

## 1. General

The filter is single ended driven. It is matched to 50  $\Omega$

The matching element values given below are valid on our test PCB. If the parasitic's on the customer PCB and on this PCB are different, the matching elements have to be optimised regarding the circuit and PCB design.

The matching elements have been chosen from the E12- series (European standard series with fixed tolerances).

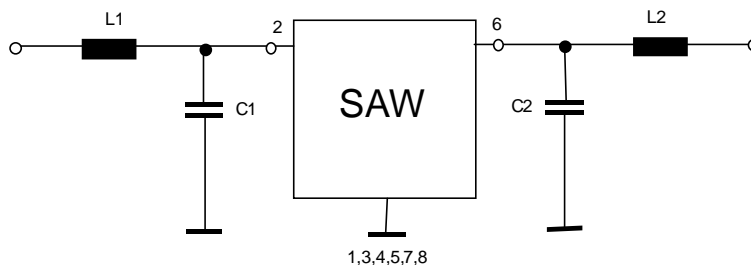
## 2. Theoretical matching

The termination impedances of the filter are:

Input impedance: 95  $\Omega$  || - 0,3 pF

Output impedance: 95  $\Omega$  || - 0,3 pF

The values of the matching elements which are given below are calculated from the input and output terminating impedance.



**L1 = 6.8 nH**  
**C1 = 0.3 pF**

**L2 = 5.8 nH**  
**C2 = 0.27 pF**

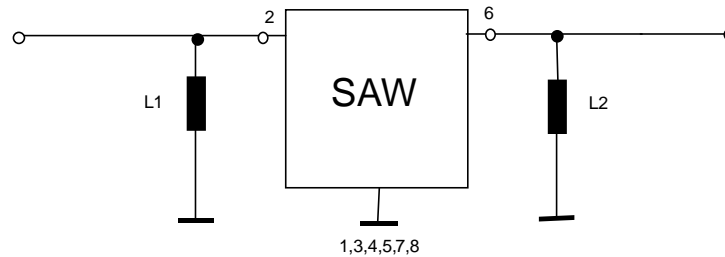
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### 3. Matching on PCB ( tft038 )



$$L1 = L2 = 6,8 \text{ nH}$$

All other components are  $0 \Omega$  jumpers.

The matching on the PCB does slightly differ from the theoretical matching. The reason for that are parasitic's on the PCB.

If the parasitic's on the customer board (mentioned parasitics, additional parasitics of active parts) are different to this PCB the matching elements have to be slightly adjusted.

In case of questions please contact us to

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