

VI TELE FILTER**Filter Specification****TFS 45 A - 1/2****Measurement condition**

Ambient temperature: 23°C
 Input power level: 10 dBm
 Terminating impedances: 50 Ω and matching network

Characteristics**Remark:**

Reference level for the relative attenuation a_{rel} of the TFS 45 A is the minimum of the pass band attenuation a_{min} . The minimum of the pass and attenuation a_{min} is defined as the insertion loss a_e . The centre frequency f_0 is the arithmetic mean value of the upper and lower frequencies at the 3dB filter attenuation level relative to the insertion loss a_e . The temperature coefficient of frequency Tc_f is valid both for the reference frequency f_c and the frequency response of the filter in the operating temperature range. The frequency shift of the filter in the operating temperature range is not included in the production tolerance scheme.

D a t a		typ. value	Variation/ Limitation	
Insertion loss (Reference level)	a_e	5.5 dB	max.	6.5 dB
Reference frequency	f_c	45,50 MHz	max.	±20 kHz
3 dB - bandwidth	BW1	375 kHz	min.	340 kHz
20 dB - bandwidth	BW2	750 kHz	max.	950 kHz
Pass Band Ripple	$f_c \pm 100$ kHz	0.8 dB	max.	1.5 dB
Relative attenuation	a_{rel}			
$f_c \pm 170$ kHz		2.5 dB	max.	3 dB
$f_c \pm 475$ kHz... $f_c \pm 1.0$ MHz		30 dB	max.	20 dB
$f_c \pm 1.0$ MHz... $f_c \pm 3.0$ MHz		40 dB	max.	30 dB
$f_c \pm 3.0$ MHz... $f_c \pm 10$ MHz		45 dB	max.	35 dB
$f_c \pm 10$ MHz... $f_c \pm 25$ MHz		55 dB	max.	44 dB
Group Delay	GD	2.4 μs	-	
Group Delay Ripple	$f_c \pm 100$ kHz	200 ns	max.	300 ns
temperature coefficient	TC 1 st order	0 ppm/K	-	

Generated:**Checked / Approved:**

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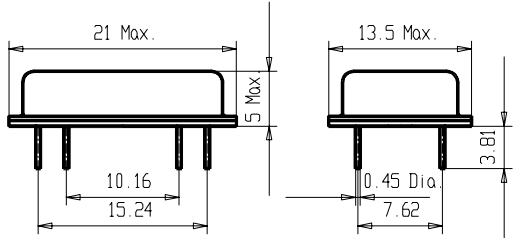
VI TELE FILTER

Filter Specification

TFS 45 A - 2/2

Construction and Pin Configuration

(All Dimensions in mm)



1 Input 1	8 Output 2
2 Package Ground	9 Package Ground
6 Package Ground	13 Package Ground
7 Output 1	14 Input 2

