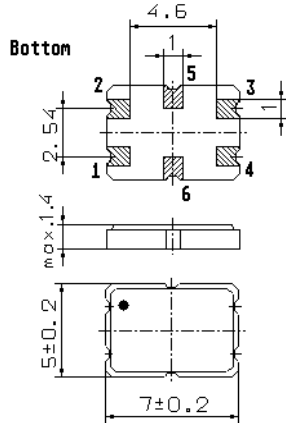


Specification for monolithic crystal filter:

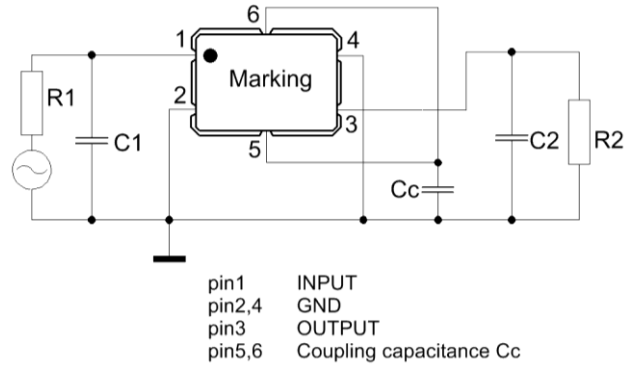
**MQF 45.0-3000/23**

## 1. General

### 1.1. Package:



**GS 2**

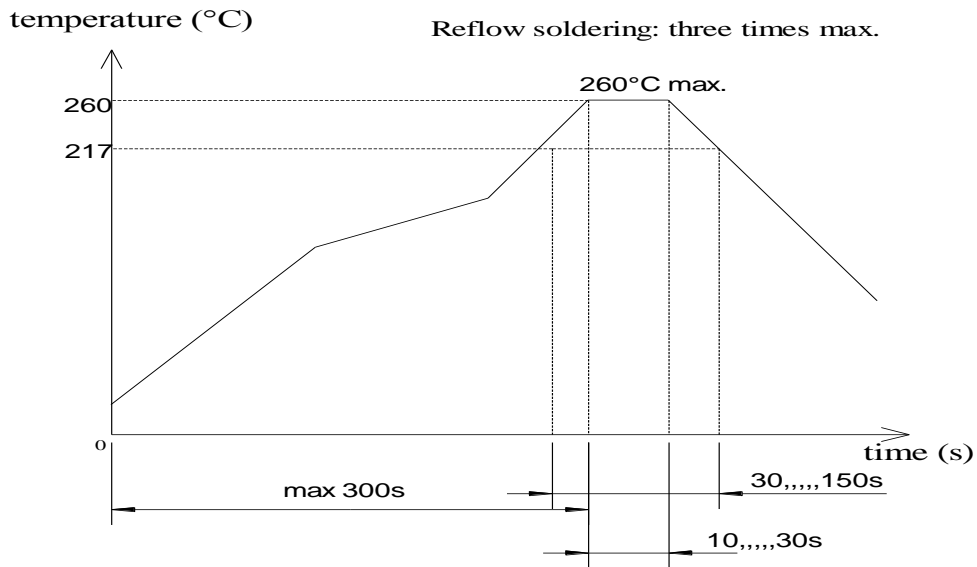


- |                                   |                  |
|-----------------------------------|------------------|
| 1.2. Type name:                   | MQF 45.0-3000/23 |
| 1.3. Number of poles:             | 4                |
| 1.4. Operating temperature range: | -40°C to +85°C   |
| 1.5. Storage temperature range:   | -45°C to +85°C   |

## 2. Electric values

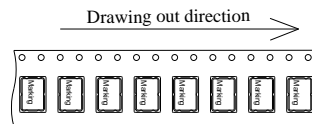
- |   |   |
|---|---|
| 2.1. Nominal centre frequency fo:   | 45.0 MHz                                |
| <b>2.2. Pass band</b>   |   |
| 2.2.1. Bandwidth between 3 dB - frequencies:                                | > fo ± 15.0 kHz                         |
| 2.2.2. Ripple:  | < 1.0 dB at fo ± 10.0 kHz               |
| 2.2.3. Insertion loss:<br>( measured on smallest attenuation in pass band ) | < 3.0 dB                                |
| <b>2.3. Stop band</b>   |   |
| 2.3.1. fo ± 50.0 kHz:   | > 30 dB                                 |
| 2.3.2. fo ± 100 kHz:  | > 50 dB (expect spurious)               |
| 2.3.3. Alternate attenuation:   | > 50 dB (expect spurious)               |
| 2.3.4. Spurious responses:  | > 20 dB in the range fo ± 1000 kHz      |
| 2.4. Maximum input power ( working/non-damaged ):                           | 0 / +15 dBm                             |
| 2.5. Terminating impedance R/C ( input and output ):                        | 1500 Ω // 0.7 pF                        |
| 2.5.1. Coupling capacitance ( Cc ):   | 3.0 pF                                  |
| 3. Marking:   | M45B6<br>date code                      |
| 4. Environment conditions:  | Corresponding to Vectron standard CF001 |
| 5. Filters are Pb-free and 2002 /95 / EC RoHS compliant                     |   |

6. Reflow soldering conditions:

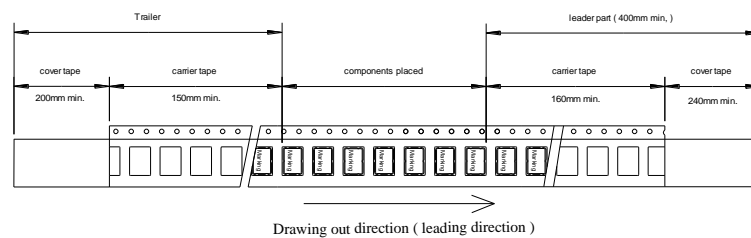


7. Packing

maximum 1000 pcs. / reel

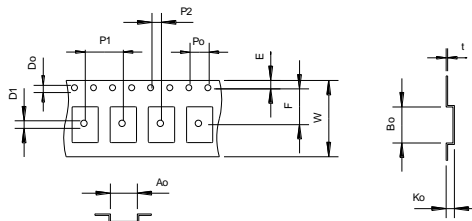


Tape dimension (mm)



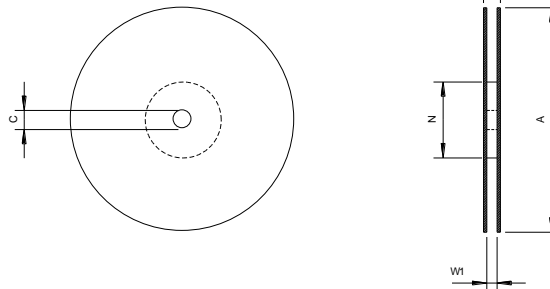
Tape (all dimensions in mm)

- 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: \_\_\_\_\_