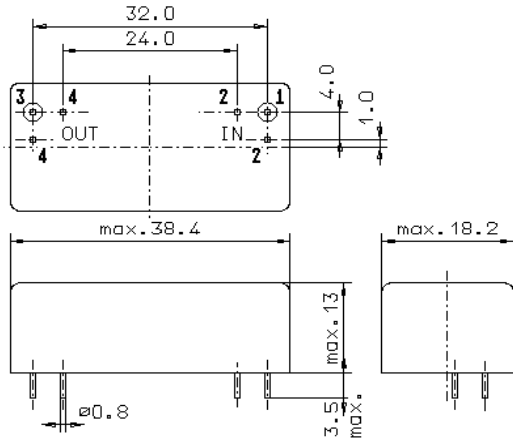


Specification for monolithic crystal filter:

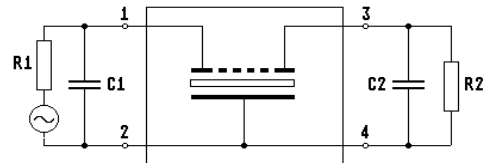
MQF 10.0-1500/06

1. General

1.1. Package:



GM17



- 1.2. Type name: MQF 10.0-1500/06
- 1.3. Number of poles: 8
- 1.4. Operating temperature range (OTR): -20°C to +70°C
- 1.5. Storage temperature range: -40°C to +85°C

2. Electric values

- 2.1. Nominal centre frequency fo: 10.0 MHz
- 2.2. Pass band
 - 2.2.1. Bandwidth between 3 dB - frequencies: $> f_o \pm 7.5 \text{ kHz}$
 - 2.2.2. Ripple at $f_o \pm 4.0 \text{ kHz}$: $< 1.0 \text{ dB (peak to peak)}$
 - 2.2.3. Differential group delay $f_o \pm 4.0 \text{ kHz} / f_o \pm 2.0 \text{ kHz}$: $< 12 \mu\text{s} / < 3.0 \mu\text{s}$
 - 2.2.4. Group delay asymmetry between lower and upper group delay range referred to f_o (lower: $f_o - 4 \text{ kHz} \leq f \leq f_o$, upper: $f_o \leq f \leq f_o + 4 \text{ kHz}$: $< 2.0 \text{ dB typical at } +25^\circ\text{C}$ and $< 3.0 \text{ dB typical in OTR}$
 - 2.2.5. Insertion loss: $< 3.0 \text{ dB}$
(measured on smallest attenuation in pass band)
- 2.3. Stop band
 - 2.3.1. $f_o \pm 15 \text{ kHz}$: $> 30 \text{ dB}$
 - 2.3.2. $f_o \pm 20 \text{ kHz}$: $> 50 \text{ dB}$
 - 2.3.3. $f_o \pm 25 \text{ kHz}$: $> 70 \text{ dB}$
 - 2.3.4. Alternate attenuation: $> 80 \text{ dB (except spurious)}$
- 2.4. Terminating impedance (input and output): $50 // 0 \text{ pF}$
- 2.5. Maximum continuous input power level: $+10 \text{ dBm} / +20 \text{ dBm (working / non-damaged)}$
- 3. Marking: manufacturer, date code
MQF 10.0-1500/06
- 4. Environment conditions: Corresponding to Vectron MIL standard

Edited by: _____ date: _____ name: _____