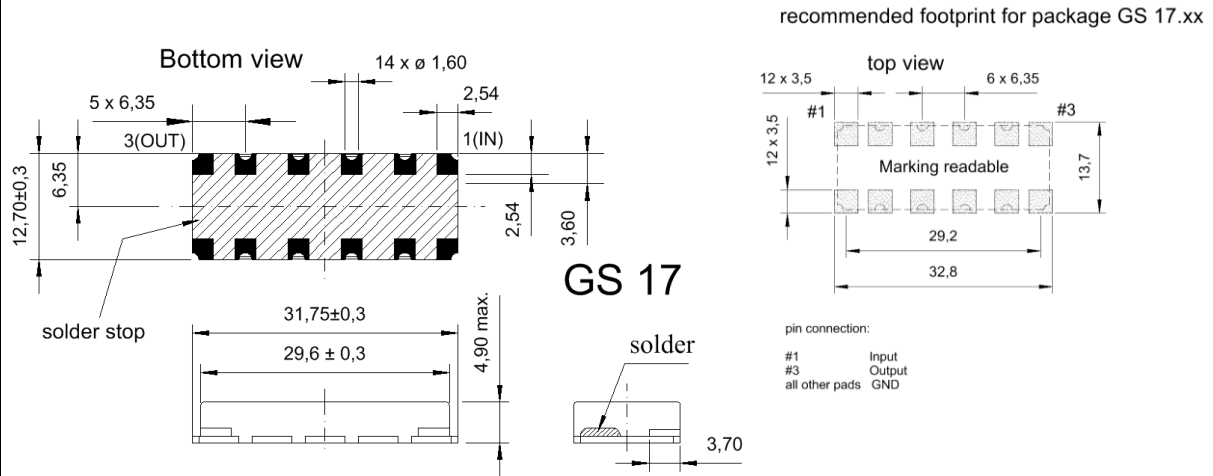


Specification for monolithic crystal filter:

MQF 70.0 - 0500/08

1. General

1.1. Package:



- | | |
|-----------------------------------|------------------|
| 1.2. Type name: | MQF 70.0-0500/08 |
| 1.3. Number of poles: | 6 |
| 1.4. Operating temperature range: | -20°C to +70°C |
| 1.5. Storage temperature range: | -45°C to +85°C |

2. Electric values

- | | |
|------------------------------------|-------------------|
| 2.1. Nominal center frequency fo: | 70.0 MHz |
| 2.1.1 Center frequency: fc at 25°C | 70.0 MHz ± 800 Hz |

2.2. Pass band

- | | |
|---|----------------------------------|
| 2.2.1. Bandwidth between 3 dB - frequencies: | > fc ± 1.9 kHz
< fc ± 2.5 kHz |
| 2.2.2. Ripple: peak to peak | < 1 dB |
| 2.2.3. Differential group delay: | < 90 µs at fc ± 1.9 kHz |
| 2.2.4. Insertion loss:
(measured on smallest attenuation in pass band) | < 9.0 dB |

2.3. Stop band

- | | |
|---|-----------------------------|
| 2.3.1. fc ± 9.0 kHz | > 60 dB |
| 2.3.2. Alternate attenuation fc ± 19 kHz...± 1MHz | > 65 dB (except spurious) |

2.4. Terminating impedance (input and output): 50 Ω // 0 pF

2.5. Input power level: working / non-damaged 0 dBm / +15 dBm

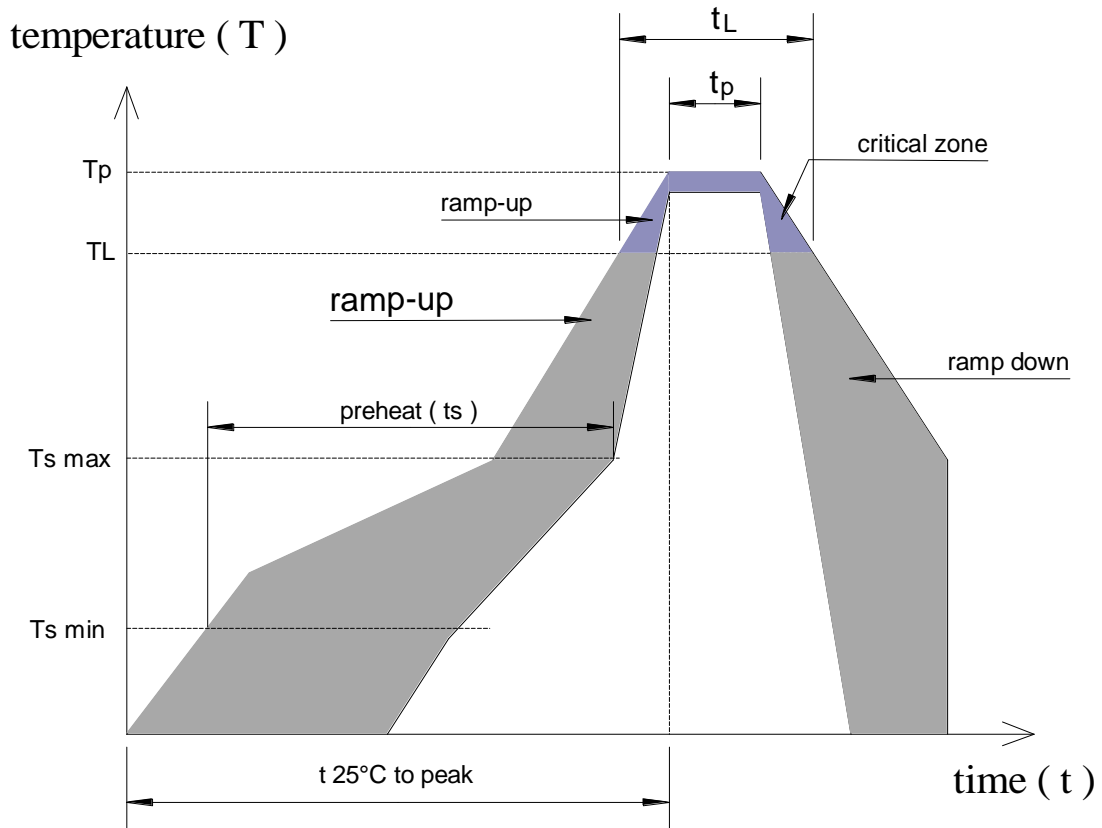
2.6. Intermodulation (outband)

frequency 1:	fc ± 50 kHz
frequency 2:	fc ± 100 kHz
input power level at pin 1(input):	0 dBm
IM:	> 60 dB

3. Marking: manufacturer, date code
MQF 70.0-0500/08

4. Environment conditions: Corresponding to Vectron standard CF001

5.) Reflow profil nach IPC / JEDEC J-STD-020C

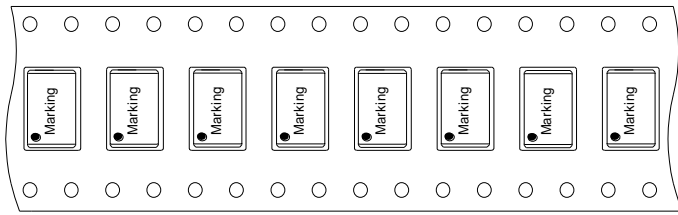


Profile Feature	Pb-free assembly	
	small body	large body
Average ramp-up rate (TL to Tp)	3°C / second max.	
Average ramp-up rate (Tsmax to TL)	3°C / second max.	
Preheat: - Temperature Min Tsmín - Temperature Min Tsmáx - Time ts (Tsmín to Tsmáx)	150°C 200°C 60-180 seconds	
Time maintained above: - Temperature TL - Time tL	217°C 60-150 seconds	
Peak temperature Tp	260 +0/-6°C	
Time within 5°C of actual peak temperature Tp	10-30 seconds	20-40 seconds
Ramp-down rate	6°C / second max.	
Time 25°C to peak temperature	8 minutes max.	

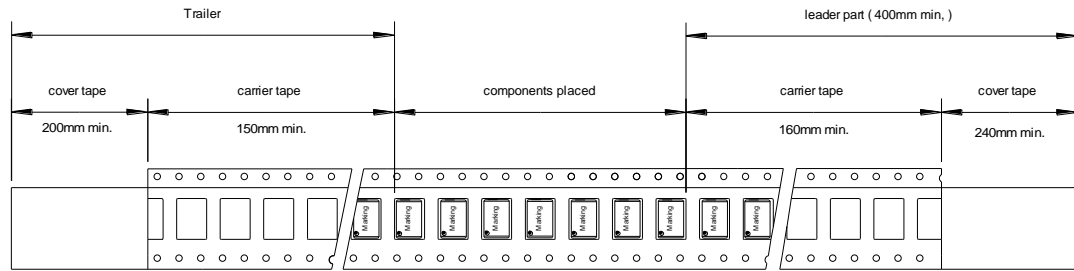
6. Taping


Maximum 600 pcs. / reel

Drawing out direction 



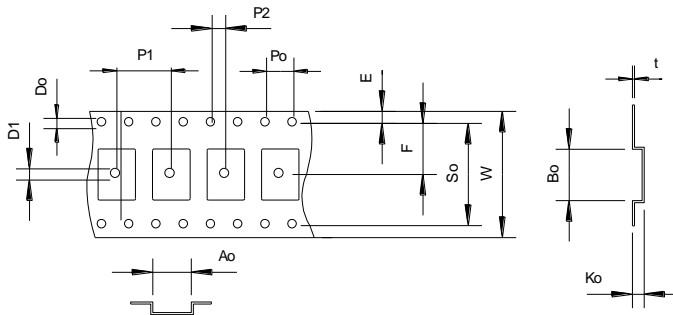
Tape dimension (mm)



Drawing out direction (leading direction) 

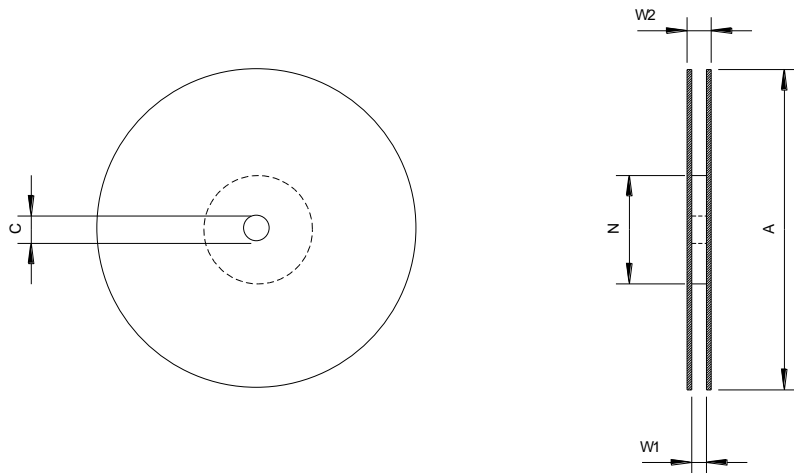
Tape (all dimensions in mm)

- W: 44.0 ± 0.3
- So: 40.4 ± 0.1
- Po: 4.0 ± 0.1
- P1: 20.0 ± 0.1
- F: 20.2 ± 0.15
- Ko: 5.1 ± 0.1
- Ao: 13.2 ± 0.1
- Bo: 32.25 ± 0.1
- t: 0.4 ± 0.05



Reel (all dimension in mm)

- A: $\varnothing 330 \text{ max.}$
- C: $\varnothing 21.8 \pm 0.5$
- N: $\varnothing 100 \text{ min.}$
- W1: 45.5 ± 0.25
- W2: 49.5 ± 0.5



Edited by: _____ date: _____ name: _____