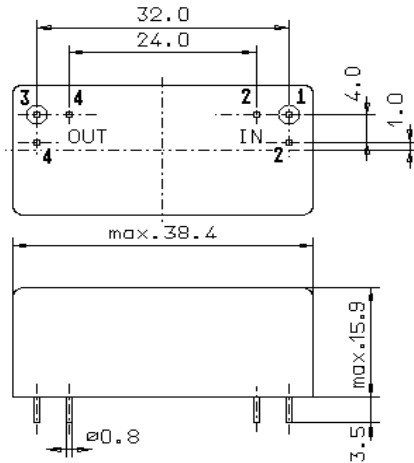


Specification for crystal filter:

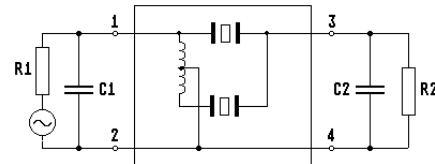
**QF 45.0-20000/04**

## 1. General

### 1.1. Package:



GM 1



- |                                   |                  |
|-----------------------------------|------------------|
| 1.2. Type name:                   | QF 45.0-20000/04 |
| 1.3. Number of poles:             | 4                |
| 1.4. Operating temperature range: | -20°C to +70°C   |
| 1.5. Storage temperature range:   | -35°C to +85°C   |

## 2. Electric values

- |   |                                   |
|---|-----------------------------------|
| 2.1. Nominal centre frequency $f_0$ :                                       | 45.0 MHz                          |
| 2.2. <b>Pass band</b>   |                                   |
| 2.2.1. Bandwidth between 3 dB - frequencies:                                | $\geq f_0 \pm 100$ kHz            |
| 2.2.2. Ripple:  | $\leq 2.0$ dB at $f_0 \pm 75$ kHz |
| 2.2.3. Insertion loss:<br>( measured on smallest attenuation in pass band ) | $\leq 3.5$ dB                     |
| 2.3. <b>Stop band</b>   |                                   |
| 2.3.1. $f_0 - 180$ kHz  | $\geq 20$ dB                      |
| 2.3.2. $f_0 + 190$ kHz  | $\geq 20$ dB                      |
| 2.3.3. $f_0 - 900$ kHz  | $\geq 70$ dB                      |
| 2.4. Terminating impedance ( input and output ):                            | $50 \Omega // 0$ pF               |
| 2.5. Input power level:   | $< 1$ dBm                         |

- |                            |   |
|----------------------------|---|
| 3. Marking:                | manufacturer, date code<br>QF 45.0-20000/04 |
| 4. Environment conditions: | Corresponding to Vectron standard CF001     |

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