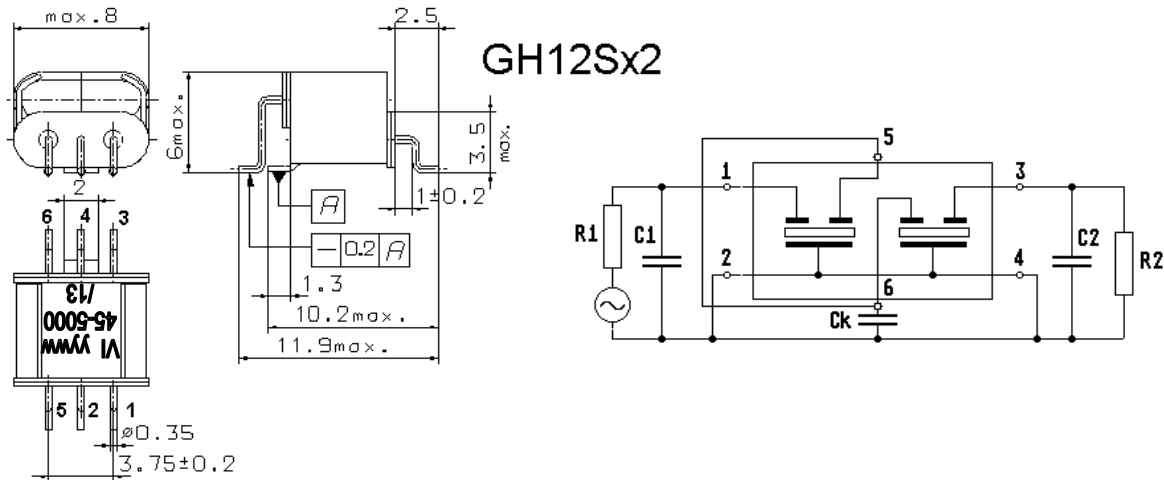


Specification for monolithic crystal filter:

MQF 45.0-5000/13

1. General

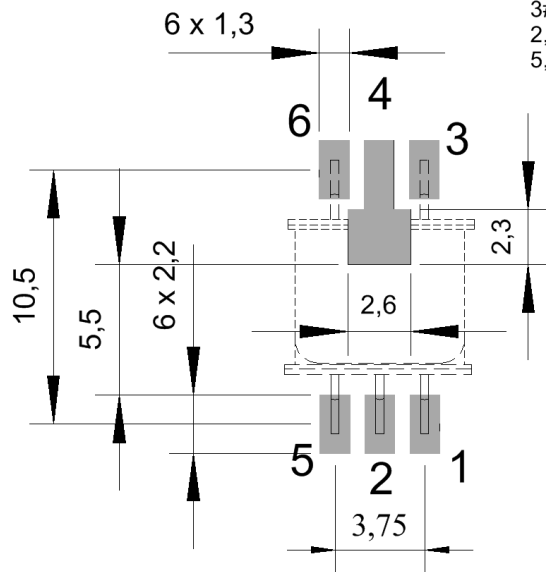
1.1. Package:



recommended footprint for package GH12Sx2

pin connection:

- 1# Input
- 3# Output
- 2,4# GND
- 5,6# Coupling capacitance Cc



- 1.2. Type name: MQF 45.0-5000/13
- 1.3. Number of poles: 4
- 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 centre frequency fo: 45.0 MHz
- 2.2. Pass band
 - 2.2.1. Bandwidth between 3 dB - frequencies: $\geq f_0 \pm 25$ kHz
 - 2.2.2. Ripple: Gaussian
 - 2.2.3. Group delay distortion: ≤ 2.5 μ s (in the range $f_0 \pm 25$ kHz)
 - 2.2.4. Insertion loss: ≤ 3.0 dB
(measured on smallest attenuation in pass band)

2.3. **Stop band**

- 2.3.1. $f_o \pm 100$ kHz ≥ 35 dB
- 2.3.2. Alternate attenuation: ≥ 60 dB (except spurious)
- 2.3.3. Spurious responses: ≥ 10 dB

2.4. Terminating impedance (input and output): $2700 \Omega // -0.3 \text{ pF} \pm 0.2 \text{ pF}$

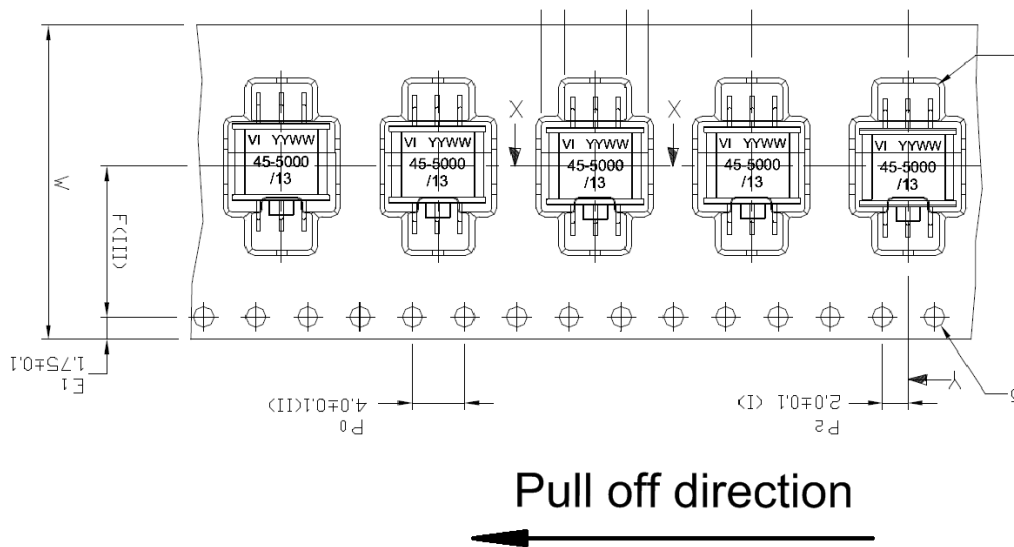
- 2.4.1. Coupling capacitance C_c 1.5 pF
- 2.5. Input power level (working / non-damaged): $-9 / 0 \text{ dBm}$

2.6. IP3 (out band Intermodulation): 20 dBm typical

Input power level: -20 dBm
 frequency 1: $f_o \pm 200 \text{ kHz}$
 frequency 2: $f_o \pm 400 \text{ kHz}$

3. Marking: VI, date code
45-5000
/13

4. Taping (maximum 800 pcs /reel),
reel diameter 300mm



5. Environment conditions: Corresponding to Vectron standard CF001