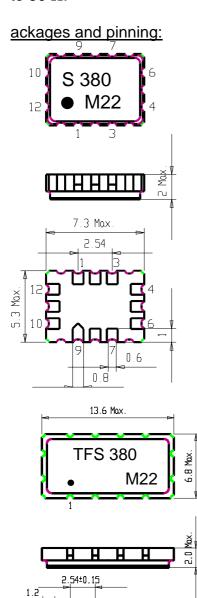
VI TELEFILTER Application Note TFS 380 7x5mm/13x6mm 1/2

1. General

The filter is designed for single ended use at the input and at the output. It is matched to 50 Ω .



| 1 2 3 4 5 6 7 8 9 10 11 12 | Ground Ground Output RF Return Output Ground Ground Ground Input RF Return Input Ground Ground |
|-------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| 1 2 3 4 5 6 7 8 9 10 11 | Ground Ground Ground Ground Output Output RF Return Ground Ground Ground Ground Input Input RF Return |

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| VI TELEFILTER | Application Note | TFS 380 | 7x5mm/13x6mm | 2/2 |
|---------------|------------------|---------|--------------|-----|
| | | | | |

The terminating impedances are

7x5mm package

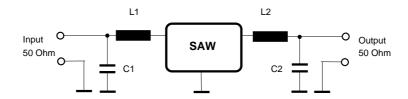
Input : 1,3 k Ω || -3,5 pF Output: 1,3 k Ω || -3,7 pF

13x6mm package

Input : 1,3 k Ω || -3,9 pF Output: 1,1 k Ω || -3,9 pF

The matching element values given below are calculated from the terminating impedances. If the values of the matching elements are not equal to standard values the best standard values are given in brackets. Because these are theoretical values they have to be modified on PCB's corresponding to the existing parasitics.

2. Theoretical matching to 50 Ω single ended



The theoretical values of the stated elements are:

7x5mm package

| L1 = 58 nH (56nH) | L2 = 55 nH (56nH) |
|-------------------|-------------------|
| C1 = 16 pF (15pF) | C2 = 17 pF (18pF) |
| 13x6mm package | |

L1 = 52 nH (56nH) L2 = 53 nH (56nH) C1 = 18 pF C2 = 17 pF (18pF)

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