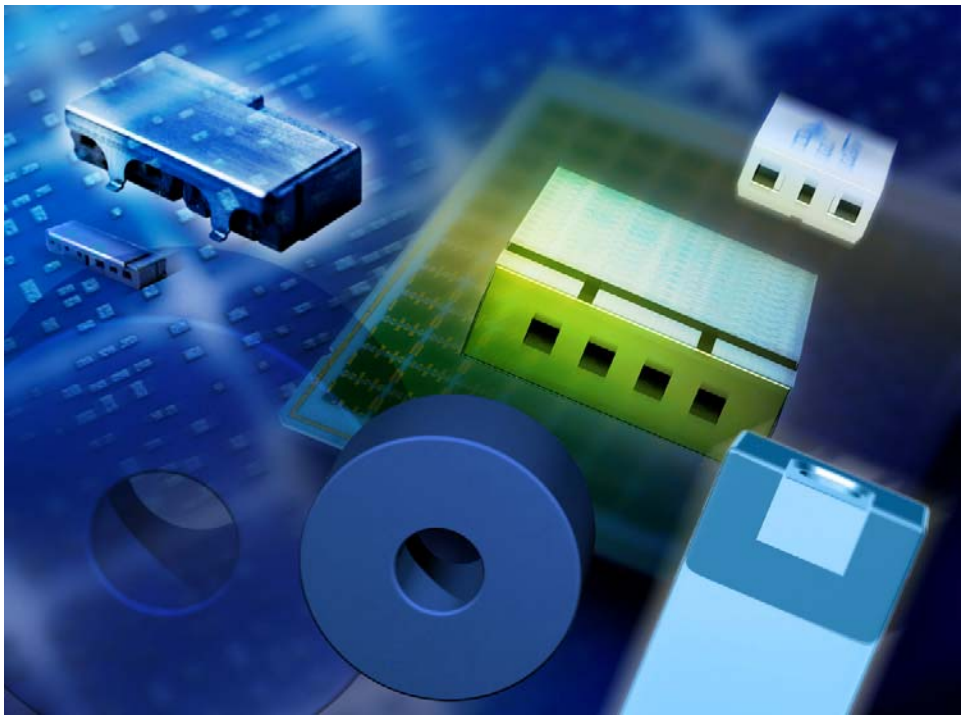
# 3-Pole Filter for WLL Base Station TX Filter

**B69843N3457A120**

Data Sheet



## Application

- RF filter for WLL (Wireless Local Loop)

## Features

- SMD filter consisting of coupled resonators with stepped impedances
- $MgTiO_3$-$CaTiO_3$ ($\varepsilon_r$ = 21 / $TC_f$ =0±10 ppm/K) with a coating of copper (10µm) and tin (>5µm)
- Excellent reflow solderability, no migration effect due to copper/tin metallization
- ESD insensitivity and ESD protecting due to filter characteristics

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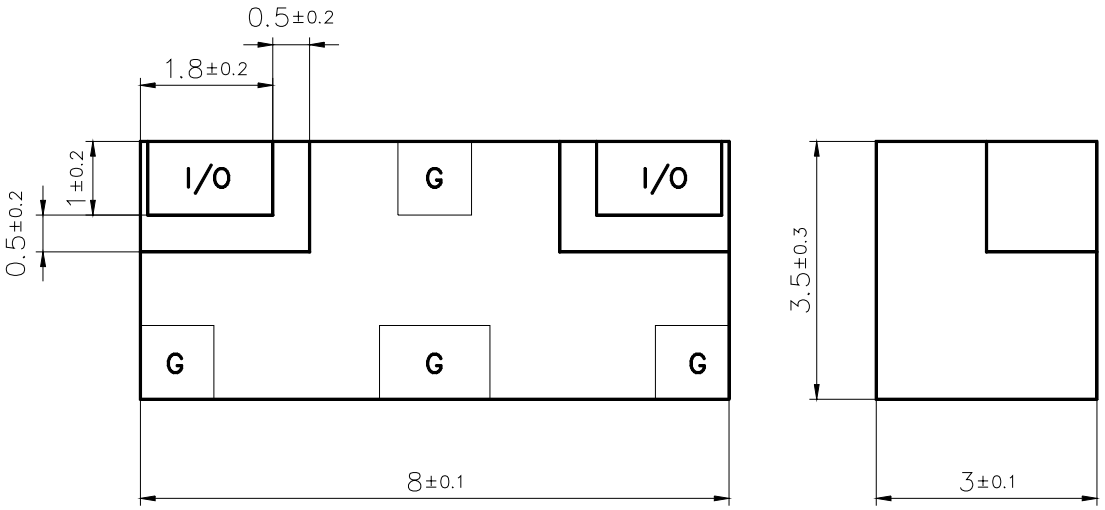
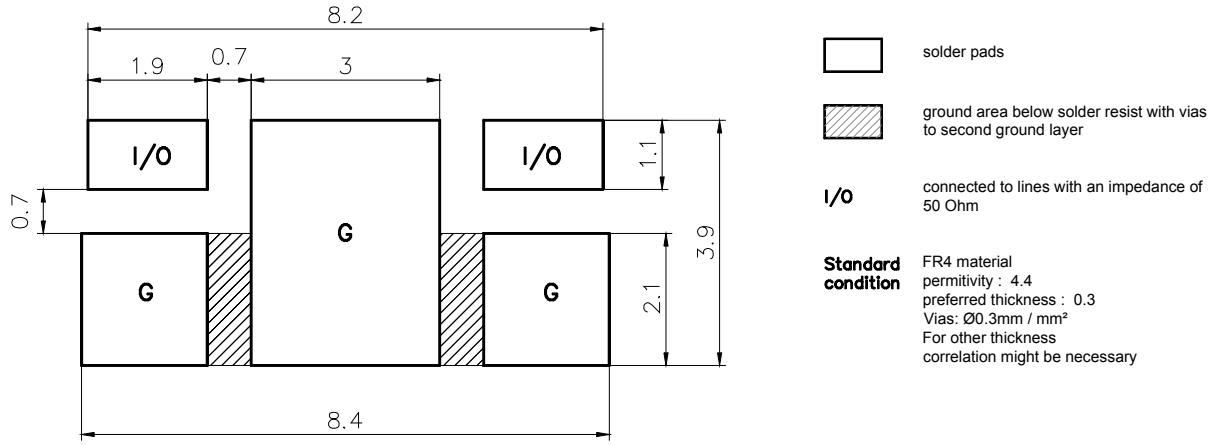
## Component drawing




View from below onto the solder terminals and view from beside

## Recommended Footprint



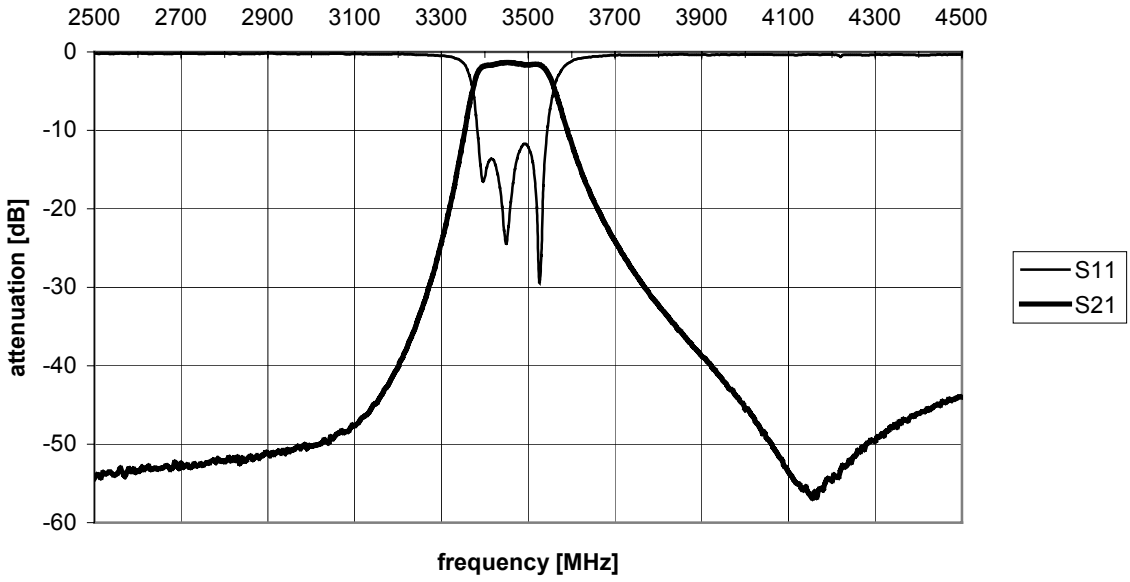
## Characteristics

| | | min. | typ. | max. | |
|---|---|---|---|---|---|
| Center frequency | $f_c$ | - | 3450.0 | - | MHz |
| Insertion loss | $\alpha_{IL}$ | | 1.6 | 2.0 | dB |
| Passband | $B$ | 120 | | | MHz |
| Amplitude ripple (peak - peak) at any 10MHz BW | $\Delta\alpha$ | | | 0.4 | dB |
| Standing wave ratio | $SWR$ | | 1.5 | 2.0 | |
| Impedance | $Z$ | | 50 | | Ω |
| Power | $P$ | | | 1.0 | W |
| Attenuation | $\alpha$ | | | | |
| at 2944 to 3044 MHz | | 45 | 51 | | dB |
| at 3800 to 4200 MHz | | 20 | 29 | | dB |

## Maximum ratings

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

## Typical passband characteristic



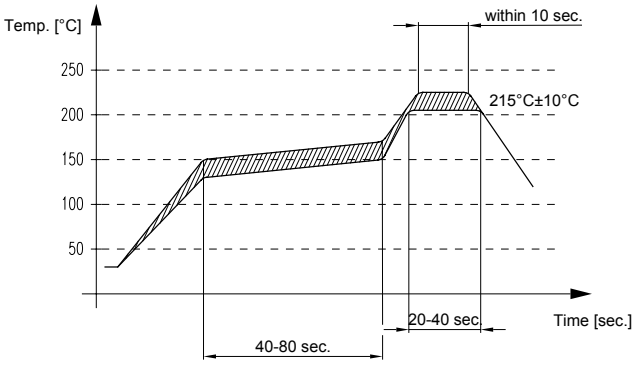
## Processing information

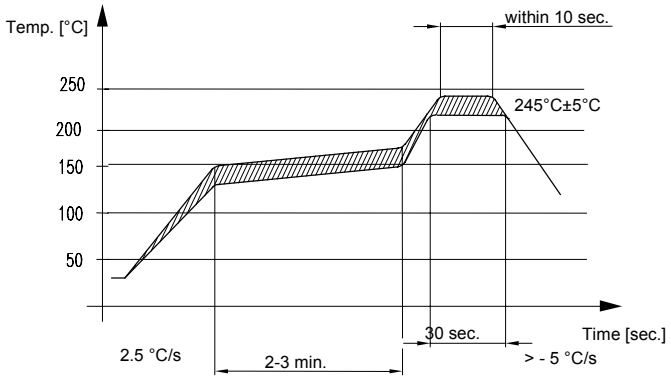
- Wettability to IEC 68-2-58: ≥ 75% (after aging)

## Soldering Requirements

| | Profile for eutectic SnPb solder paste | Profile for leadfree solder paste | |
|---|---|---|---|
| Soldering type | reflow | reflow | |
| Maximum soldering temperature | 235 (max. 2 sec.) | 260 (max. 2 sec.) | °C |
| (measuring point on top surface of the component) | 225 (max. 10 sec.) | 250 (max. 10 sec.) | °C |

Recommended soldering conditions (infrared):




## Delivery mode

- Blister tape acc. to IEC 286-3, PS, grey
- Pieces/tape: 2000