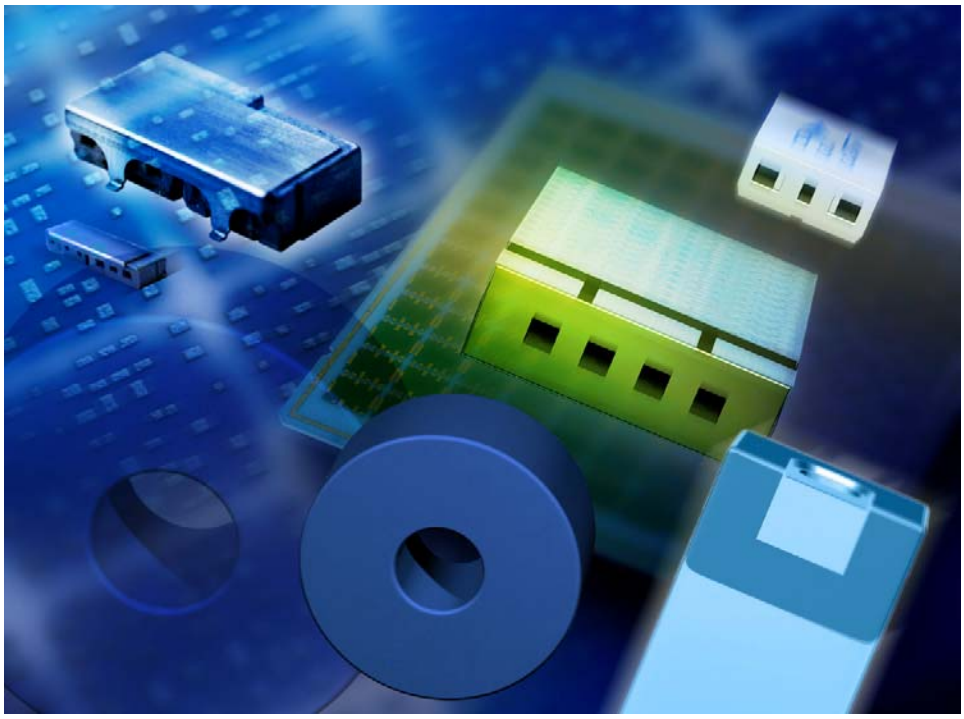
3-Pole Filter for IMT 2000 / CDMA 2000 / UMTS / WCDMA

B69813N1957A560

Preliminary Data Sheet



Features

- SMD filter consisting of coupled resonators with stepped impedances
- (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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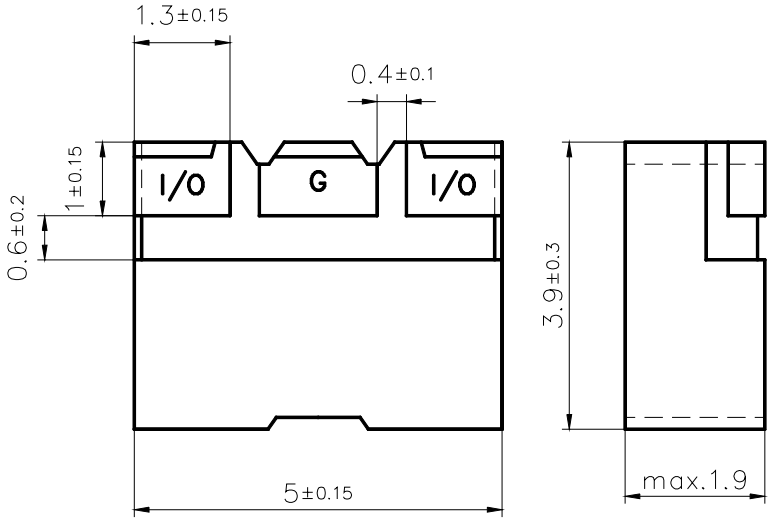
Component drawing

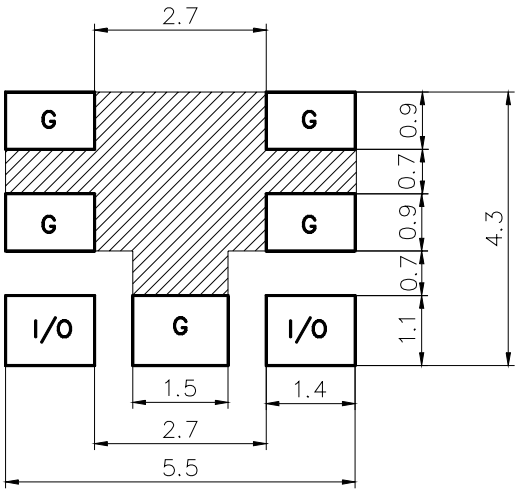


View from below onto the solder terminals and view from beside

Marking

y= calendar year
w= calendar week
e.g.: 427= calendar year 2004, calendar week 27

Recommended footprint



solder pads

ground area below solder resist with vias to second ground layer

I/O — connected to lines with an impedance of 50 Ohm

Standard condition
FR4 material
permitivity : 4.4
preferred thickness : 0.3
Vias: Ø0.3mm / mm²
For other thickness
correlation might be necessary

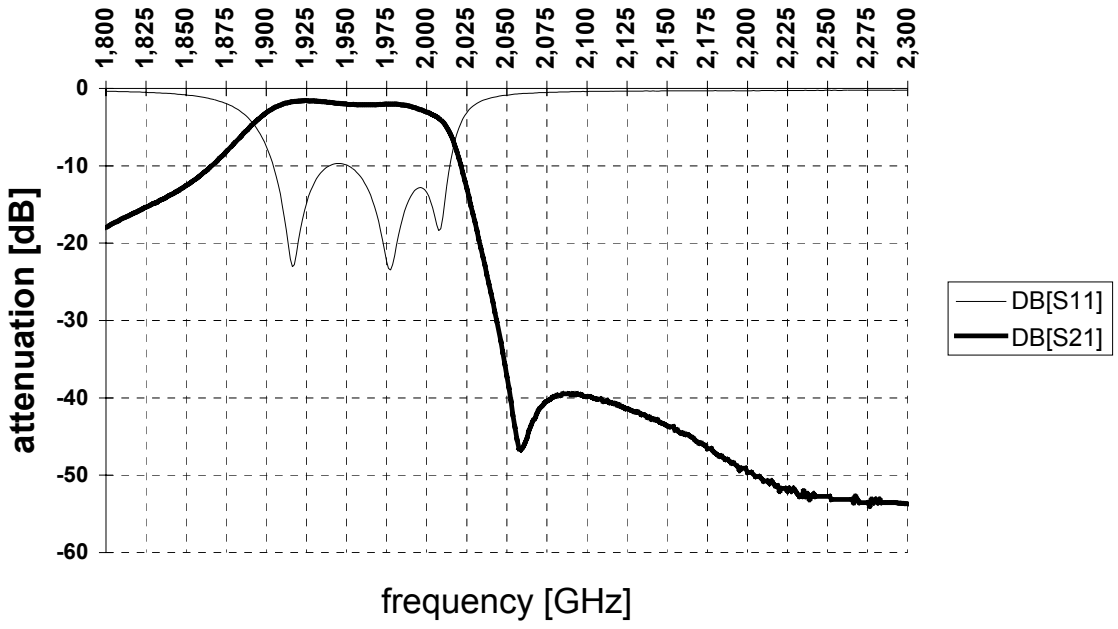
Characteristics

		min.	typ.	max.	
Center frequency	f_C	-	1950	-	MHz
Insertion loss	α_{IL}		1.5	1.8	dB
Passband	B	60			MHz
Amplitude ripple (peak - peak)	$\Delta\alpha$			1.5	dB
Standing wave ratio	SWR			2.2	
Impedance	Z		50		Ω
Attenuation at 2110 to 2170 MHz	α	 40			 dB

Maximum ratings

IEC climatic category (IEC 68-1)		- 40/+ 90/56	
Operating temperature	T_{op}	-25 / +85	°C

Typical passband characteristic



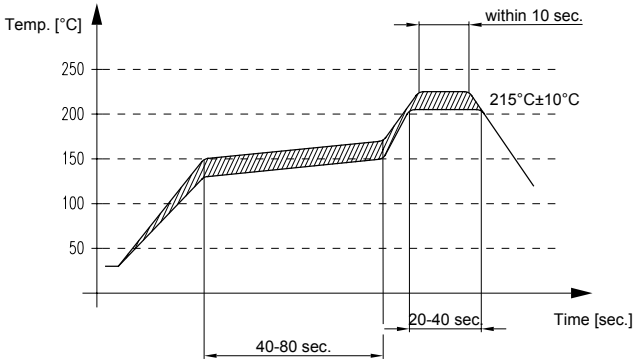
Processing information

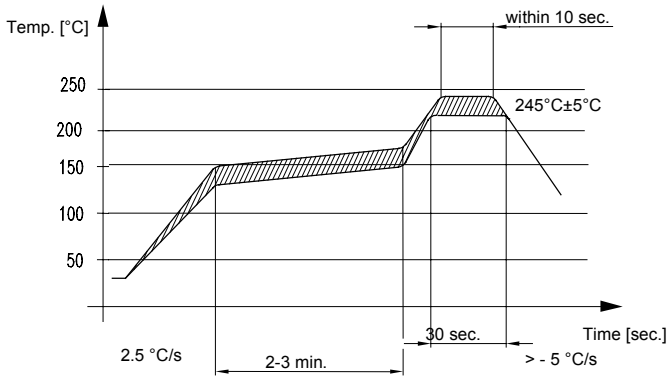
- Wettability to IEC 68-2-58: ≥ 75% (after aging)

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)	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: 3000