Ltp: tft035 version 1.0 11.05.2001

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1. General

The filter is single ended driven. It is matched to 50Ω

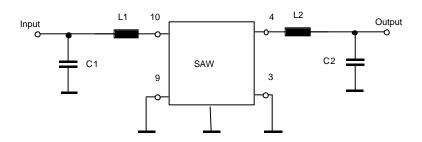
The matching element values given below are valid theoretically. The matching elements have to be optimised regarding the circuit and PCB design and existing parasitics.

2. Theoretical matching

The balanced driven source and load impedances of the filter are:

Source: 720 Ω || -4.7 pF Load: 1,0 k Ω || -4.1 pF

The values of the matching elements which are given below are calculated from the source and load impedance. If the values of the matching elements are not equal to standard values the best standard values are given in brackets.



L1 = 46 nH (47 nH)C1 = 15 pF L2 = 51 nH (56 nH+33pF in line)L4 = 16 pF (15pF)

VI TELEFILTER
Potsdamer Straße 18
D 14 513 TELTOW / Germany
Tel: (+49) 3328 4784-0 / Fax: (+49) 3328 4784-30

0075

E-Mail: tft@telefilter.com

Vectron International, Inc. 267 Lowell Road Hudson, NH 03051 / USA

Tel: (603) 598-0070 Fax: (603) 598-

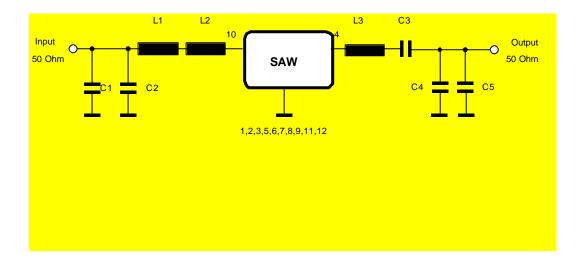
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3. Matching on PCB

Single ended matching



L1 = 10 nHL3 = 22 nHL2 = 15 nHC3 = 56 pFC1 = 5,6 pFC4 = 18 pFC2 = 22 pFC5 = 5,6 pF

All other components are 0 Ω jumper.

The matching on the PCB does slightly differ from the theoretical matching. The reason for that are parasitics on PCB.

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

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0075

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Vectron International, Inc. 267 Lowell Road Hudson, NH 03051 / USA

Tel: (603) 598-0070 Fax: (603) 598-

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In case of questions please contact us to

VI TELEFILTER
Potsdamer Straße 18
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0075

E-Mail: tft@telefilter.com

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Tel: (603) 598-0070 Fax: (603) 598-

E-Mail: vti@vtinh.com

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