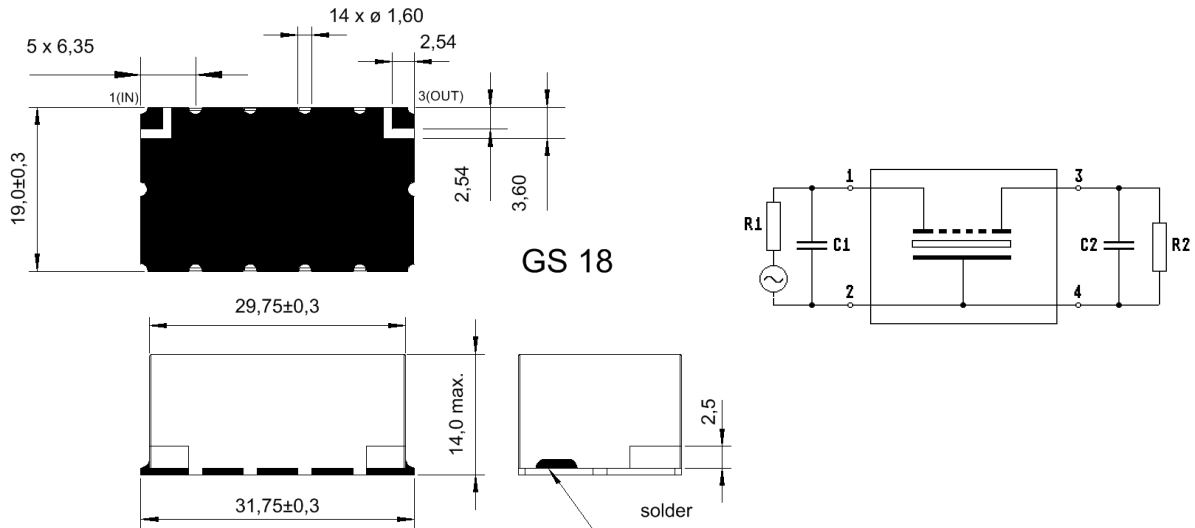


Specification for crystal filter:

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 f_0 [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 f_c at 25°C ± 3°C: | $f_0 \pm 180\text{Hz}$ |
| 2.2.2. Bandwidth between 3 dB - frequencies: | $> f_c \pm 1.4 \text{ kHz}$ |
| 2.2.3. Ripple at $f_c \pm 0.8 \text{ kHz}$: | $< 1.0 \text{ dB}$ ($< 0.5 \text{ dB}$ peak to peak) |
| 2.2.4. Insertion loss:
(measured on smallest attenuation in pass band) | $< 3.0 \text{ dB}$ |
| 2.3. Stop band | |
| 2.3.1. $f_c \pm 5.5 \text{ kHz}$ | $> 60 \text{ dB}$ |
| 2.3.2. Alternate Attenuation | $> 70 \text{ dB}$ (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 |

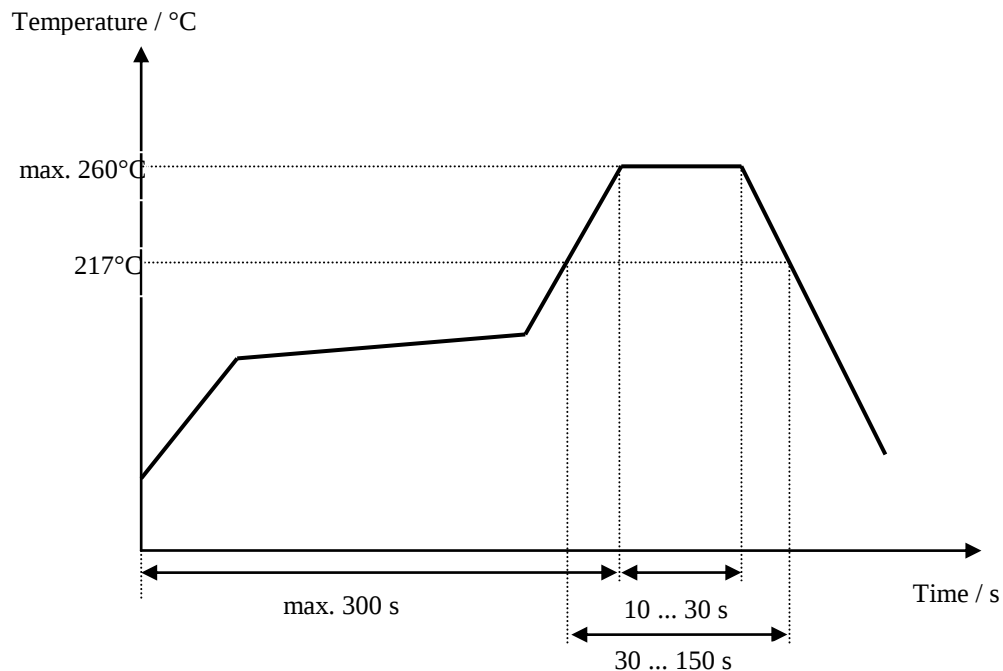
4. Environment conditions:

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: _____