1. General

1.1. Package:

1.2. Type name: MQF 41.44-0800/06V1

1.3. Number of poles: 4

1.4. Operable temperature range: -30°C to +70°C

1.5. Operating temperature range: -25°C to +70°C

1.6. Storage temperature range: -40°C to +85°C

2. Electric values

2.1. Nominal centre frequency $f_0$: 41.44 MHz

2.2. Pass band

2.2.1. Bandwidth between 1 dB - frequencies: $\geq f_0 \pm 4.0$ kHz

2.2.2. Ripple: $\leq 1.0$ dB at $f_0 \pm 4.0$ kHz

2.2.3. Change of group delay between different samples of the same type: $\leq 300 \mu$s (at $f_0 \pm 4$ kHz)

2.2.4. Insertion loss: $\leq 3.0$ dB (measured on smallest attenuation in pass band)

2.3. Stop band

2.3.1. $f_0 + 30$ kHz.........+250 MHz $\geq 60$ dB

2.3.2. $f_0 - 30$ kHz.........-2.83 MHz $\geq 60$ dB

2.3.3. $f_0 - 2.83$ MHz....,-2.93 MHz $\geq 80$ dB

2.3.4. $f_0 - 2.93$ MHz........400 kHz $\geq 60$ dB

2.3.5. Spurious responses: $\geq 40$ dB

2.4. Terminating impedance (input and output): 50 $\Omega \pm 5\% // 0$ pF
2.5. **Intermodulation**

2.5.1. Pin 1:  input  
Pin 3:  output  

frequency 1:  \( f_0 \pm 30 \text{ kHz} \)  
frequency 2:  \( f_0 \pm 60 \text{ kHz} \)  
input power level at pin 1:  -6 dBm  
power level at pin 3:  > -9 dBm  
IM:  \( \geq 71 \text{ dB ( in relation to pin 3 )} \)

2.5.2. Pin 3:  input  
Pin 1:  output  

frequency 1:  \( f_0 +1 \text{ kHz} \)  
frequency 2:  \( f_0 -1 \text{ kHz} \)  
input power level at pin 3:  0 dBm  
IM:  \( \geq 50 \text{ dB ( in relation to pin 1 )} \)

2.6. Maximum input power level:  + 20 dBm

3. **Environment conditions**

3.1. Vibration according to IEC 68-2-6 test FC ( filter case shall be fastened to the vibration table )  
- frequency range ( with total amplitude 0.7 mm ):  10 Hz - 55 Hz  
- acceleration:  49.05 m/s²  
- duration:  0.5 hours

3.2. Shock according to IEC 68-2-27, test Ea  
- number of directions:  3  
- peak acceleration:  490.5 m/s²  
- duration of the nominal pulse:  11 ms  
- number of shocks:  3

3.3. Humidity test Db 40 according to IEC 68-2-30  21 cycles

3.4. Aging:  1000 hours at 70°C ± 3°C

3.5. Change of temperature according to IEC 68-2-14  
- temperatures:  -25°C / 70°C  
- exposure time:  30 minutes  
- cycles:  10

4. **Others**

4.1. Design:  package soldered

4.2. Weight:  \( \leq 35 \text{ g} \)

5. Marking:  manufacturer, date code  
MQF 41.44-0800/06V1

______________________________________________________________________________

date: _____________________________ name: _________________________________