

VI TELEFILTER

Specification

1. Measurement Condition

Ambient temperature T_A :	23 °C
Input power level:	0 dBm
Source impedance:	50 Ω (refer to page 2)
Load impedance:	50 Ω (refer to page 2)

2. Construction and Pin Configuration

see page 2

3. Characteristics

Remark:

Reference level for the relative attenuation a_{rel} and the band width BW of the TFS 71 D 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 center frequency f_0 is the arithmetic mean value of the upper and lower frequencies at the 1,5 dB filter attenuation level relative to the insertion loss a_e .

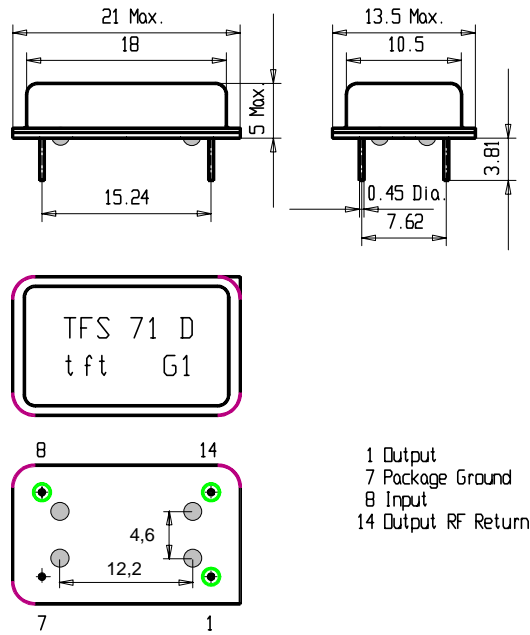
Description		typ. value	Variation / Limitation	
Insertion Loss (Reference Level)	a_e	5,4 dB	max 8	dB
Center Frequency	f_0	-	71,0	MHz
1 dB - Band Width		195 kHz	min \pm 65	kHz
1,5 dB - Band Width		235 kHz	min \pm 82,5	kHz
Relative Attenuation	a_{rel}			
$f_0 \pm 200$ kHz ... $f_0 \pm 400$ kHz		-	min 4	dB
$f_0 \pm 400$ kHz ... $f_0 \pm 600$ kHz		-	min 20	dB
$f_0 \pm 600$ kHz ... $f_0 \pm 800$ kHz		-	min 25	dB
$f_0 \pm 800$ kHz ... $f_0 \pm 1,6$ MHz		-	min 27	dB
$f_0 \pm 1,6$ MHz ... $f_0 \pm 10$ MHz		-	min 35	dB
Group Delay	GD	2,15 μ s	-	
Group Delay Ripple	$f_0 \pm 80$ kHz	200 ns	max 400	ns
Terminating Impedances				
Input			832 Ω // -15,1 pF	
Output			1055 Ω // -11,6 pF	
Temperature Coefficient	TC 1st order	0 ppm/K	-	
Operating Temperature Range			- 25 °C ... + 85 °C	
DC - Voltage	V_{dc} *)	-	max 12	V
AC - Voltage	V_{ac} *)	-	max 10	V

*) Between any pins

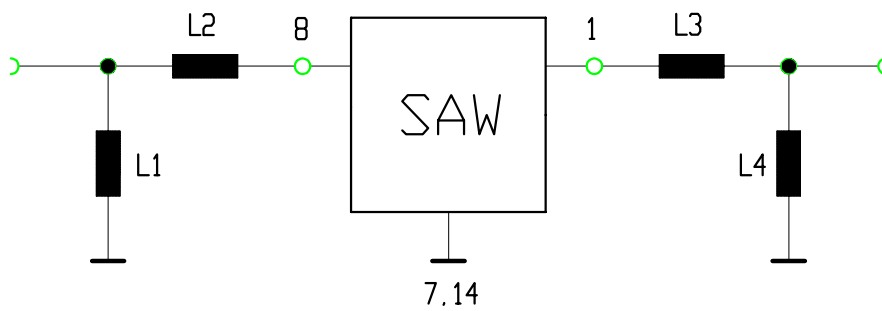


2. Construction and Pin Configuration

(All Dimensions in mm)



4. 50 Ω Matching Network



5. Delivery Package Form

Only available without tape and reel. Filters stick on plastics plates and packed in folding carton (each carton max. 150 pieces).

6. Environmental Test Conditions

Dry heat:	According to IEC 68 - 2 - 2; + 85 °C; 1000 hours.
Damp heat , steady state:	According to IEC 68 - 2 - 3; 92 % rel. humidity; + 40 °C, 21 days.
Damp heat , cyclic :	According to IEC 68 - 2 - 30; 95 % rel. humidity; + 20 °C / + 55 °C within 12 + 12-hour cycle; 6 days.
Vibration (sinusoidal):	According to IEC 68 - 2 - 6; 10 Hz - 500 Hz, 0,075 mm or 1g respectively, 1 octave per min, 10 cycles per plan, 3 plans;
Change of temperature:	According to IEC 68 - 2 - 14 and IEC 68 - 2 - 33; -25 °C / +85 °C, 10 cycles.
Resistance to solder heat:	According to IEC 68 - 2 - 20, test Tb, test method 1A; 260 °C; 10 sec.;
Solderability:	According to IEC 68 - 2 - 20; test Ta, test method 1; soft solder L - Sn60 Pb40; 235 °C / 2 sec.; Flux is Kolophonium 25 % and Propanol 75 % or Ethanol 75 %; Preconditioning is aging according to IEC 68 - 2 - 30; 95 % rel. humidity; +25 °C / +55 °C within 12 + 12-hour cycle; 6 days.

Absolute maximum ratings

Operating temperature range:	- 25 °C / + 85 °C
Storage temperature range:	- 40 °C / + 85 °C
Input power level :	0 dBm
Permissible humidity :	≤ 75 % in annual average;
Highest value:	95 % rel. humidity only 30 days within a year, otherwise 85 %; short term formation of condensation is permissible.

Requirements after Tests

The limiting values of supplier have to be fulfilled. Neither mechanical nor electrical damages should happen.