Specification for monolithic crystal filter: **MQF 71.85-2500/12**

1. General

1.1. Package:

- **Type name:** MQF 71.85-2500/12
- **Number of poles:** 6, fundamental mode
- **Operating temperature range:** -40°C to +70°C
- **Storage temperature range:** -45°C to +85°C

---

**Chip-mount air reflow profile**

Temperature / °C

max. 260°C

217°C

Time / s

max. 300 s

10 ... 30 s

30 ... 150 s
2. Electric values

2.1. Nominal centre frequency $f_0$: 71.85 MHz

2.2. Pass band

2.2.1. Bandwidth between 6 dB - frequencies: $> f_0 \pm 12.5$ kHz
2.2.2. Ripple: $< 1.5$ dB at $f_0 \pm 9$ kHz
2.2.3. Group delay distortion: $< 14 \mu s$ at $f_0 \pm 9$ kHz
2.2.4. Insertion loss: $< 4.5$ dB
   (measured on smallest attenuation in pass band)

2.3. Stop band

2.3.1. $f_0 \pm 30$ kHz $> 20$ dB
2.3.2. $f_0 \pm 45$ kHz $> 40$ dB
2.3.3. $f_0 \pm 60$ kHz $> 55$ dB
2.3.4. $f_0 -900$ kHz........-1000 kHz $> 80$ dB
2.3.5. Spurious responses: $> 50$ dB

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

2.5. Maximum input power level: -5 dBm (+5 dBm non-damaged)

2.6. Intermodulation measurement with two test tones of -28dBm power level at filter’s input and test tones frequencies at $f_0+200$kHz / $f_0+400$kHz and $f_0-200$kHz / $f_0-400$kHz. 3-rd order intermodulation products at $f_0$ have to be at least 90dB down from both of the -28dBm test tones which means that IP3 is better or equal then +17dBm

3. Laser or inkjet marking:

4. Environment conditions: Corresponding to Vectron CF001

________________________________________________________________________

Edited by: ___________________________ date: ______________ name: ___________________________