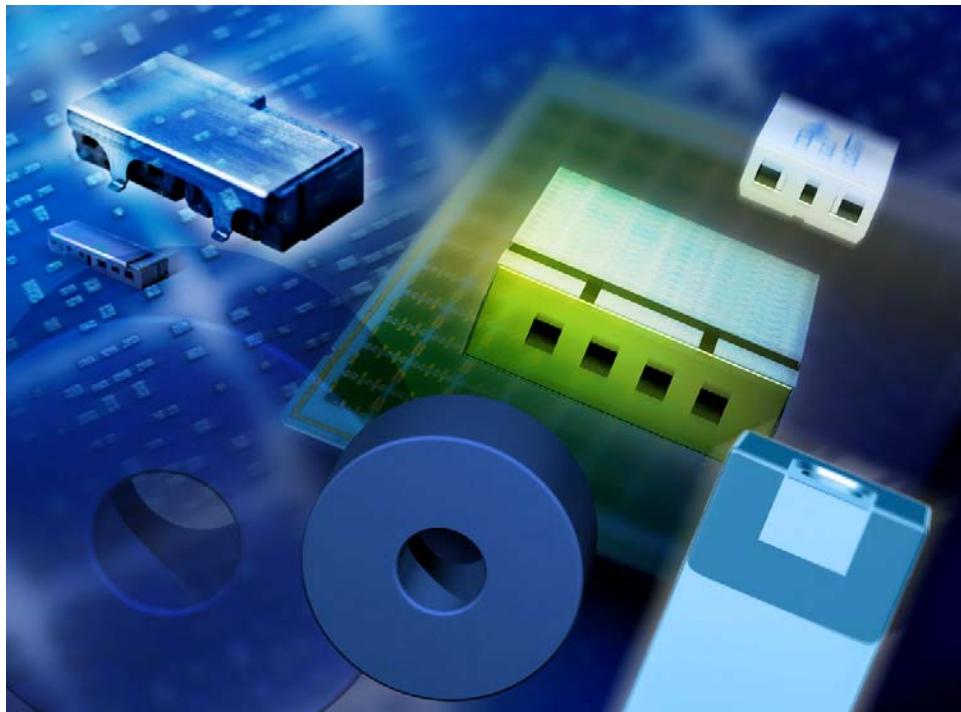


**Data Sheet**

**Application**

- RF filter for WLL (Wireless Local Loop)

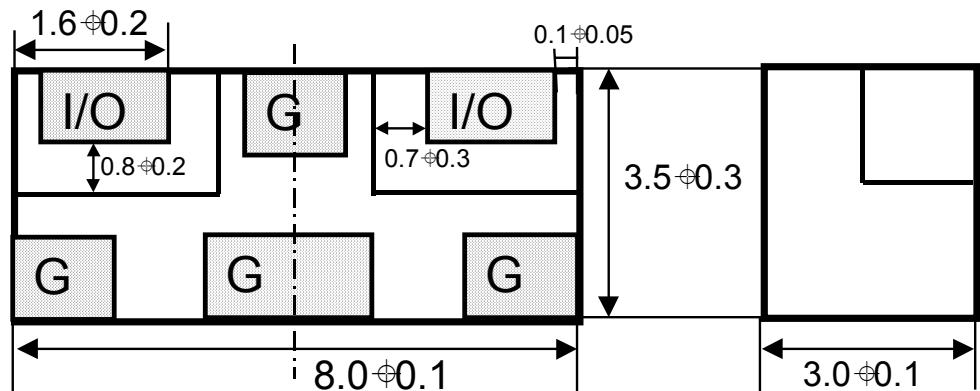
**Features**

- 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

**Index**

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

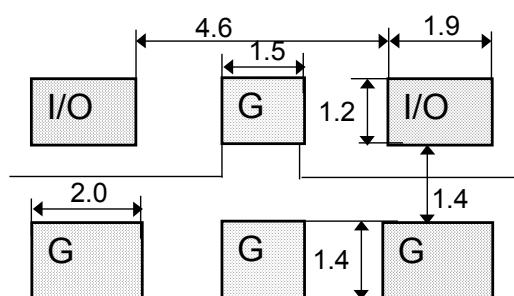
## Component drawing



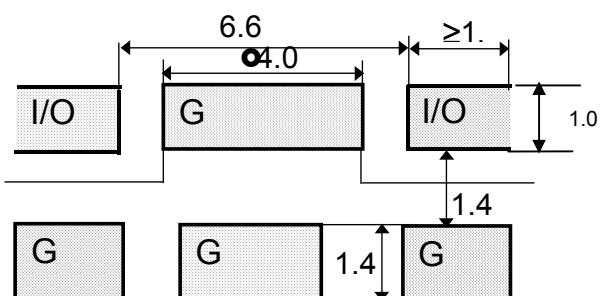
View from below onto the solder terminals and view from beside

## Footprint

recommended



compatible footprint

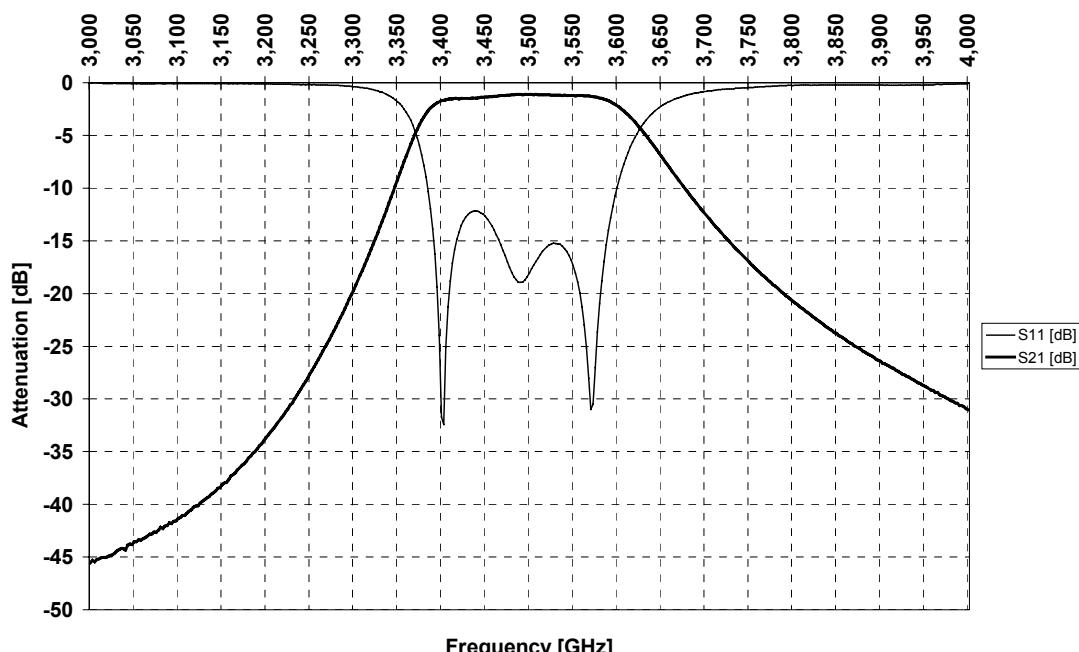


**Data Sheet**
**Characteristics**

|                                |                |     | min.   | typ. | max. |          |
|--------------------------------|----------------|-----|--------|------|------|----------|
| Center frequency               | $f_c$          | -   | 3500.0 | -    | -    | MHz      |
| Insertion loss                 | $\alpha_{IL}$  |     | 1.2    | 1.8  |      | dB       |
| Passband                       | $B$            | 160 |        |      |      | MHz      |
| Amplitude ripple (peak - peak) | $\Delta\alpha$ |     | 0.5    | 1.0  |      | dB       |
| Standing wave ratio            | $SWR$          |     | 1.5    | 2.0  |      |          |
| Impedance                      | $Z$            |     | 50     |      |      | $\Omega$ |
| Power                          | $P$            |     |        |      | 1.0  | W        |
| Attenuation                    | $\alpha$       |     |        |      |      |          |
| at DC to 2800 MHz              |                | 40  | 45     |      |      | dB       |
| at 2800 to 3240 MHz            |                | 26  |        |      |      | dB       |
| at 3900 to 5000 MHz            |                | 25  |        |      |      | dB       |
| at 5000 to 7200 MHz            |                | 20  |        |      |      | dB       |

**Maximum ratings**

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

**Typical passband characteristic**


## Data Sheet

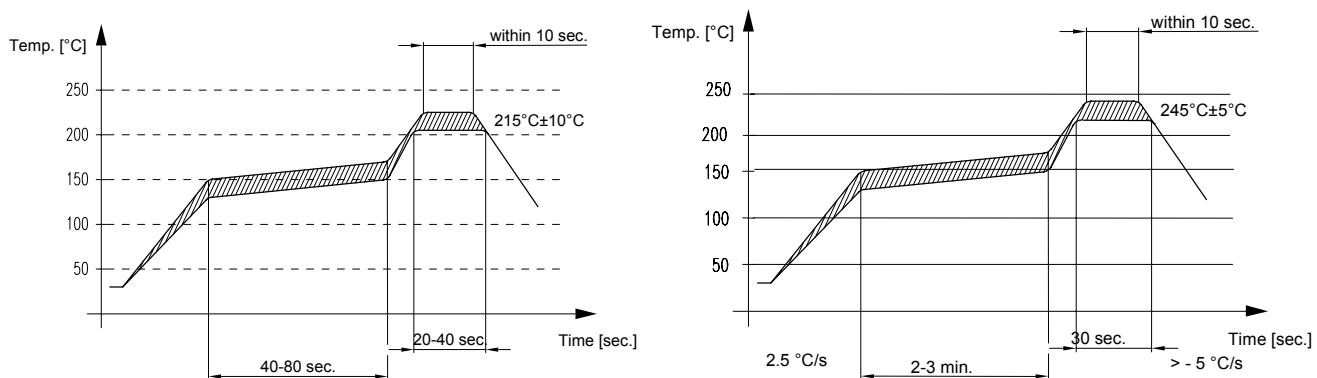
## Processing information

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

## Soldering Requirements

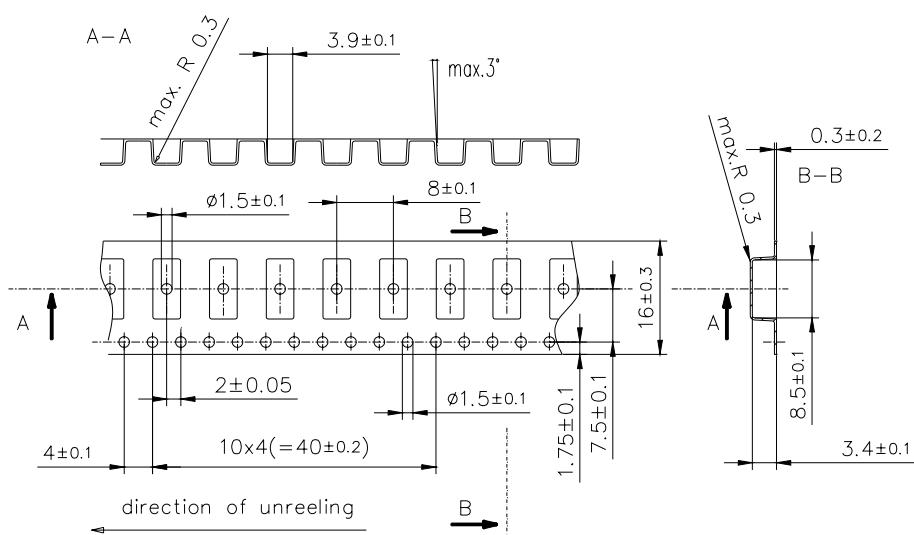
|  | Profile for eutectic SnPb solder paste  | Profile for leadfree solder paste       |          |
|--|---|---|----------|
| Soldering type   | reflow                                  | reflow                                  |          |
| Maximum soldering temperature<br>(measuring point on top surface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

#### Recommended soldering conditions (infrared):



## Delivery mode

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



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