

VI TELEFILTER**Specification****TFS 71 D - Page 1/3****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:

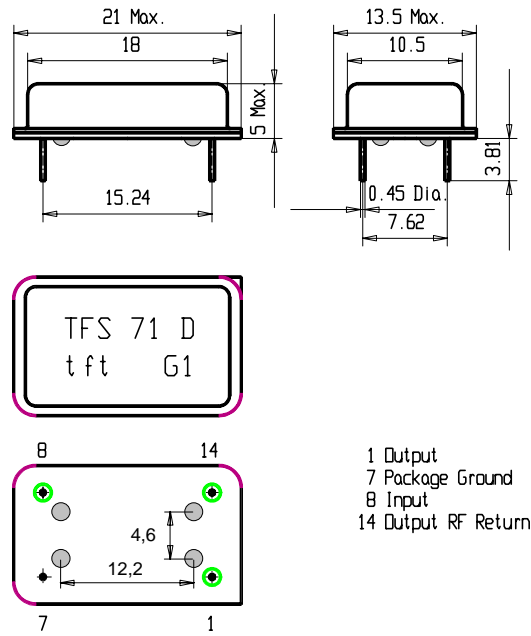
Reference level for the relative attenuation a_{rel} and the band width BW of the TFS 71 D is the minimum of the pass band attenuation a_{min} . The minimum of the pass band attenuation a_{min} is defined as the insertion loss a_e . The center frequency f_0 is the arithmetic mean value of the upper and 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

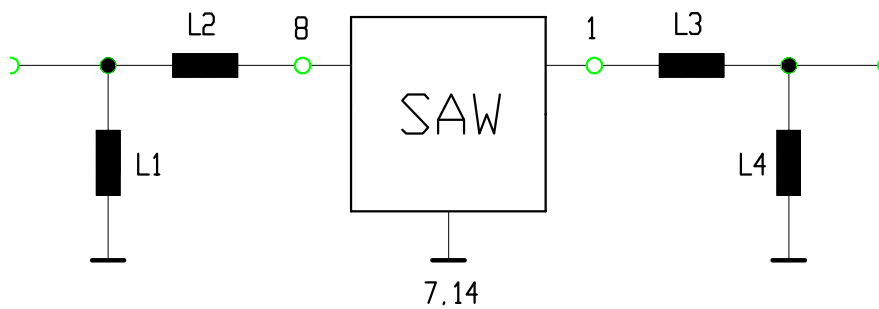
*) Between any pins

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).

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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.