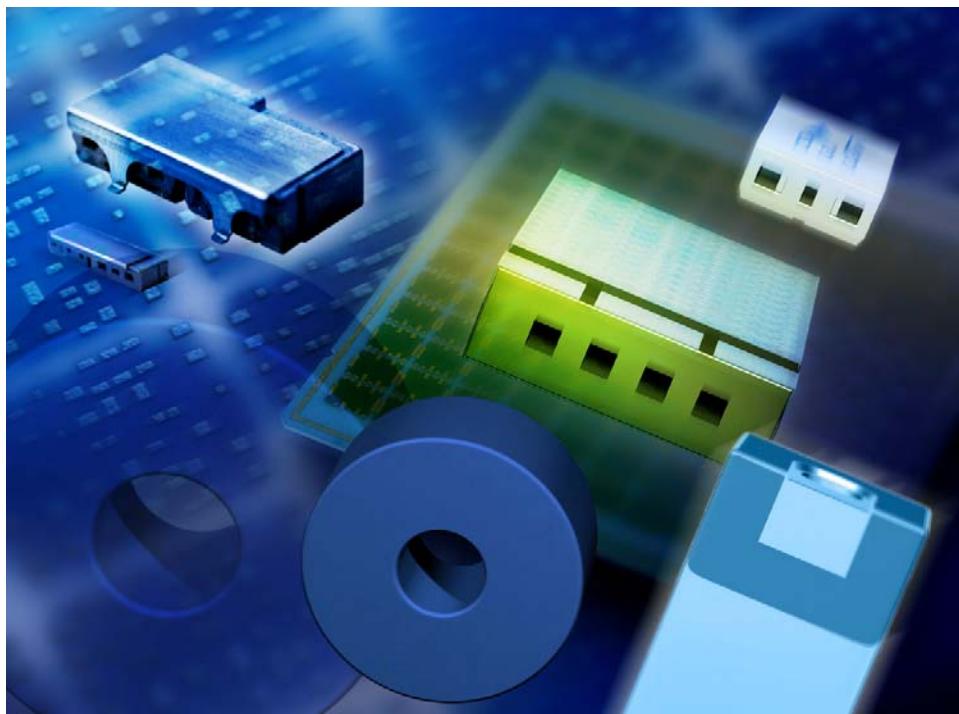


Data Sheet



Application

- RF filter for WLL (Wireless Local Loop)

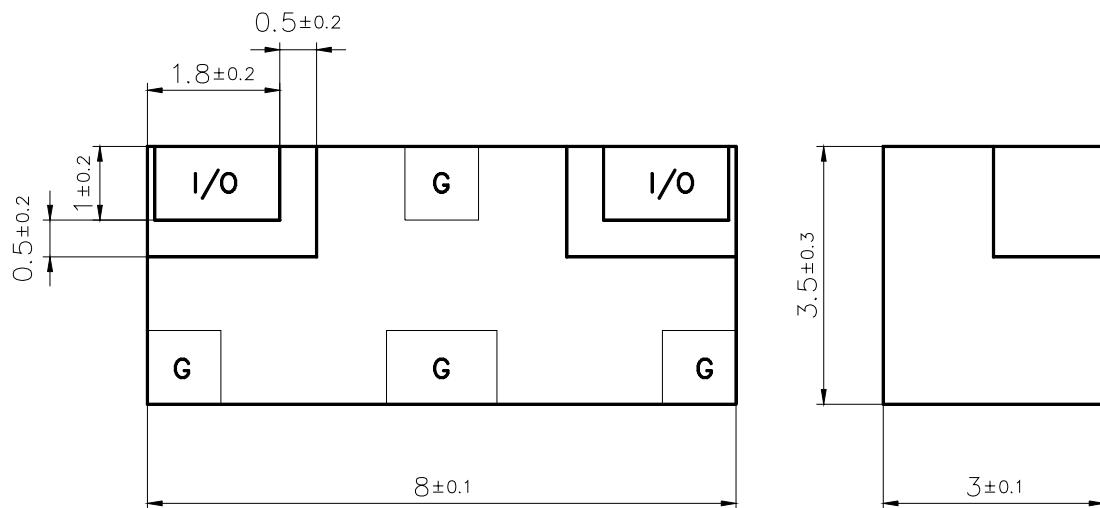
Features

- SMD filter consisting of coupled resonators with stepped impedances
- $\text{MgTiO}_3\text{-CaTiO}_3$ ($\epsilon_r = 21$ / $TC_f = 0 \pm 10 \text{ ppm/K}$) with a coating of copper ($10\mu\text{m}$) and tin ($>5\mu\text{m}$)
- Excellent reflow solderability, no migration effect due to copper/tin metallization
- ESD insensitivity and ESD protecting due to filter characteristics

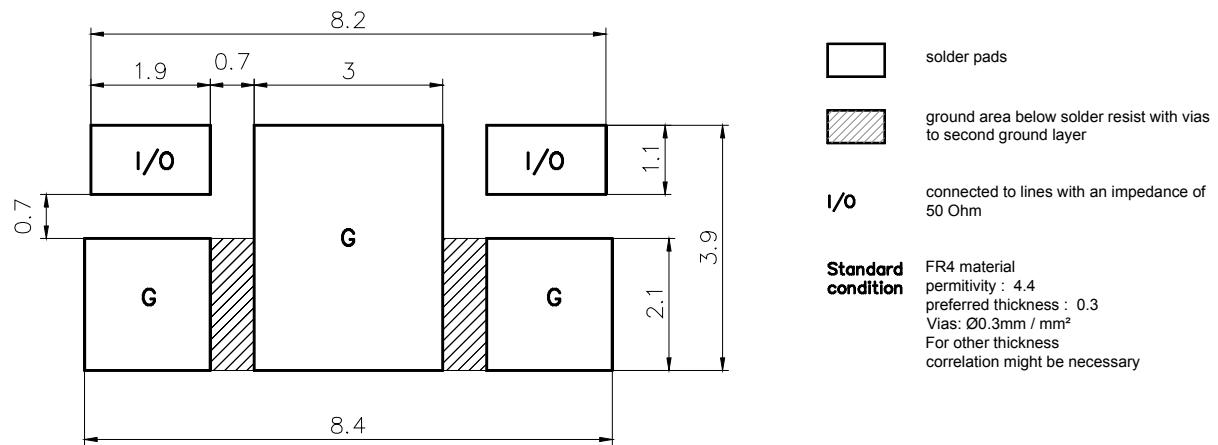
Index

| | |
|--------|---|
| Page 2 | <ul style="list-style-type: none">● Component drawing● Footprint |
| Page 3 | <ul style="list-style-type: none">● Characteristics● Maximum ratings● Typical passband characteristic |
| Page 4 | <ul style="list-style-type: none">● Processing information● Soldering requirements● Delivery mode |

| | | | | | | | |
|------------|----------|-------|----|-----------|------------|------|-----|
| ISSUE DATE | 05.07.04 | ISSUE | P1 | PUBLISHER | SAW MWC PD | PAGE | 1/4 |
|------------|----------|-------|----|-----------|------------|------|-----|

Data Sheet
Component drawing


View from below onto the solder terminals and view from beside

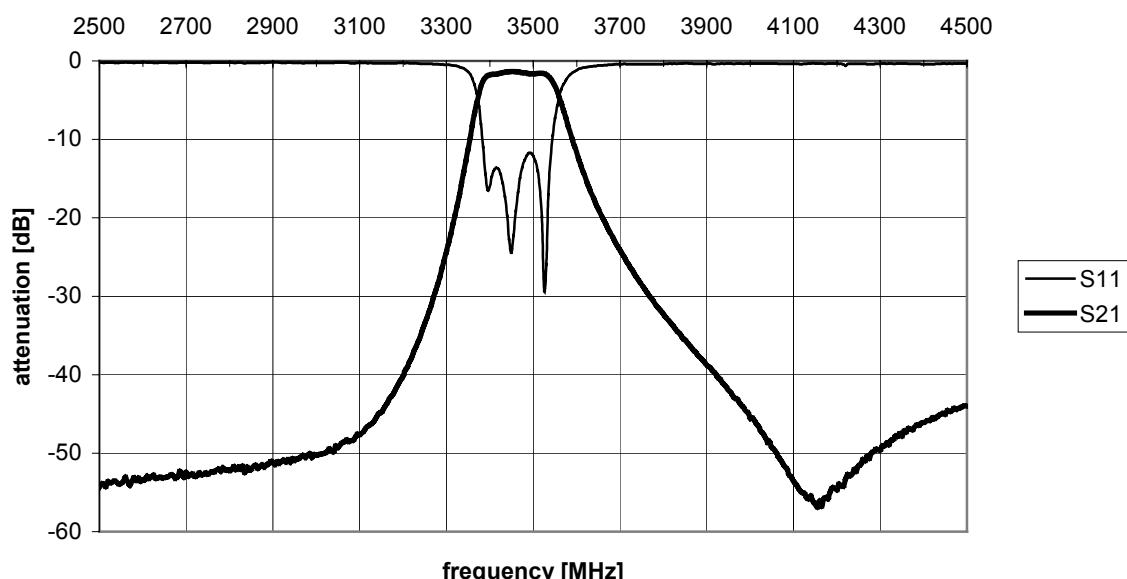
Recommended Footprint


Data Sheet
Characteristics

| | | min. | typ. | max. | |
|--|----------------|------|--------|------|----------|
| Center frequency | f_c | - | 3450.0 | - | MHz |
| Insertion loss | α_{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 | α | | | | |
| 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


Microwave Ceramics and Modules

Filter

3-Pole Filter for WLL Base Station TX Filter

B69843N3457A120

Data Sheet

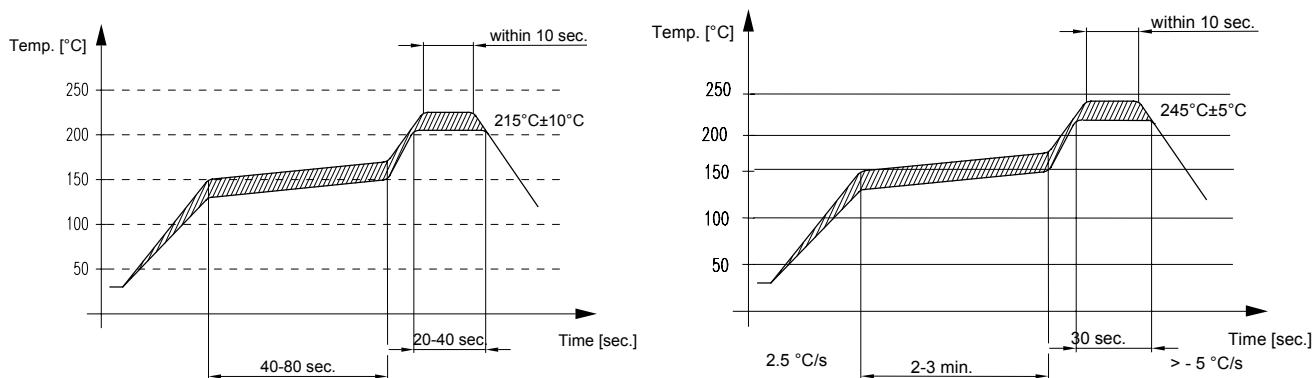
Processing information

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

Soldering Requirements

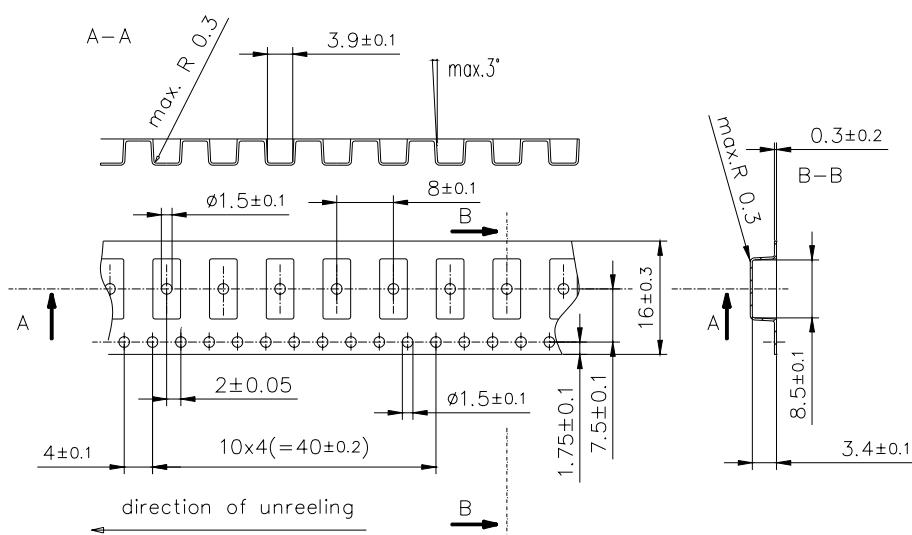
| | Profile for eutectic SnPb solder paste | Profile for leadfree solder paste | |
|--|---|---|----------|
| Soldering type | reflow | reflow | |
| Maximum soldering temperature (measuring point on top surface of the component) | 235 (max. 2 sec.) 225 (max. 10 sec.) | 260 (max. 2 sec.) 250 (max. 10 sec.)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

Recommended soldering conditions (infrared):



Delivery mode

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



© EPCOS AG 2001. All Rights Reserved. Reproduction, publication and dissemination of this data sheet, enclosures hereto and the information contained therein without EPCOS' prior express consent is prohibited.

The information contained in this data sheet describes the type of component and shall not be considered as guaranteed characteristics. Purchase orders are subject to the General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry recommended by the ZVEI (German Electrical and Electronic Manufacturers' Association), unless otherwise agreed.

| | | | | | | | |
|------------|----------|-------|----|-----------|------------|------|-----|
| ISSUE DATE | 05.07.04 | ISSUE | P1 | PUBLISHER | SAW MWC PD | PAGE | 4/4 |
|------------|----------|-------|----|-----------|------------|------|-----|