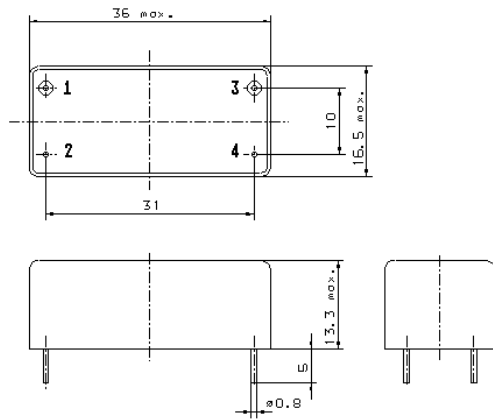


Specification for crystal filter:

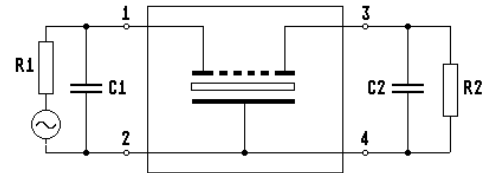
QF 124.8 - 7000/02

1. General

1.1. Package:



GM 44



Filters are Pb-free and 2002/95 / EC RoHS compliant

- | | |
|-----------------------------------|------------------|
| 1.2. Type name: | QF 124.8-7000/02 |
| 1.3. Number of poles: | 4 |
| 1.4. Operating temperature range: | -40°C to +85°C |
| 1.5. Storage temperature range: | -45°C to +85°C |

2. Electric values

- | | |
|---|-------------------------|
| 2.1. Nominal centre frequency (f_0): | 124.8 MHz |
| 2.2. Center frequency at +25°C (f_c): | 124.8 MHz \pm 2.0 kHz |

2.3. Pass band

- | | |
|---|-----------------------------------|
| 2.3.1. Bandwidth between 3 dB – frequencies: | $> f_c \pm 35$ kHz |
| 2.3.2. Ripple in pass band peak to peak: | < 0.5 dB |
| 2.3.3. Insertion loss: (measured on smallest attenuation in pass band) | < 4.0 dB |
| 2.3.4. Group delay absolute at f_c : | $10 \mu s \pm 2 \mu s$ |
| 2.3.5. Group delay distortion | $< 2.5 \mu s$ at $f_c \pm 35$ kHz |

2.4. Stop band

- | | |
|----------------------------------|-----------|
| 2.4.1. $f_c \pm 60$ kHz | > 6 dB |
| 2.4.2. $f_c \pm 120$ kHz | > 30 dB |
| 2.4.3. $f_c +150$ kHz / -170 kHz | > 40 dB |
| 2.4.4. $f_c \pm 350$ kHz | > 60 dB |
| 2.4.5. $f_c -768$ kHz | > 70 dB |
| 2.4.6. Ultimate attenuation | > 60 dB |
| 2.4.7. Spurious responses | > 30 dB |
| $f_c +150$ kHz.....+5.0 MHz: | > 30 dB |
| 40 MHz.....90 MHz: | > 10 dB |

- | | |
|--|---------------------|
| 2.5. Terminating impedance R/C (input and output): | $50 \Omega // 0$ pF |
| 2.6. Maximum input power level working : | -10 dBm |
| 2.6.1. Maximum input power level non damaged: | +8 dBm |

3. Marking: manufacturer, date code
QF 124.8-7000/02

4. Environment conditions: according to Vectron CF001