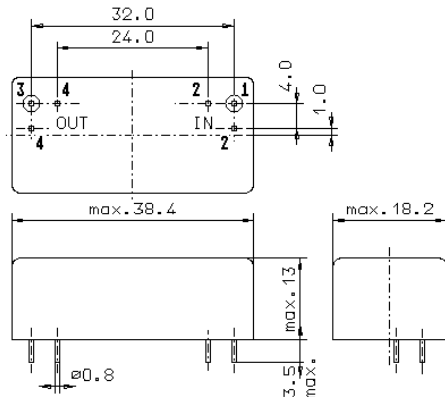


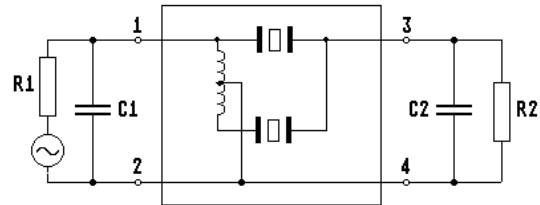
Specification for crystal filter:

QF 90.0-5200/04
1. General

1.1. Package:



GM17



- | | |
|-----------------------------------|-----------------|
| 1.2. Type name: | QF 90.0-5200/04 |
| 1.3. Number of poles: | 4 |
| 1.4. Operating temperature range: | -20°C to +70°C |
| 1.5. Storage temperature range: | -40°C to +85°C |

2. Electric values

- | | |
|---|---|
| 2.1. Nominal centre frequency fo: | 90.0 MHz |
| 2.2. Pass band | |
| 2.2.1. Bandwidth between 3 dB - frequencies: | > fo ± 26 kHz |
| 2.2.2. Ripple: | < 1.0 dB at fo ± 20.0 kHz |
| 2.2.3. Insertion loss: | < 5.0 dB |
| (measured on smallest attenuation in pass band) | |
| 2.2.4. Group delay distortion: | < 5.0 μs at fo ± 12.0 kHz |
| 2.3. Stop band | |
| 2.3.1. fo ± 65kHz | > 30dB |
| 2.3.2. fo ± 200 kHz | > 70 dB (except spurious) |
| 2.3.3. 100 MHz.....105 MHz | > 90 dB |
| 2.3.4. Spurious response fo + 200 kHz...fo +2500 kHz | > 30 dB |
| 2.4. Terminating impedance (input and output): | 50 Ω // 0 pF |
| 2.5. Input power level for reference measurement: | 0 dBm |
| Maximum input power level without destruction: | +10 dBm |
| 2.6. 3 rd order outband Intermodulation products (IP3) | |
| test tones: fo ± 100 / 200 kHz, | |
| input power level: -5 dBm per tone | > +30 dBm (70dB down from both -5dBm test tones) |
| input power level: -15 dBm per tone | > +25 dBm (80dB down from both -15dBm test tones) |
| 3. Marking: | manufacturer, date code
27S32693831
QF 90.0-5200/04 |
| 4. Environment conditions: | Corresponding to Vectron MIL standard |

Edited by: _____ date: _____ name: _____