

Features

- SMD filter consisting of coupled resonators with stepped impedances
- (NdBa)TiO₃ ($\epsilon_r = 88$ / $TC_f = 0 \pm 10$ ppm/K) with a coating of copper (10 μ m) and tin (>5 μ m)
- Excellent reflow solderability, no migration effect due to copper/tin metallization

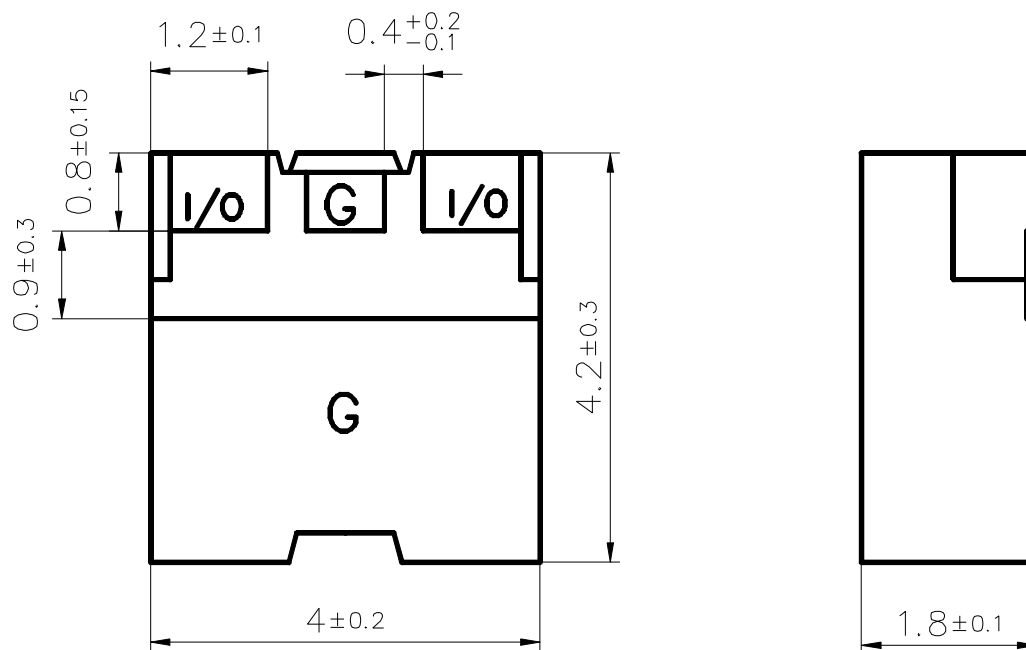
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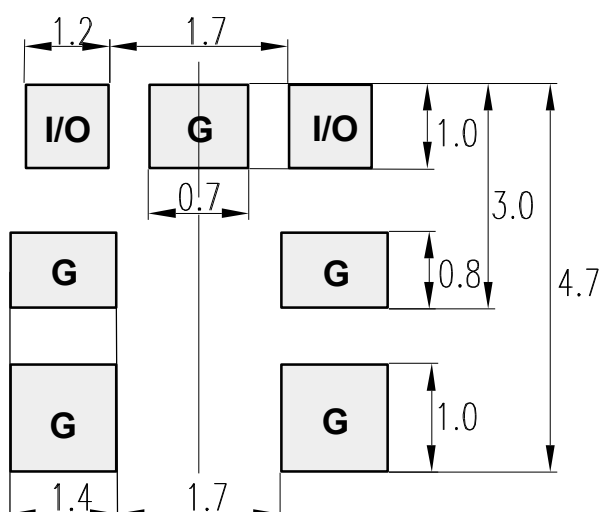
Preliminary Datasheet

Component drawing



View from below onto the solder terminals and view from beside

Recommended footprint



FPS3P91X.DOC

| | | | | | | | |
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Preliminary Datasheet

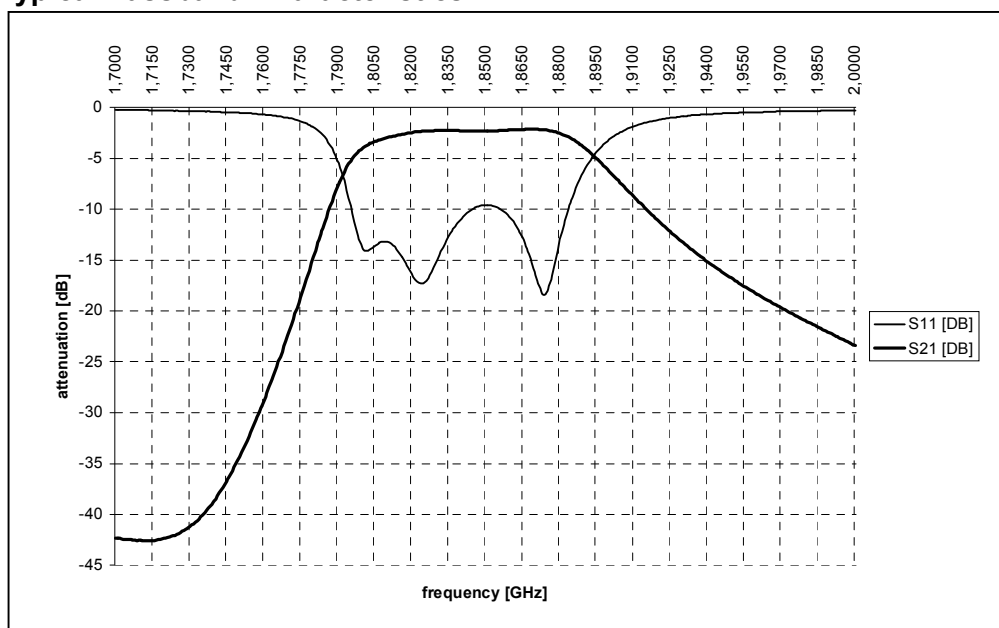
Characteristics (items marked with * must still be correlated to customer print,
top surface may have additional contact to ground)

| | | min. | typ. | max. | |
|--------------------------------|---------------------|------|--------|------|----------|
| Center frequency | f_c | - | 1842.5 | - | MHz |
| Insertion loss | α_{IL} | | 2.7 | 3.2* | dB |
| Passband | B | 75 | | | MHz |
| Amplitude ripple (peak - peak) | $\Delta\alpha$ | | 1.2 | 1.5 | dB |
| Power | | | | 15 | dBm |
| Standing wave ratio (S11, S22) | SWR | | 1.4 | 2.2 | |
| Impedance | Z | | 50 | | Ω |
| Attenuation | α | | | | |
| | at DC to 1160 MHz | 45 | 48 | | dB |
| | at 1160 to 1705 MHz | 38 | 40 | | dB |
| | at 1705 to 1785 MHz | 11* | | | dB |
| | at 1920 to 1980 MHz | 11* | | | dB |
| | at 1980 to 2530 MHz | 23* | | | dB |
| | at 2530 to 2680 MHz | 30 | | | dB |
| | at 3250 to 3400 MHz | 27 | | | dB |
| | at 3975 to 4200 MHz | 22 | | | dB |
| | at 4695 to 4920 MHz | 15* | | | dB |

Maximum ratings

| | | | |
|----------------------------------|----------|----------------|----|
| IEC climatic category (IEC 68-1) | | - 40 / + 90/56 | |
| Storage temperature | T_{st} | - 40 / + 85 | |
| Operating temperature | T_{op} | - 20 / + 80 | °C |

Typical Passband Characteristics



Preliminary Datasheet

ZNr.: 452 (FILT95_2)

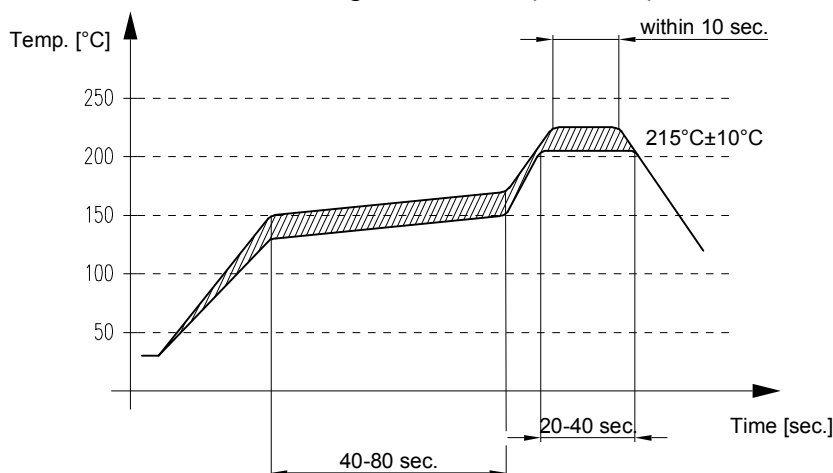
Processing information

- Wettability to IEC 68-2-58: $\geq 75\%$ (after aging)

Soldering requirements

| | | |
|--|---|----------|
| Soldering type | reflow | |
| Maximum soldering temperature (measuring point on top surface of the component) | 235 (max. 2 sec.) 225 (max. 10 sec.) | °C °C |

Recommended soldering conditions (infrared):



LOETPROF.DOC

Delivery mode

- Blister tape acc. to IEC 286-3, polystyrol, grey
- Pieces/tape: 3000

