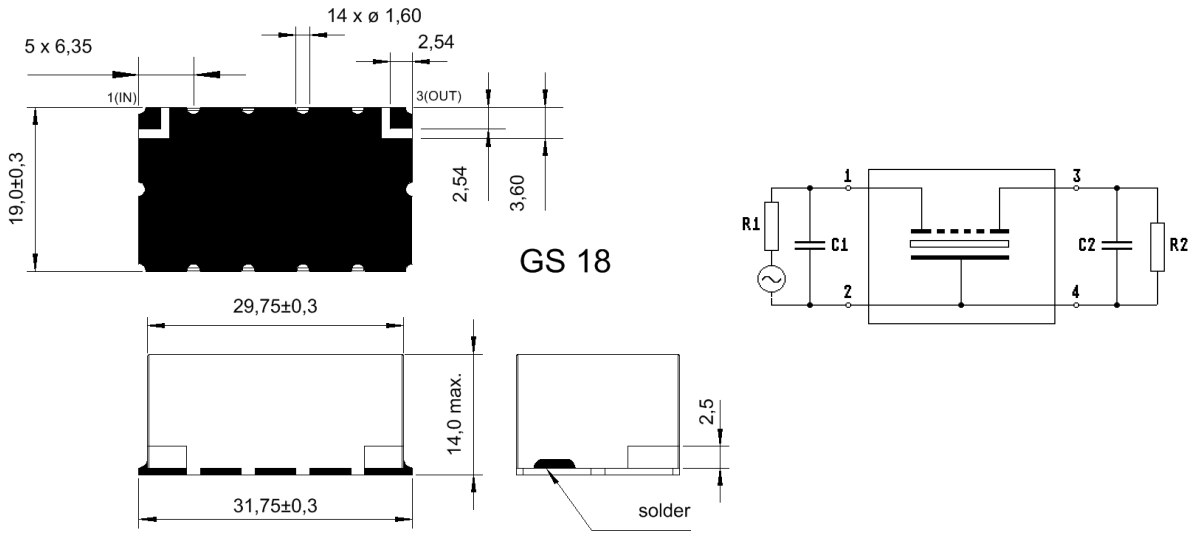
24 January 2008

Specification for crystal filter: QF 6.990……...7.010-0280/06

1. General

1.1. Package



1.2.	Type name:	QF 6.990…….7.010-0280/06
1.3.	Number of poles:	5
1.4.	Operating temperature range:	-30°C to +85°C
1.5.	Storage temperature range:	-45°C to +85°C

2. Electric values

2.1.	Nominal centre frequency fo [MHz]:	6.990 , 6.992, 6.994, 6.996, 6.998, 7.000, 7.002 7.004, 7.006, 7.008, 7.010
2.2.	**Pass band**	
2.2.1.	Centre frequency fc at 25°C ± 3°C:	fo ± 180Hz
2.2.2.	Bandwidth between 3 dB - frequencies:	> fc ± 1.4 kHz
2.2.3.	Ripple at fc ± 0.8 kHz:	< 1.0 dB (< 0.5 dB peak to peak)
2.2.4.	Insertion loss: (measured on smallest attenuation in pass band)	< 3.0 dB
2.3.	**Stop band**	
2.3.1.	fc ± 5.5 kHz	> 60 dB
2.3.2.	Alternate Attenuation	> 70 dB (except spurious)
2.4.	Nominal input power level	+10 dBm
2.4.1.	Maximal input power level	+25 dBm
2.5.	Terminating impedance R//C (input and output):	50 Ω // 0 pF
3.	Marking (i. e.):	manufacturer, date code QF 6.990-0280/06

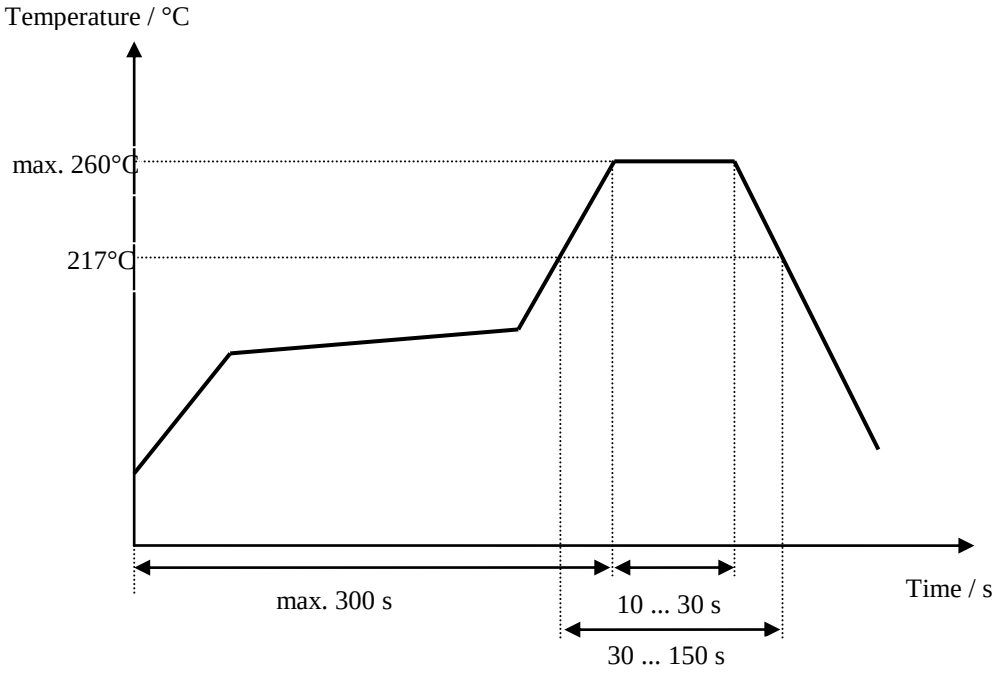
4. Environment conditions:

vibration:	9.8 g, 20-2000 Hz, duration 60 sec.	each axis.
shock:	40g, 11 ms, ½ sine;	change of
temperature:	-30…..+70 Deg. C with exposure	time rate at 5 Deg. C / min.

5. 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 peak temperature	between 10 and 30 seconds
cool-down rate (starting at peak temperature to 50°C)	less than 6°C / second
time from 30°C to peak temperature	no more than 300 seconds

Chip-mount air reflow profile



Edited by: date: _____ name: _____