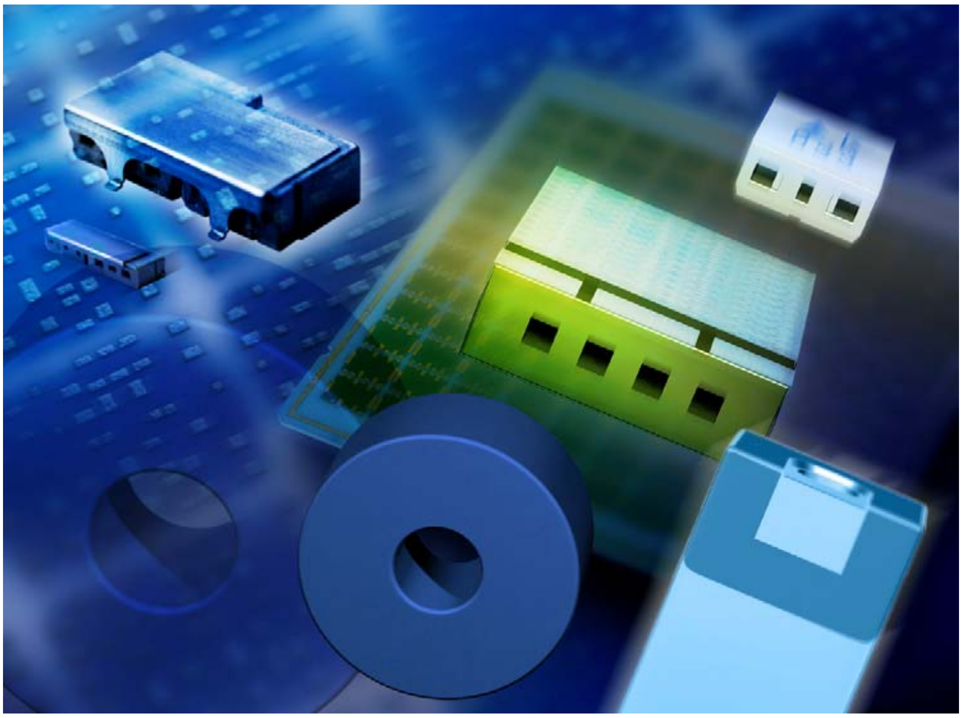
Microwave Ceramics and Modules **Filter**

2 Pole Filter for W-LAN 5GHz / [5.725–5.875] Band B69842N5807A150

Preliminary Data Sheet



Features

- SMD filter consisting of coupled resonators with stepped impedances
- $MgTiO_3$ - $CaTiO_3$ ($\varepsilon_r = 21$ / $TC_f = 0 \pm 10$ 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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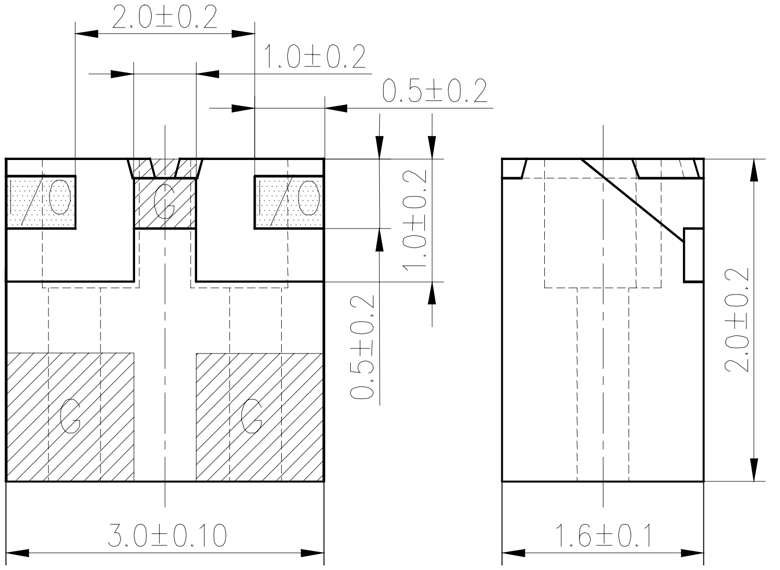
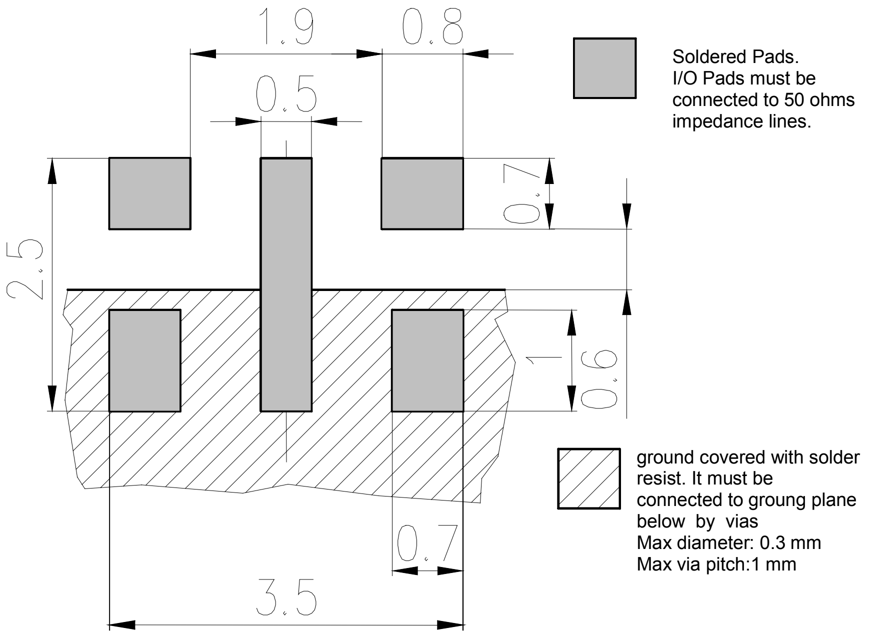
Component drawing



View from below onto the solder terminals and view from beside

Recommended footprint



Soldered Pads.
I/O Pads must be connected to 50 ohms impedance lines.

ground covered with solder resist. It must be connected to groung plane below by vias
Max diameter: 0.3 mm
Max via pitch:1 mm

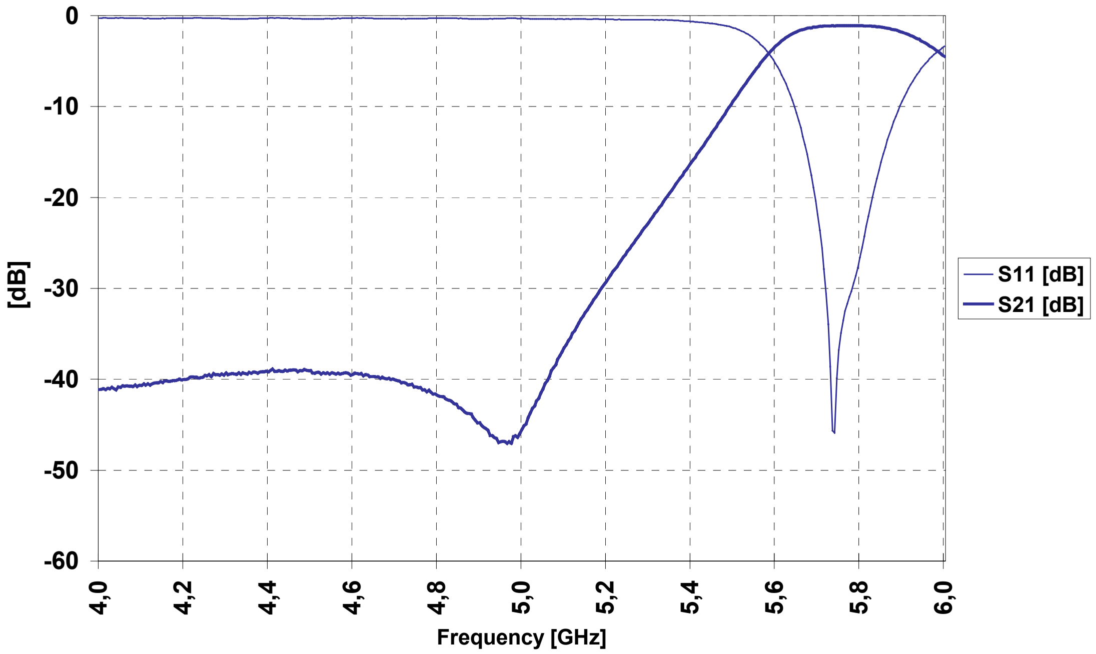
Characteristics

		min.	typ.	max.	
Center frequency	f_C	-	5.8	-	GHz
Insertion loss	α_{IL}		1.1	1.3	dB
Passband	B	150			MHz
Standing wave ratio	SWR		1.5	2.0	
Impedance	Z		50		Ω
Power	P			1.0	W
Attenuation	α				
at DC to 1990 MHz		55	60		dB
at 3300 MHz		40	46		dB
at 5000 MHz		40	45		dB
at 5425 MHZ		12	15		dB
at 6175 MHz		8	12		dB
at 6800 MHz		25	27		dB

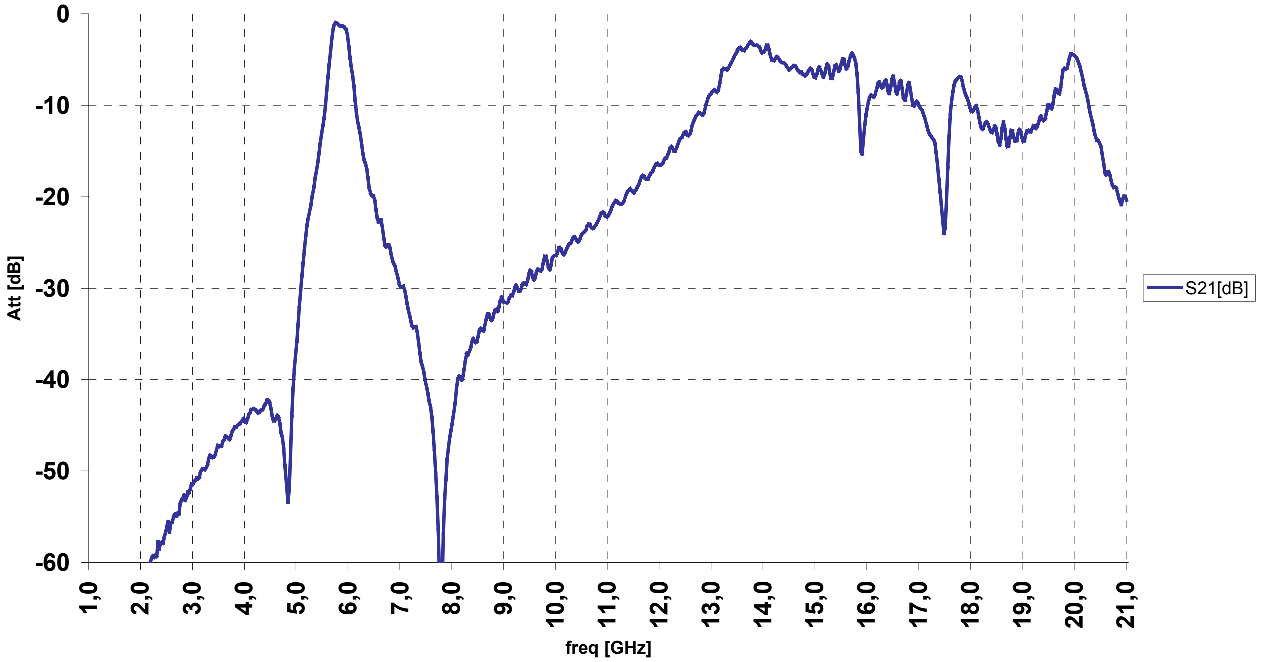
Maximum ratings

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

Typical passband characteristic



Broadband characteristic



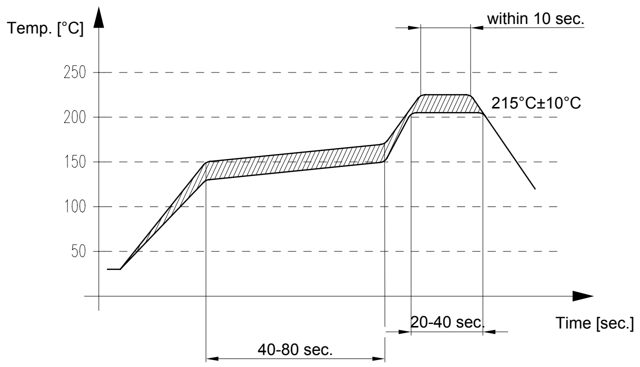
Processing information

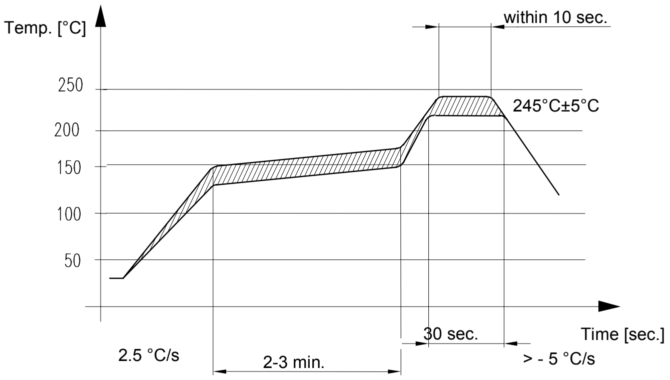
- Wettability acc. to IEC 68-2-58: ≥ 75% (after aging)

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, PS, grey
- Pieces/tape: 4000