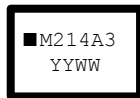


**SPECIFICATION FOR CRYSTAL FILTER**  
**MCF 21.4-30/52 (preliminary specification)**

**Number: 92 255**  
**Drawing: 64 9513**

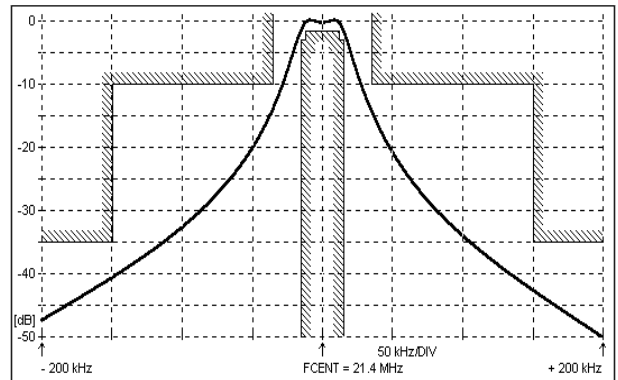
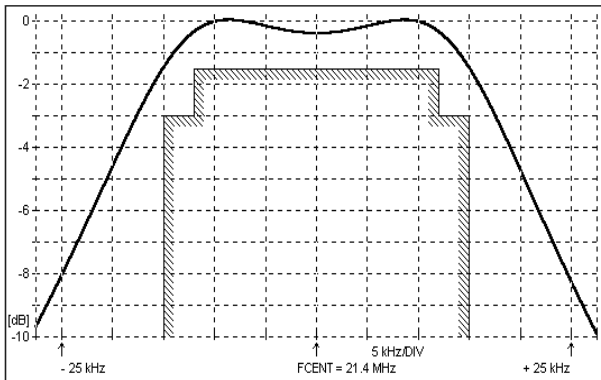
**1. Electric values**

- 1.0 Number of poles: 2
- 1.1 Nominal center frequency f<sub>nom</sub>: 21 400 kHz ( 1. overtone)
- 1.2 Bandwidth between 3 dB frequencies: ≥± 15.0 kHz
- 1.3 Ripple in pass band f<sub>nom</sub> ± 12 kHz: ≤ 1.5 dB
- 1.4 Insertion loss: ≤ 3.0 dB
- 1.5 Group delay distortion at f<sub>nom</sub> ± 15 kHz: ≤ 20 μs
- 1.6 Stop band: f<sub>nom</sub> ± 35 kHz: ≥ 10 dB  
f<sub>nom</sub> ± 150 kHz: ≥ 35 dB except spurious
- 1.7 Alternate attenuation: f<sub>nom</sub> - 910 kHz: ≥ 50 dB
- 1.8 Terminating impedance ( input and output ): 3000 Ohm // +0.5 pF
- 1.9 Maximum input power level ( working ): 0 dBm  
Maximum input power level ( for non-damaged ): +10 dBm
- 1.10 Operating temperature range: -40°C ... + 85°C
- 1.11 Case: SMD 7 x 5 mm
- 1.12 Taping 3000 pcs. /reel maximum
- 1.13 Marking on the case :

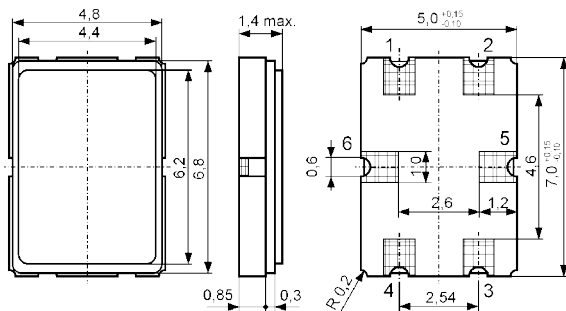


YY - year  
WW – week  
( or customer's marking )

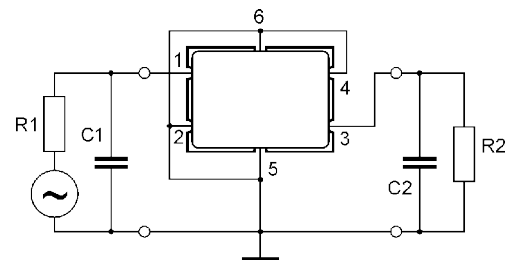
**2. Characteristics MCF 21.4-30/52**



**Dimensions[mm]**



**Measurement Circuit**



edited 27.07.2012 P.Jungling