

**SAW- Filter****Filter specification****TFS 82 B 1/2****Measurement condition**

Ambient temperature: 23 °C  
 Input power level: 0 dBm  
 Source Impedance: 582 Ω || -21,5 pF  
 Load Impedance: 3,18 kΩ || -5,81 pF

**Construction and pin connection**

see page 2

**50 Ω test circuit**

see page 2

**Characteristics**

Remark:

Reference level for the relative attenuation  $a_{rel}$  of the TFS82B is the minimum of the pass band attenuation  $a_{min}$ . The minimum of the pass band attenuation  $a_{min}$  is defined as the insertion loss  $a_e$ . The nominal frequency is fixed on 82 MHz. The centre frequency  $f_0$  is the arithmetic mean value of the upper and lower frequencies at the 3 dB filter attenuation level relative to the insertion loss  $a_e$ .

<b>D a t a</b>		<b>typ. value</b>	<b>Variation/ Limitation</b>
<b>Nominal frequency</b>	$f_N$	-	82 MHz
<b>Centre frequency</b>	$f_0$	82 MHz	-
<b>Insertion loss</b> (Reference level)	$a_e$	31 dB	-
<b>3 dB - Bandwidth</b>	Bw	-	min. ± 3,6 MHz
<b>Relative attenuation</b> $a_{rel}$ $f_N \pm 3,9$ MHz ... $f_N \pm 4$ MHz $f_N \pm 4$ MHz ... $f_N \pm 50$ MHz			min. 35 dB min. 40 dB
<b>Group delay</b>	GD	5 μs	-
<b>Temperature coefficient of the frequency</b> $TC_f$ *)		- 0,050 ppm/K <sup>2</sup>	-
<b>Operating temperature range</b>		0 °C ... 50 °C	
<b>Frequency inversion temperature</b>	$T_0$	20 °C	

$$*) \Delta f(\text{Hz}) = TC_f(\text{ppm/K}^2) \times (\Delta T)^2 \times f_{T_0}(\text{MHz})$$

**Responsible:**

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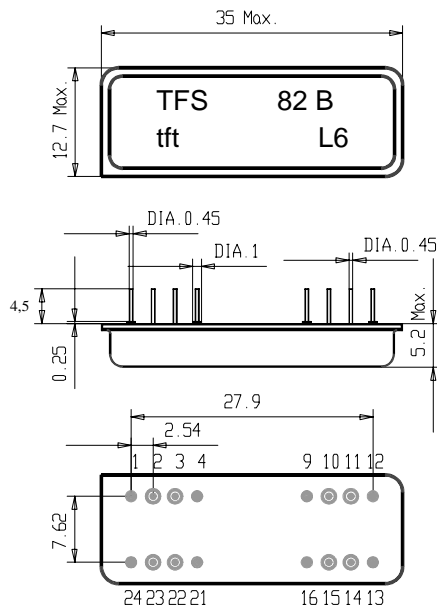
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**SAW- Filter**

**Filter specification**

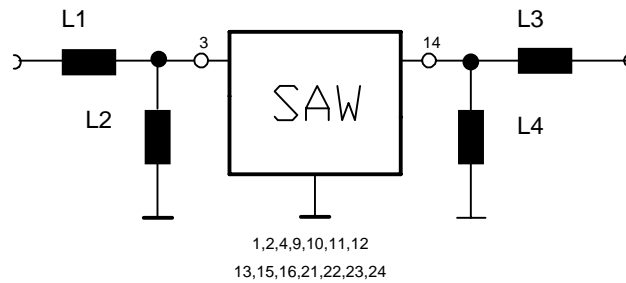
**TFS 82 B 2/2**

**Construction and pin connection**  
(All dimensions in mm)

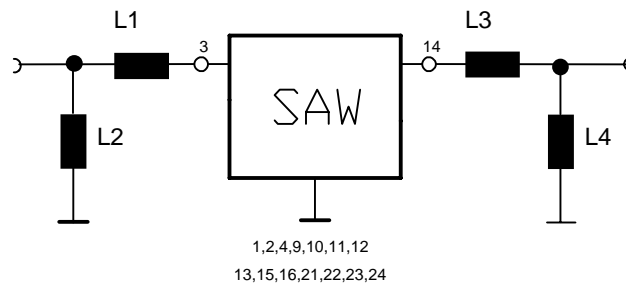


- 1 Package Ground
- 2 Input RF Return
- 3 Input
- 4 Package Ground
- 9 Package Ground
- 10 Ground
- 11 Ground
- 12 Package Ground
- 13 Package Ground
- 14 Output
- 15 Output RF Return
- 16 Package Ground
- 21 Package Ground
- 22 Ground
- 23 Ground
- 24 Package Ground

**50 Ω test circuit 1**



**50 Ω test circuit 2**



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