



**SPECIFICATION FOR CRYSTAL FILTER**  
**MCF 28.080...28.380-30/04**

**Number: 92 251**  
**Drawing: 61 9578**

**= This set of crystal filters is determined for the preselector of amateur transceivers =**

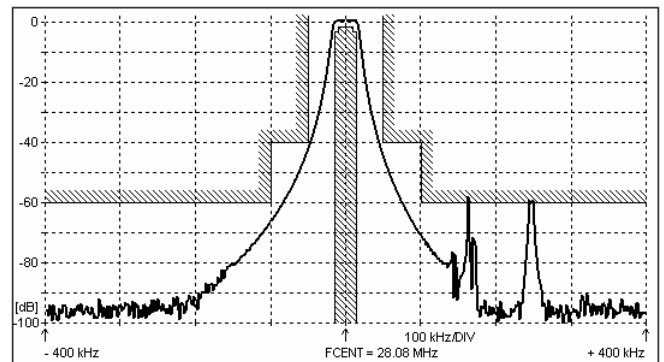
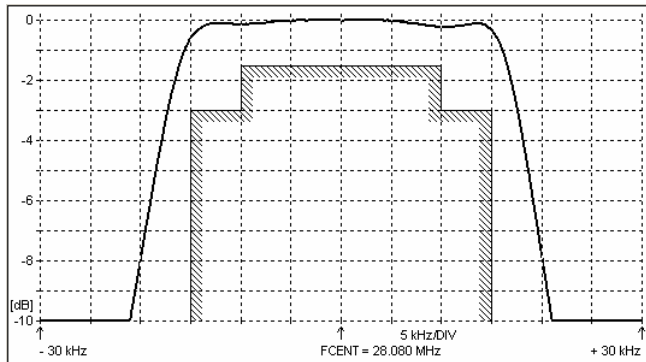
**1. Electric values**

- 1.0 Number of poles : 4
- 1.1 Nominal centre frequency  $f_{nom}$  : 28.080 MHz, 28.120 MHz, 28.180 MHz  
28.220 MHz, 28.250 MHz, 28.280 MHz  
28.320 MHz, 28 340 MHz, 28.380 MHz
- 1.2 Bandwidth between 3 dB frequencies :  $\geq \pm 15$  kHz
- 1.3 Ripple at  $f_{nom} \pm 10$  kHz :  $\leq 1.5$  dB
- 1.4 Insertion loss :  $\leq 3.0$  dB
- 1.5 Stop band  $f_{nom} \pm 50$  kHz :  $\geq 40$  dB  
 $f_{nom} \pm 100 \dots \pm 1000$  kHz :  $\geq 60$  dB
- 1.6 Spurious :  $\geq 35$  dB
- 1.7 Terminating impedance ( input and output ) : 50 Ohm // 0 pF
- 1.8 Operating temperature range :  $-25^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$
- 1.9 Case : KF 13 (25.1 x 14.1 x 10.5 mm)
- 1.10 Marking on the case :

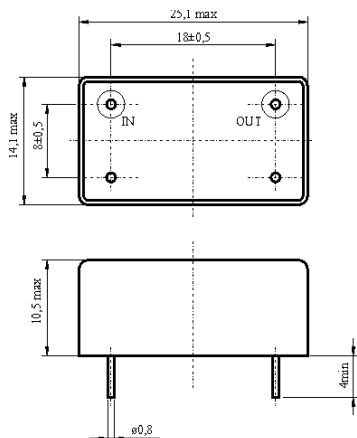
KRYSTALY CZ
YYWW
28.xxx-30/04

YY = year  
WW = week

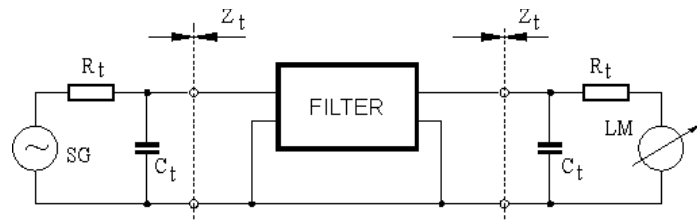
**2. Characteristics MCF 28.080...28.380-30/04**



**Dimensions [mm]**  
**Case KF 13**



**Measurement Circuit**



edited 07.06.2012 P. Seidl