

Filter

2 - Pole Filter for W - LAN

B69812N2457A101

Preliminary Datasheet



Features

- Low Profile (maximum height 1.4 mm)
- SMD filter consisting of coupled resonators with stepped impedances
- Low losses
- High attenuations at GSM (900, 1800) and UMTS bands
- High attenuation at 2 times center frequency
- (NdBa)TiO₃ (ε_{Γ} = 88 / TC_f =0±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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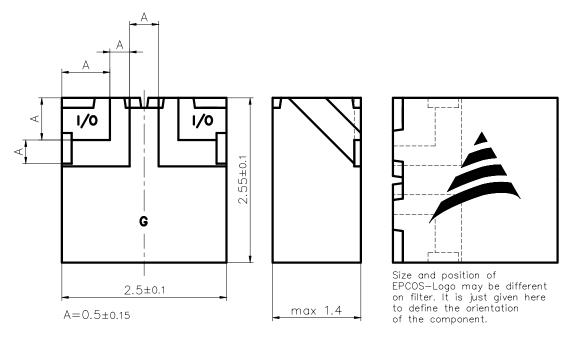
Filter

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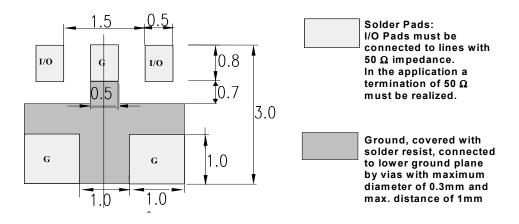
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Dimension Limits, Marking



Recommended footprint



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Characteristics

| | | min. | typ. | max. | |
|--------------------------------|----------------|------|-------|------|-----|
| Center frequency | f _C | - | 2.450 | - | GHz |
| Insertion loss | α_{IL} | | 1.2 | 1.5 | dB |
| Passband (2400- 2500) | В | 100 | | | MHz |
| Amplitude ripple (peak - peak) | Δα | | 0.4 | 0.8 | dB |
| Standing wave ratio | SWR | | 1.5 | 2.0 | |
| Impedance | Z | | 50 | | Ω |
| Attenuation | α | | | | |
| at DC to 880 MHz | | 50 | 55 | | dB |
| at 880 to 960 MHz | | 45 | 50 | | dB |
| at 960 to 1990 MHz | | 40 | 45 | | dB |
| at 1990 to 2100 MHz | | 25 | 30 | | dB |
| at 2100 to 2170 MHz | | 20 | 25 | | dB |
| at 3000 to 3200 MHz | | 15 | 20 | | dB |
| at 3200 to 3500 MHz | | 20 | 25 | | dB |
| at 3500 to 4600 MHz | | 27 | 30 | | dB |
| at 4800 to 5000 MHz | | 25 | 30 | | dB |

Maximum ratings

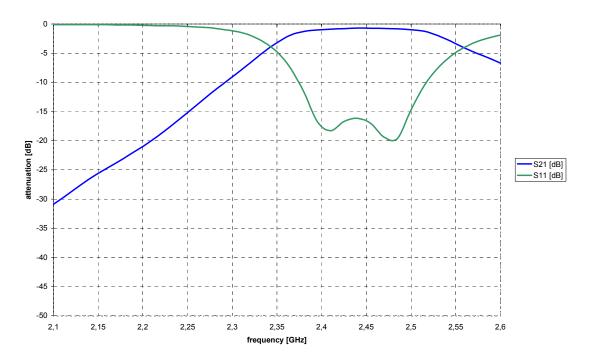
| IEC climatic category (IEC 68-1) |
|----------------------------------|
| Operating temperature |

| - 40 /+ | 90/56 | |
|---------|-------|--|
| | | |

T_{op} - 40 / + 85

85 °C

Typical passband characteristics



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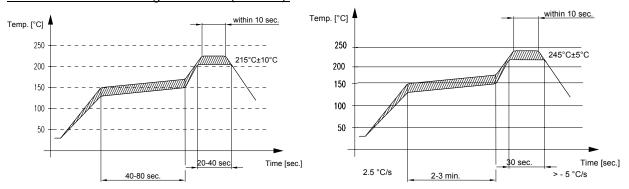
Processing information

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

Soldering Requirements

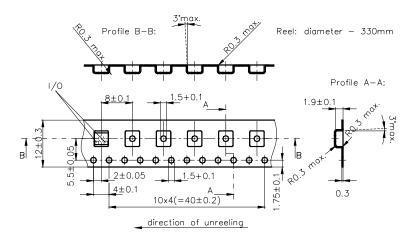
| | Profile for eutectic SnPb solder paste | Profile for leadfree solder paste | |
|---|--|---|----------|
| Soldering type | reflow | reflow | |
| Maximum soldering temperature (measuring point on top surface of the component) | | 260 (max. 2 sec.) 250 (max. 10 sec.) | °C O° |

Recommended soldering conditions (infrared):



Delivery mode

- Blister tape acc. to IEC 286-3, grey
- Pieces/tape: 4000



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