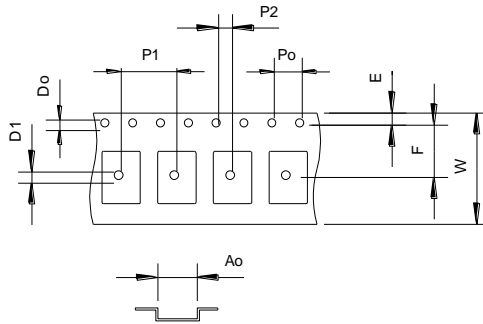


Tape dimension (mm)



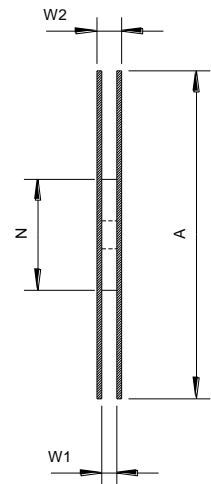
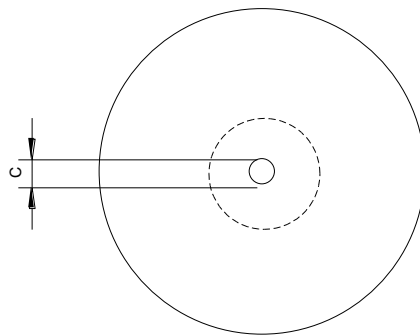
Tape (all dimensions in mm)

- W: 16.0±0.1
- Pα: 4.0±0.1
- P1: 8.0±0.1
- P2: 2.0±0.1
- Dα: 1.5+0.1/-0
- D1: 1.6+0.1/-0
- E: 1.75±0.1
- F: 7.5±0.1
- Kα: 1.7±0.1
- Aα: 5.6±0.1
- Bα: 7.6±0.1
- t: 0.3±0.05



Reel (all dimension in mm)

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



Edited by: _____ date: _____ name: _____