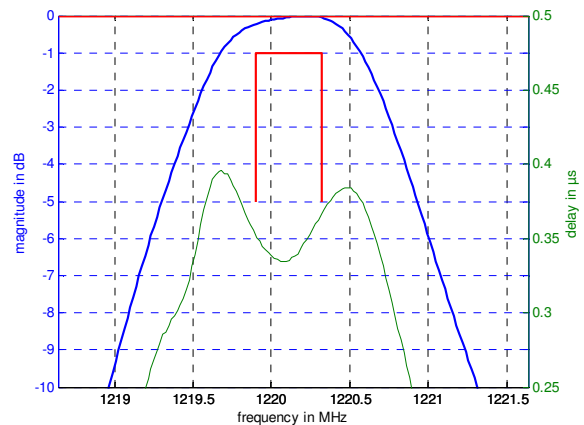
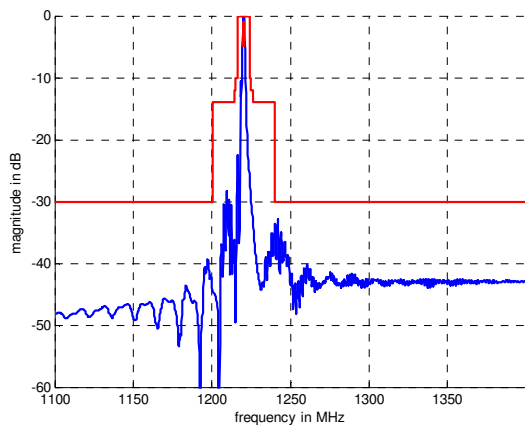
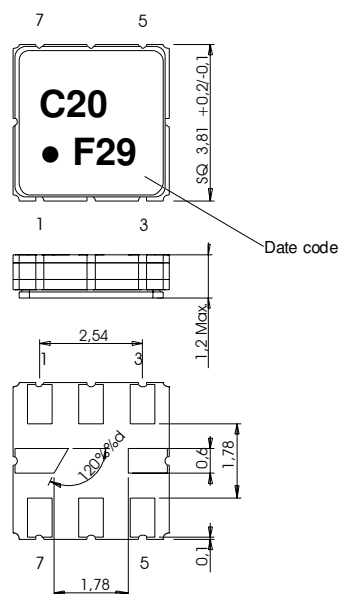


Filter characteristic



Construction and pin connection

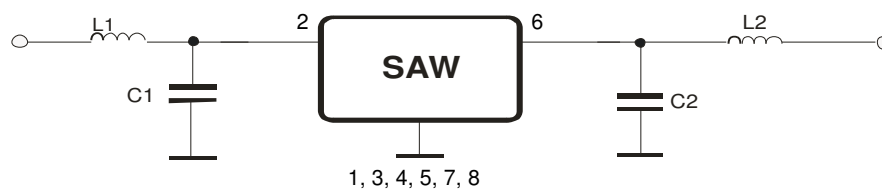
(All dimensions in mm)



1	Ground
2	Input
3	Ground
4	Ground
5	Ground
6	Output
7	Ground
8	Ground

Date code:	Year + week
F	2015
G	2016
H	2017
...	

50 Ohm Test circuit



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Stability characteristics, reliability

After the following tests the filter shall meet the whole specification:

1. Shock: 500g, 1ms, half sine wave, 3 shocks each plane;
DIN IEC 68 T2 - 27
2. Vibration: 10Hz to 500Hz, 0.3mm or 5g respectively, 1 octave per min, 10 cycles per plane, 3 planes; DIN IEC 68 T2 - 6
3. Change of temperature: -5 °C to 125°C / 15 min. each / 100 cycles
DIN IEC 6 part 2 – 14 Test N
4. Resistance to solder heat (reflow): reflow possible: three times max.;
for temperature conditions, see page 4: "Air reflow temperature conditions"

This filter is RoHS compliant (2011/65/EU)

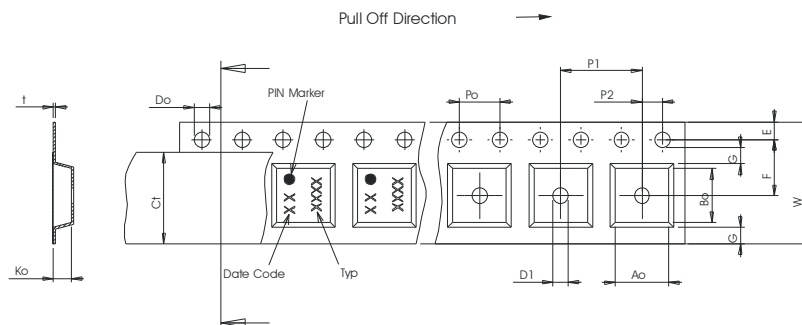
Packing

Tape & Reel: IEC 286 – 3, with exception of value for N and minimum bending radius;
tape type II, embossed carrier tape with top cover tape on the upper side;

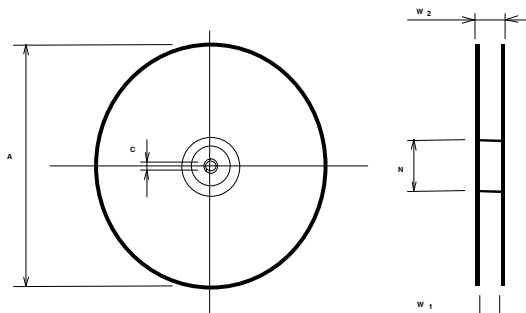
max. pieces of filters per reel:	3000
reel of empty components at start:	min. 300 mm
reel of empty components at start including leader:	min. 500 mm
trailer:	min. 300 mm

Tape (all dimensions in mm)

W	: 12.00 ± 0.3
Po	: 4.00 ± 0.1
Do	: 1.50 +0.1/-0
E	: 1.75 ± 0.1
F	: 5.50 ± 0.05
G(min)	: 0.75
P2	: 2.00 ± 0.05
P1	: 8.00 ± 0.1
D1(min)	: 1.50
Ao	: 4.30 ± 0.1
Bo	: 4.30 ± 0.1
Ct	: 9.2 ± 0.1

**Reel (all dimensions in mm)**

A	: 330 or 180
W1	: 12.4 +2/-0
W2(max)	: 18.4
N(min)	: 50
C	: 13.0 +0.5/-0.2



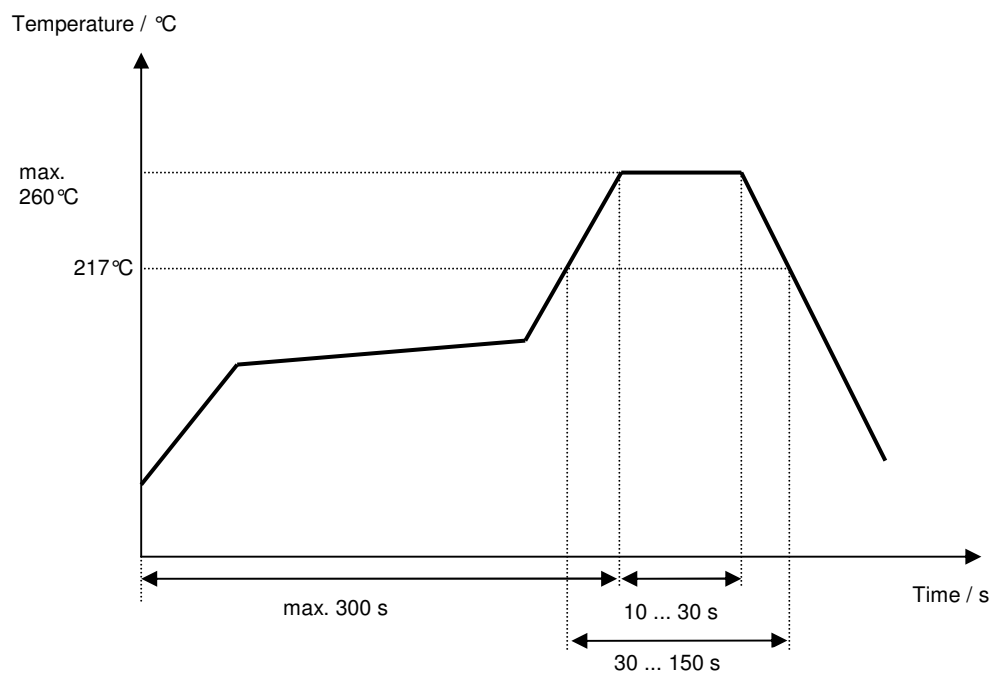
The minimum bending radius is 45 mm.

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Air reflow temperature conditions

Conditions	Exposure
Average ramp-up rate (30°C to 217°C)	less than 3°C/second
> 100°C	between 300 and 600 seconds
> 150°C	between 240 and 500 seconds
> 217°C	between 30 and 150 seconds
Peak temperature	max. 260°C
Time within 5°C of actual peak temperature	between 10 and 30 seconds
Cool-down rate (Peak to 50°C)	less than 6°C/second
Time from 30°C to Peak temperature	no greater than 300 seconds

Chip-mount air reflow profile

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Vectron International**Filter specification****TFS1220****5/5****History**

Version	Reason of Changes	Name	Date
1.0	- Generation of development specification according to customer specification	Dr. Sabah	26.03.2002
1.1	- Changing range of storage temperature - Reducing maximum of insertion loss to 4 dB - Changing relativ attenuation	Pfeiffer	05.04.2002
1.2	- Change insertion loss and relative attenuation	Dr. Sabah	18.07.2002
1.3	- Preliminary Specification; add of typical values and terminating impedance	Dr. Sabah	19.08.2002
1.4	- Filter Specification; add of terminating impedance and frequency inversion temperature	Dr. Sabah	21.08.2002
1.5	- Changing of pin configuration: input and outout pin	Dr. Sabah	13.01.2003
1.6	- add filter characteristic	Noack	05.10.2006
1.7	- Correcting typo (terminating impedance)	S.Springfeldt	12.11.2014
2.0	- Change of tape and reel orientation	S.Springfeldt	14.07.2015

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