

SPECIFICATION FOR CRYSTAL FILTER
MCF 21.4-30/04 (preliminary specification)

Number: 92 104
Drawing: 64 9513

1. Electric values

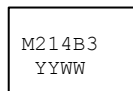
- 1.0 Number of poles: 4
- 1.1 Nominal centre frequency f_{nom} : 21 400 kHz
- 1.2 Bandwidth between 3 dB frequencies: $\geq \pm 15$ kHz
- 1.3 Ripple (p to p): ≤ 1.0 dB
- 1.4 Insertion loss: ≤ 2.5 dB
- 1.5 Stop band: $f_{nom} \pm 50$ kHz: ≥ 40 dB
- 1.6 Spurious responses: $f_{nom} + 100$ kHz ... + 400 kHz: ≥ 35 dB
- 1.7 Terminating impedance (input and output): 4250 Ohm // -1.5 pF
- Coupling capacitance C_c : 1.3 pF
- 1.8 Operating temperature range: - 20°C až + 75°C
- 1.9 Case: SMD 7 x 5 mm

2. Environment conditions

- 2.1 Vibration according to IEC68-2-29, test FC - frequency range (amplitude 0,7 mm): 10 Hz - 55 Hz
 - acceleration :49,05 m/s², duration :0,5 hours
- 2.2 Shock according to IEC 68-2-27, test Fa -number of directions : 3, peak acceleration : 490,5 m/s²
 - duration of the nominal pulse: 1 ms, number of shocks: 3
- 2.3 Humidity test Db 40 according to IEC 68-2-30: 21 cycles
- 2.4 Aging: - 1000 hours at +70°C $\pm 3^\circ$ C

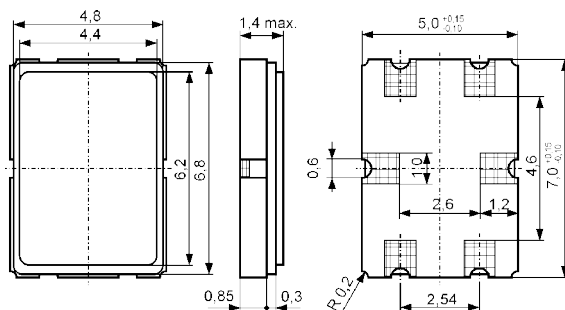
3. Others

3.1 Marking on the case :

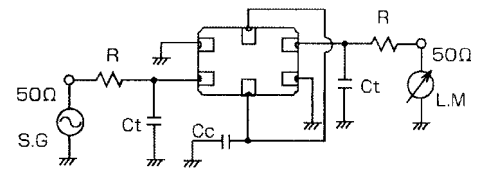


YY - year
 WW – week

Dimensions[mm]



Measurement Circuit



C_c : External coupling capacitor is required

	Date	Name
edited	5.3.2009	P.Jüngling