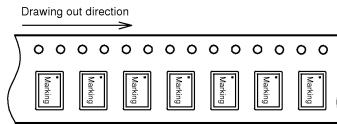


SPECIFICATION FOR CRYSTAL FILTER MCF 90.0-30/S2

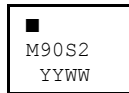
Number: 92 333
Drawing: 64 9513

1. Electric values

- 1.0 Number of poles: 4
- 1.1 Nominal centre frequency f_{nom}: 90 000 kHz (fundamental mode)
- 1.2 Bandwidth between 3 dB frequencies: ≥± 15 kHz
- 1.3 Ripple at f_{nom} ± 10.5 kHz: ≤ 1.0 dB
- 1.4 Insertion loss: ≤ 3.5 dB
- 1.5 Stop band: f_{nom} ± 50 kHz: ≥ 30 dB
f_{nom} ± 130 kHz: ≥ 60 dB
- 1.6 Alternate attenuation: ≥ 60 dB (except spurious)
- 1.7 Terminating impedance Input and Output : 450 Ohm // +1.6 pF
Coupling capacitance: +5.2 pF
- 1.8 Maximum input power level (working / non-damaged): -10 / 0 dBm
- 1.9 Operating temperature range: - 30°C ... + 85°C
- 1.10 Case: SMD 7 x 5 mm
- 1.11 Taping 1000 pcs. /reel maximum



1.12 Marking on the case :

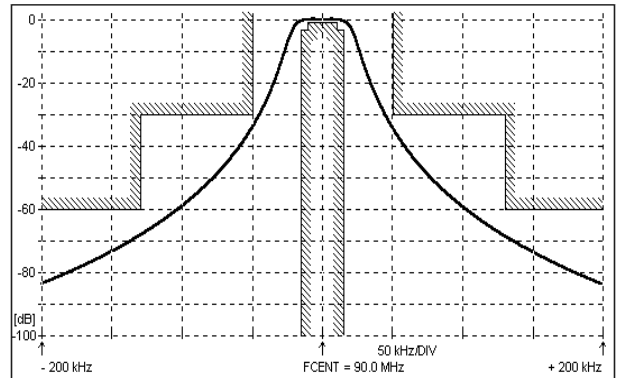
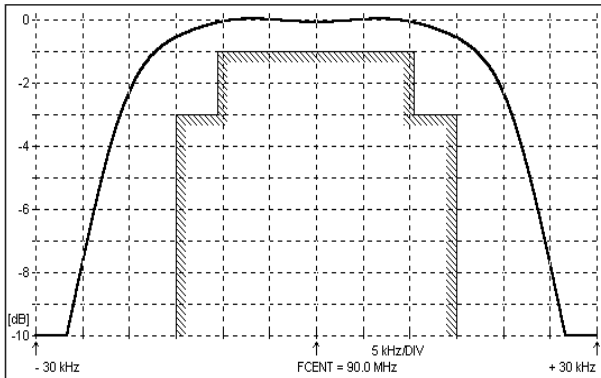


YY - year

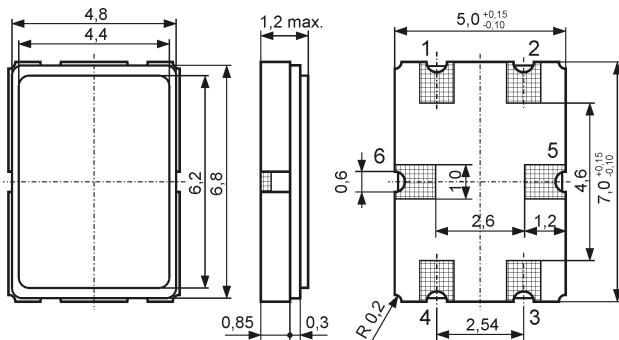
WW - week

(or customer's marking)

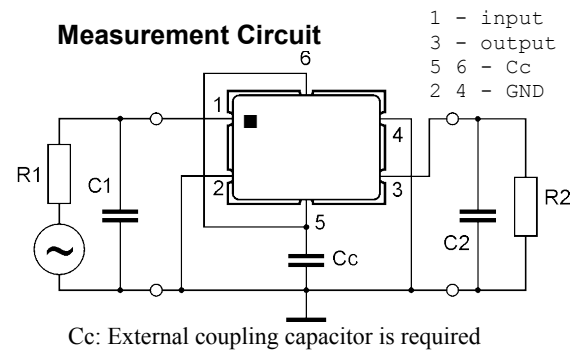
2. Characteristics MCF 90.0-30/S2



Dimensions[mm]



Measurement Circuit

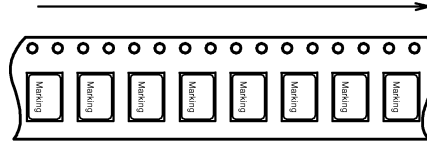


Cc: External coupling capacitor is required

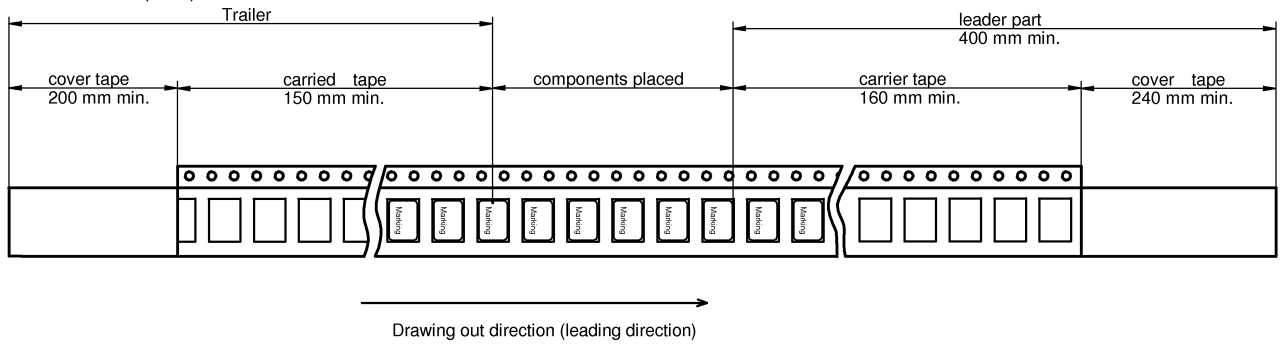
edited 03.07.2014 P.Jungling

Filter SMD 7x5 mm - taping

Drawing out direction (leading direction)

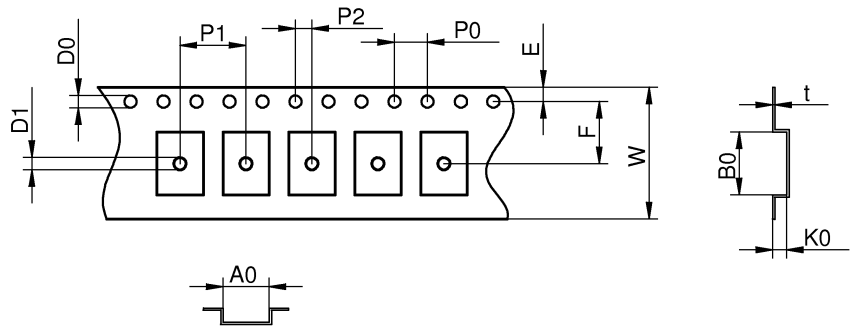


Tape dimension (mm)



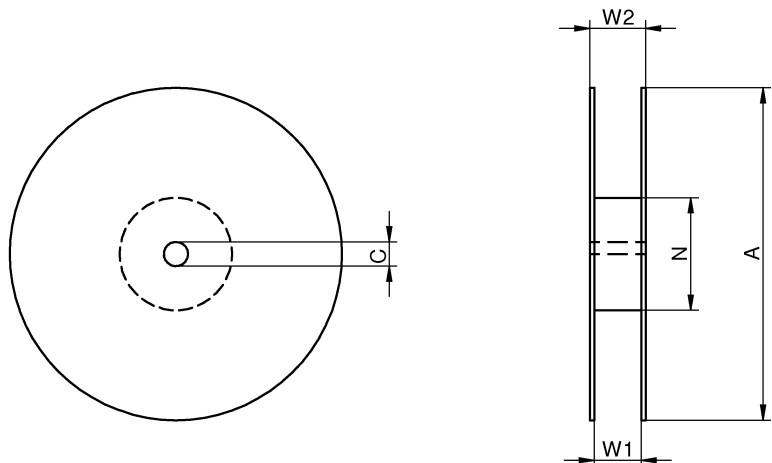
Tape (all dimensions in mm)

- W: $16,0 \pm 0,1$
- P0: $4,0 \pm 0,1$
- P1: $8,0 \pm 0,1$
- P2: $2,0 \pm 0,1$
- D0: $1,5 + 0,1 / -0$
- D1: $1,6 + 0,1 / -0$
- E: $1,75 \pm 0,1$
- F: $7,5 \pm 0,1$
- K0: $1,7 \pm 0,1$
- A0: $5,6 \pm 0,1$
- B0: $7,6 \pm 0,1$
- t: $0,3 \pm 0,05$

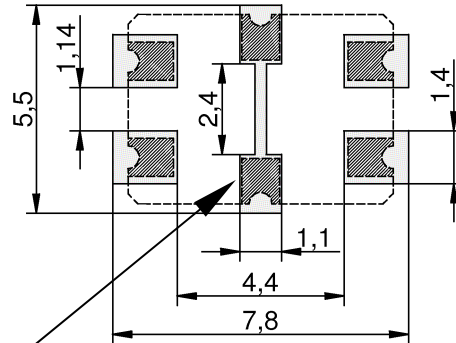


Reel (all dimension in mm)

- A: $\phi 178 \pm 2$
- C: $\phi 13 \pm 0,5$
- N: $\phi 60 \pm 1$
- W1: $17,5 \pm 1,5$
- W2: $21,5 \pm 1,5$



Recommended land pattern



Note:

C_c = coupling capacitance to ground must be including parasitic capacitance of PCB !

Reflow soldering: three times max.

