

**VI TELEFILTER****Development specification****TFS915****1/5****Measurement condition**

Ambient temperature:	23	°C
Input power level:	0	dBm
Terminating impedance:		
Input:	50	Ω
Output:	50	Ω

**Characteristics****Remark:**

The maximum attenuation in the pass band is defined as the insertion loss  $a_e$ . The nominal frequency  $f_N$  is fixed at 915 MHz without tolerance or limit. The frequency shift of the filter in the operating temperature range is included in the production tolerance scheme.

<b>D a t a</b>		<b>typ. value</b>	<b>tolerance / limit</b>		
<b>Insertion loss</b>	$a_e$	-	max.	3	dB
<b>Nominal frequency</b>	$f_N$	-		915	MHz
<b>Passband</b>		-	$f_N \pm$	0,5	MHz
<b>Pass band ripple</b>			max.	1	dB
<b>Absolute attenuation</b>	$a_{abs}$				
0,3 MHz ... 899 MHz		-	min.	40	dB
932 MHz ... 1300 MHz		-	min.	40	dB
1300 MHz ... 2000 MHz		-	min.	30	dB
<b>Operating temperature range</b>	OTR	-		- 10 °C ... + 60 °C	
<b>Storage temperature range</b>		-		- 40 °C ... + 85 °C	
<b>Temperature coefficient of frequency</b>	$TC_f^*$	T.B.D	ppm/K		-
<b>Input power level</b>		-	max.	10	dBm

\*)  $\Delta f_c(\text{Hz}) = TC_f(\text{ppm/K}) \times (T - T_0) \times f_{CAT}(\text{MHz})$ .

**Generated:** \_\_\_\_\_

**Checked / Approved:** \_\_\_\_\_

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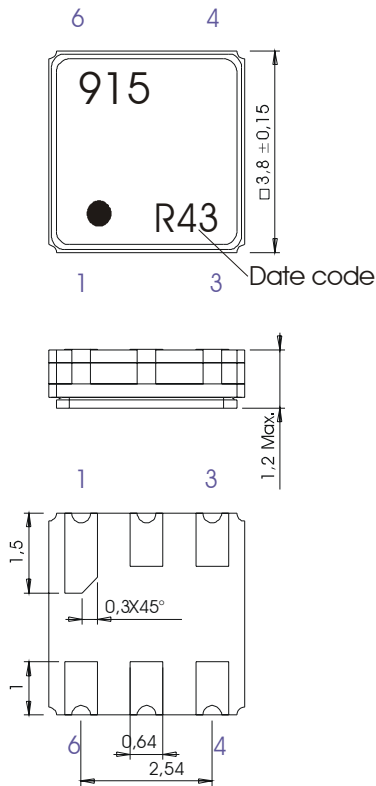
**VI TELEFILTER**

**Development specification**

**TFS915**

**2/5**

**Construction, pin configuration and 50 Ω - matching network**  
 (All dimensions in mm)



Date code: Year + week

N	2001
P	2002
R	2003
...	

- Pin 1 Ground
- Pin 2 Input
- Pin 3 Ground
- Pin 4 Ground
- Pin 5 Output
- Pin 6 Ground

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**Air reflow temperature conditions**

1st and 2nd air reflow profile

Name:	pre-heating periods	main-heating periods	peak temperature
Temperature:	150 °C - 170 °C	over 200 °C	255 °C ± 5 °C
Time:	60 sec. - 90 sec.	20 sec. - 25 sec.	

**Chip-mount air reflow profile**

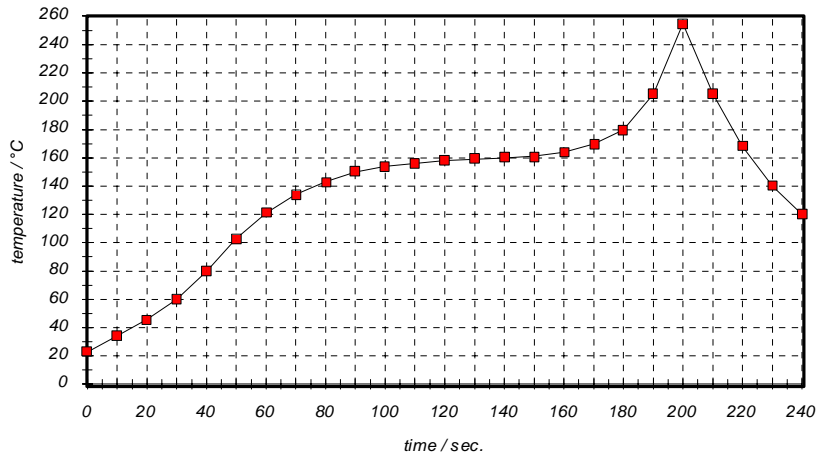


Table for temperature vs. time during the air reflow process

Tolerance of temperatures: ± 5 °C

time / sec.	temperature / °C	time / sec.	temperature / °C
0	23	140	160
10	34	150	161
20	46	160	164
30	60	170	170
40	80	180	180
50	103	190	205
60	121	195	230
70	134	200	255
80	143	205	230
90	150	210	205
100	154	215	180
110	156	220	165
120	158	230	140
130	159	240	120

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**VI TELEFILTER****Development specification****TFS915****5/5****History**

<b>Version</b>	<b>Reason of Changes</b>	<b>Name</b>	<b>Date</b>
1.0	- Generation of development specification	Roizengaft	1.10.2003
1.1	- Change of rejection in upper stop band	Roizengaft	21.10.2003

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