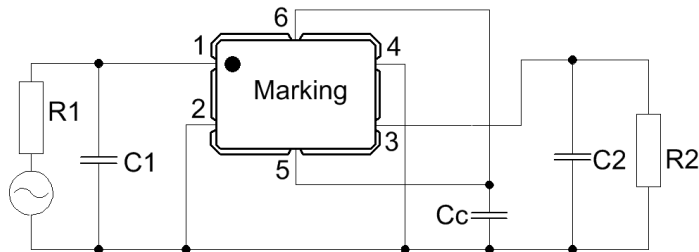
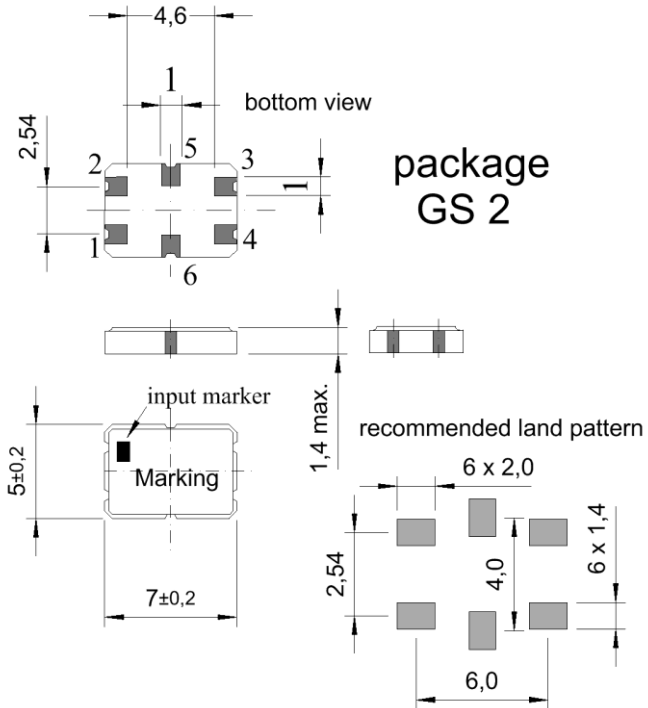


Specification for monolithic crystal filter:

MQF 45.0 - 5000/28

1. General

1.1. Package:



pin1 INPUT
 pin2,4 GND
 pin3 OUTPUT
 pin5,6 Coupling capacitance Cc

- 1.2. Type name: MQF 45.0-5000/28
- 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

2.3. Pass band

- 2.3.1. Bandwidth between 3 dB - frequencies: $> f_0 \pm 25 \text{ kHz}$
2.3.2. Ripple (at $f_0 \pm 17 \text{ kHz}$): $< 1.0 \text{ dB}$ (peak to peak)
2.3.3. Differential group delay (at $f_0 \pm 17 \text{ kHz}$): $< 5.0 \mu\text{s}$
2.3.4. Insertion loss: $< 3.0 \text{ dB}$
(measured on smallest attenuation in pass band)

2.4. Stop band

- 2.4.1. $f_0 \pm 100 \text{ kHz}$ $> 35 \text{ dB}$
2.4.2. Guaranteed attenuation $> 80 \text{ dB}$ (except spurious)
2.4.3. Spurious responses: > 20
2.5. Terminating impedance R//C (IN / OUT): $2700 \Omega // -0.3 \text{ pF}$
2.5.1. Coupling capacitance Cc: 0.7 pF
2.6. Maximum input power level (working): -9 dBm
2.6.1. Maximum input power level (non-damaged): $+10 \text{ dBm}$

- 2.7. 3rd order intermodulation product: $< -80 \text{ dBm}$
- test tone frequencies: $f_0 + -200 \text{ kHz} / f_0 + -400 \text{ kHz}$
- input power level -20 dBm (at pin 1)

3. Marking: • M45B12
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

Edited by: _____ date: _____ name: _____