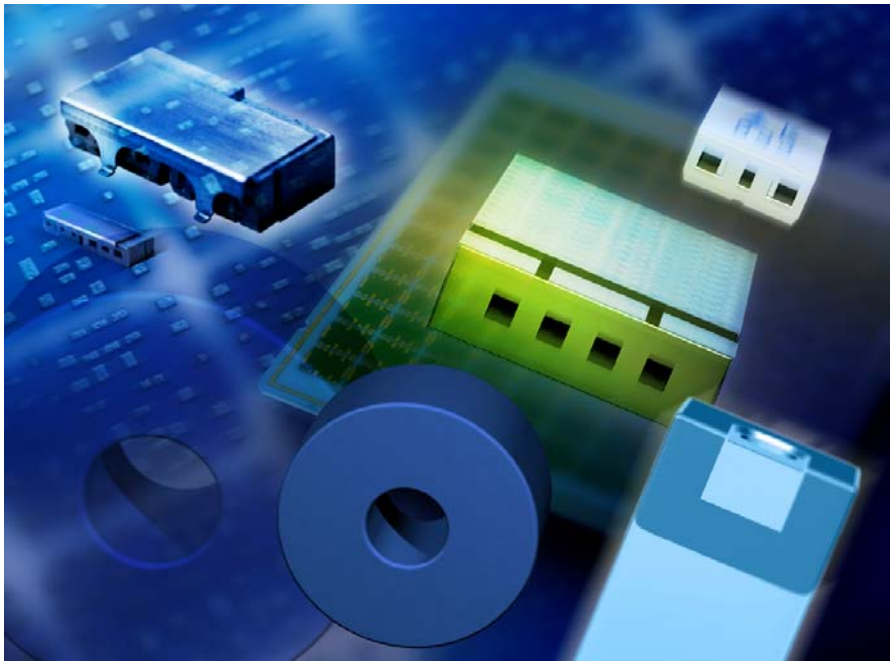
2 – Pole Filter for W - LAN B69812N2457D101

Datas Sheet



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)TiO_3 (ε_r = 88 / 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

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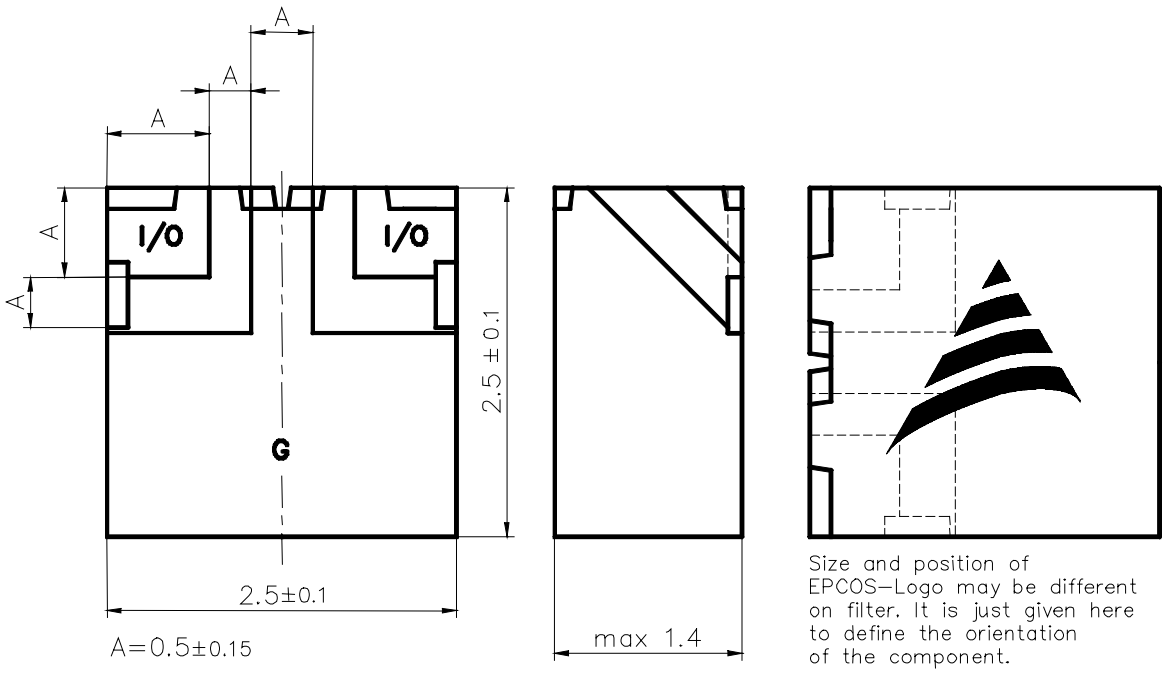
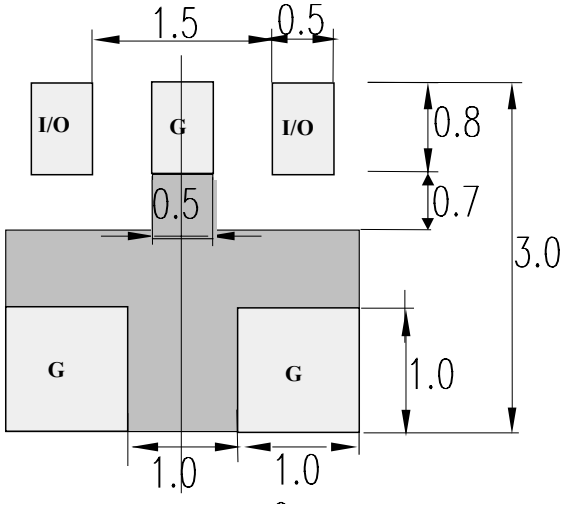
Component drawing, Marking



Recommended footprint



Solder Pads:
I/O Pads must be connected to lines with 50 Ω impedance.
In the application a termination of 50 Ω must be realized.

Ground, covered with solder resist, connected to lower ground plane by vias with maximum diameter of 0.3mm and max. distance of 1mm

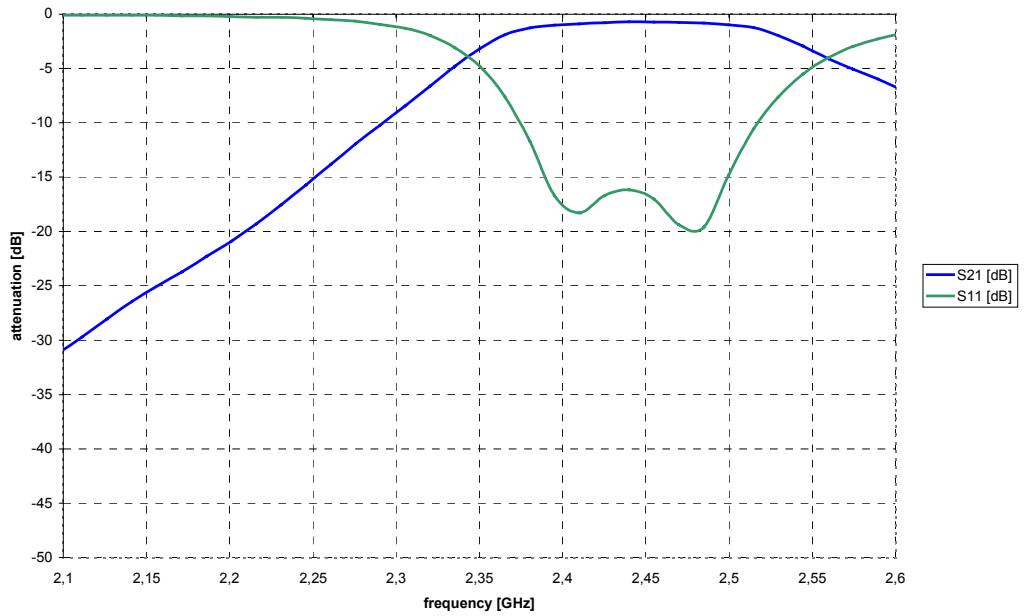
Characteristics

		min.	typ.	max.	
Center frequency	f_c	-	2.450	-	GHz
Insertion loss	α_{IL}		1.4	1.8	dB
Passband (2400- 2500)	B	100			MHz
Amplitude ripple (peak - peak)	$\Delta\alpha$		0.4	0.8	dB
Standing wave ratio	SWR		1.5	2.0	
Impedance	Z		50		Ω
Attenuation	α				
at DC to 827 MHz		56	60		dB
at 880 to 960 MHz		48	55		dB
at 1500 to 1910 MHz		45	47		dB
at 1930 to 1990 MHz		48	49		dB
at 1990 to 2100 MHz		30	34		dB
at 2100 to 2170 MHz		23	27		dB
at 3200 to 3500 MHz		28	30		dB
at 4000 to 4600 MHz		27	30		dB
at 4800 to 5000 MHz		25	30		dB
at 5600 to 5789 MHz		15	20		dB
at 6400 to 6615 MHz		5	10		dB

Maximum ratings

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

Typical passband characteristics



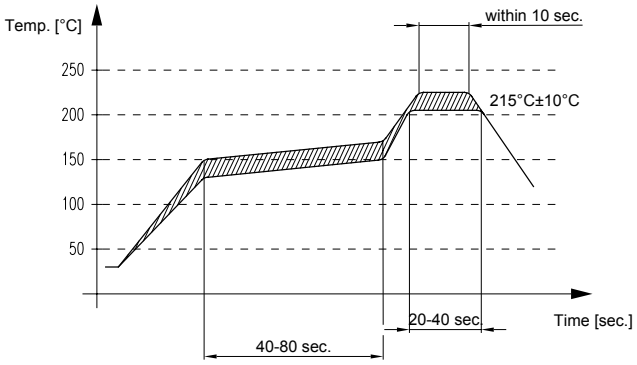
Processing information

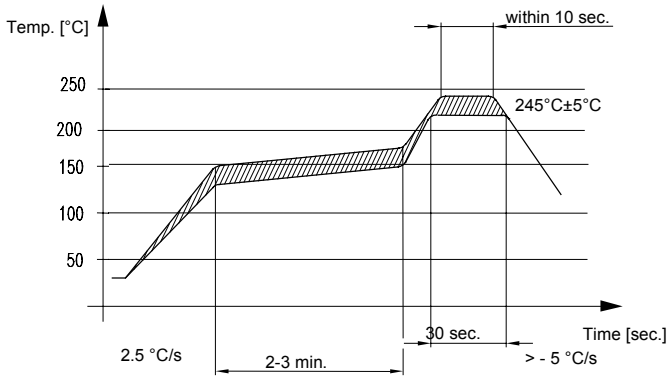
- Wettability acc.to IEC 68-2-58: ≥ 75% (after aging)

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)	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, grey
- Pieces/tape: 4000