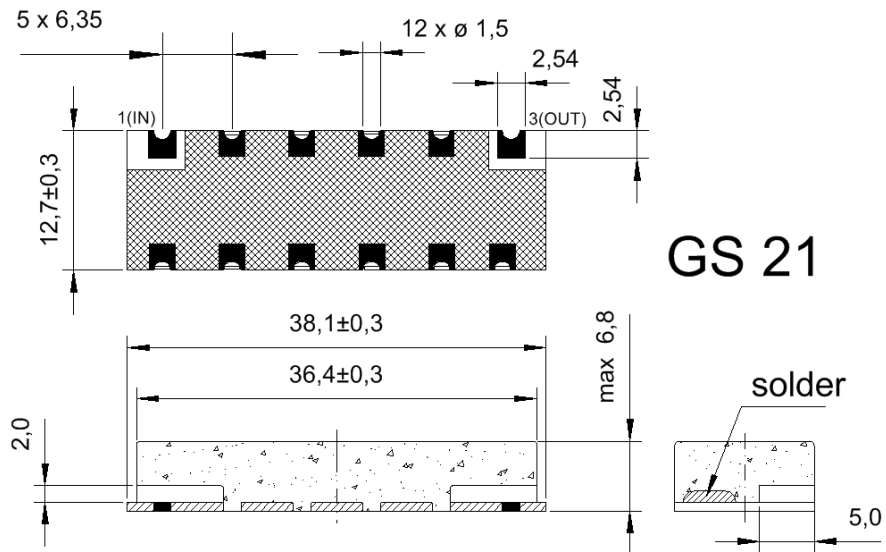


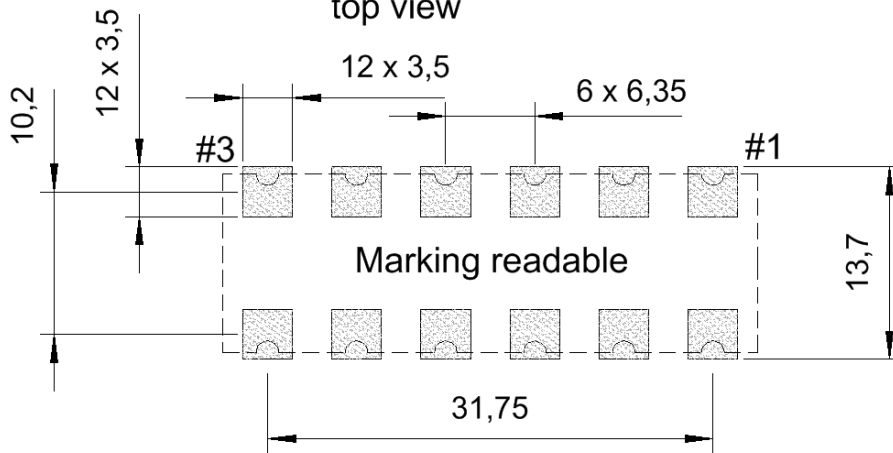
Specification for monolithic crystal filter **MQF 21.4-2500/13**

1. General

1.1. Package:



recommended footprint for package GS 21.xx
top view



pin connection:

- | | |
|----------------|--------|
| #1 | Input |
| #3 | Output |
| all other pads | GND |

- | | |
|-----------------------------------|------------------|
| 1.2. Type name: | MQF 21.4-2500/13 |
| 1.3. Number of poles: | 10 |
| 1.4. Operating temperature range: | -40°C to +85°C |
| 1.5. Storage temperature range: | -55°C to +85°C |

2. Electric values

2.1. Nominal centre frequency f_0 : 21.4 MHz

2.2. Pass band

- 2.2.1. Bandwidth between 3 dB - frequencies: $> f_0 \pm 12.5$ kHz
2.2.2. Ripple (peak to peak): < 1.5 dB at $f_0 \pm 8.0$ kHz
2.2.3. Insertion loss: < 4.0 dB
(measured on smallest attenuation in pass band)

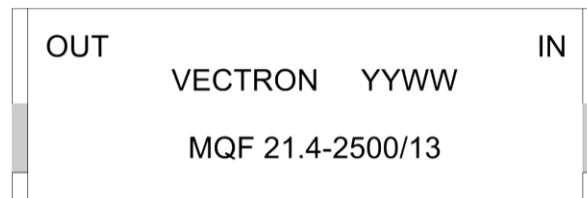
2.3. Stop band

- 2.3.1. $f_0 \pm 20$ kHz > 50 dB
2.3.2. $f_0 \pm 24$ kHz > 70 dB
2.3.3. $f_0 \pm 27$ kHz > 80 dB
2.3.4. Guaranteed attenuation > 80 dB

2.4. Terminating impedance (input and output): $50 \Omega // 0$ pF

2.5. Maximum input power level:
(working / non-damaged) +10 dBm / +15 dBm

3. Marking: top view



4. Environment conditions: Corresponding to Vectron MIL standard

5. Packing: Tape & reel, maximum 500 pcs. / reel

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

Edited by: _____ date: _____ name: _____