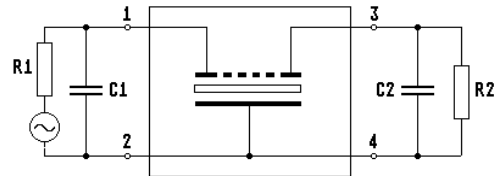
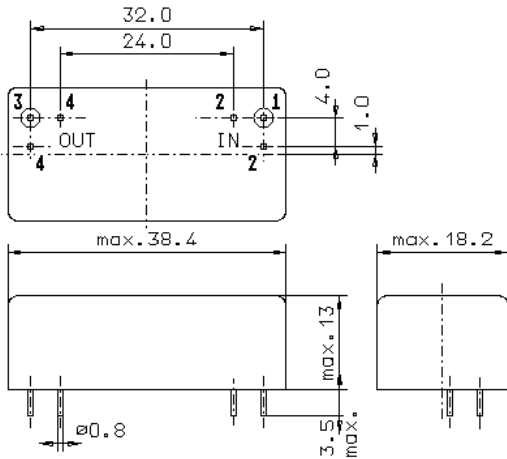


Specification for crystal filter:

**QF 21.4-20000/07**

**1. General**

1.1. Package:



- |                                   |                  |
|-----------------------------------|------------------|
| 1.2. Type name:                   | QF 21.4-20000/07 |
| 1.3. Number of poles:             | 4                |
| 1.4. Operating temperature range: | -10°C to +70°C   |
| 1.5. Storage temperature range:   | -25°C to +85°C   |

**2. Electric values**

- |                                       |          |
|---------------------------------------|----------|
| 2.1. Nominal centre frequency $f_0$ : | 21.4 MHz |
|---------------------------------------|----------|

**2.2. Pass band**

- |   |                                   |
|---|-----------------------------------|
| 2.2.1. Bandwidth between 3 dB - frequencies:                                | $\geq f_0 \pm 100$ kHz            |
| 2.2.2. Ripple:  | $\leq 1.0$ dB at $f_0 \pm 80$ kHz |
| 2.2.3. Insertion loss:<br>( measured on smallest attenuation in pass band ) | $\leq 8$ dB                       |

**2.3. Stop band**

- |                               |              |
|-------------------------------|--------------|
| 2.3.1. $f_0 - 300$ kHz        | $\geq 40$ dB |
| 2.3.2. $f_0 + 500$ kHz        | $\geq 30$ dB |
| 2.3.3. Alternate attenuation: | $\geq 60$ dB |
| 2.3.4. Spurious responses:    | $\geq 30$ dB |

- |  |                     |
|--|---------------------|
| 2.4. Terminating impedance ( input and output ): | $50 \Omega // 0$ pF |
|--|---------------------|

- |             |   |
|-------------|---|
| 3. Marking: | manufacturer, date code<br>QF 21.4-20000/07 |
|-------------|---|

- |                            |   |
|----------------------------|---|
| 4. Environment conditions: | Corresponding to Vectron standard CF001 |
|----------------------------|---|

Edited by: \_\_\_\_\_ date: \_\_\_\_\_ name: \_\_\_\_\_