



Microwave Ceramics Filter

4-pole filter for 802.11g right skirt

Series/Type: S4I3/2/2
Ordering code: B69844N2447B392
Date: 2010-02-11
Version: B

Data sheet

Modification

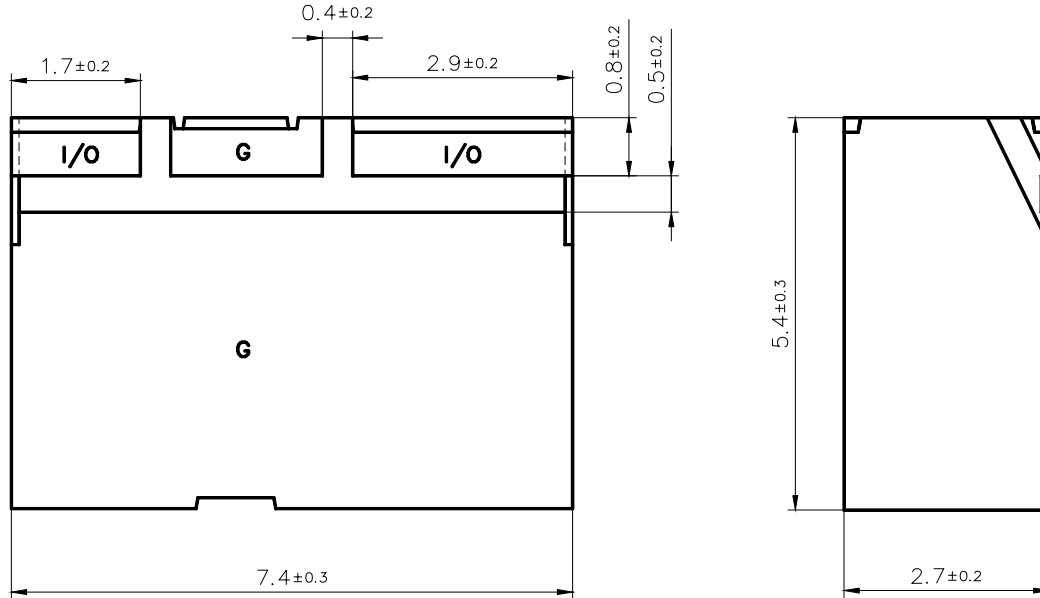
P1	Created from DG F5001	24.03.05	Reichel
A	Final version	25.05.05	Reichel
B	Upgraded to new form	11.02.10	Reichel

Features

- Dimensions (7.4 mm × 5.4 mm × 2.7 mm)
- MgTiO₃-CaTiO₃ ($\epsilon_r = 21/TC_f = 0 \pm 10$ 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
- ESD insensitivity and ESD protecting due to filter characteristics

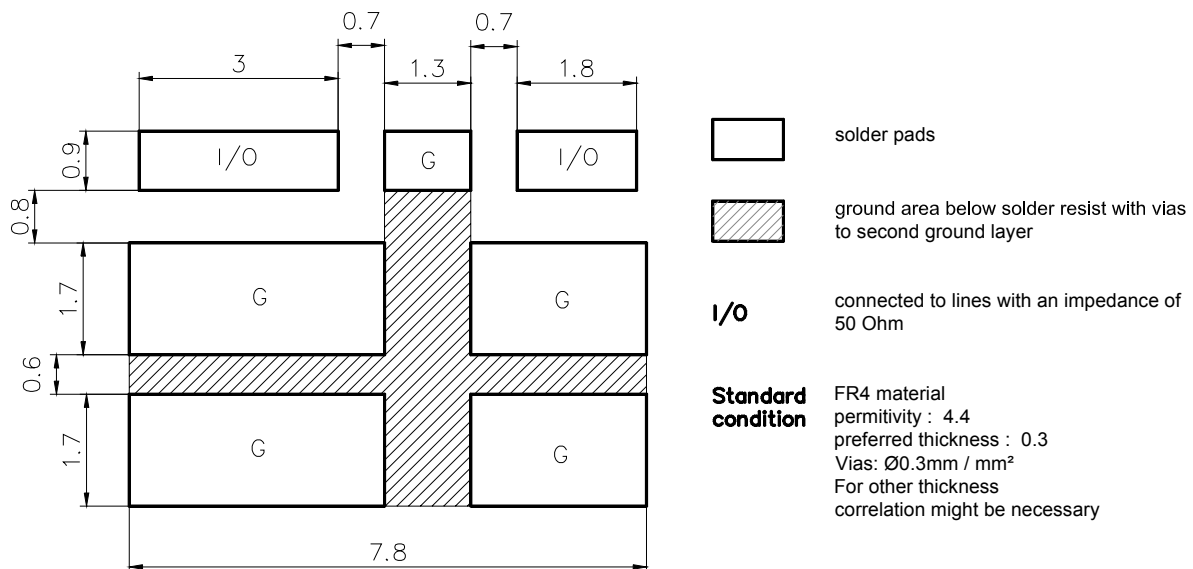
Data sheet

Component drawing



View from below onto the solder terminals and view from beside
 Marking: 'EPCOS logo' C, on top of the filter

Recommended footprint

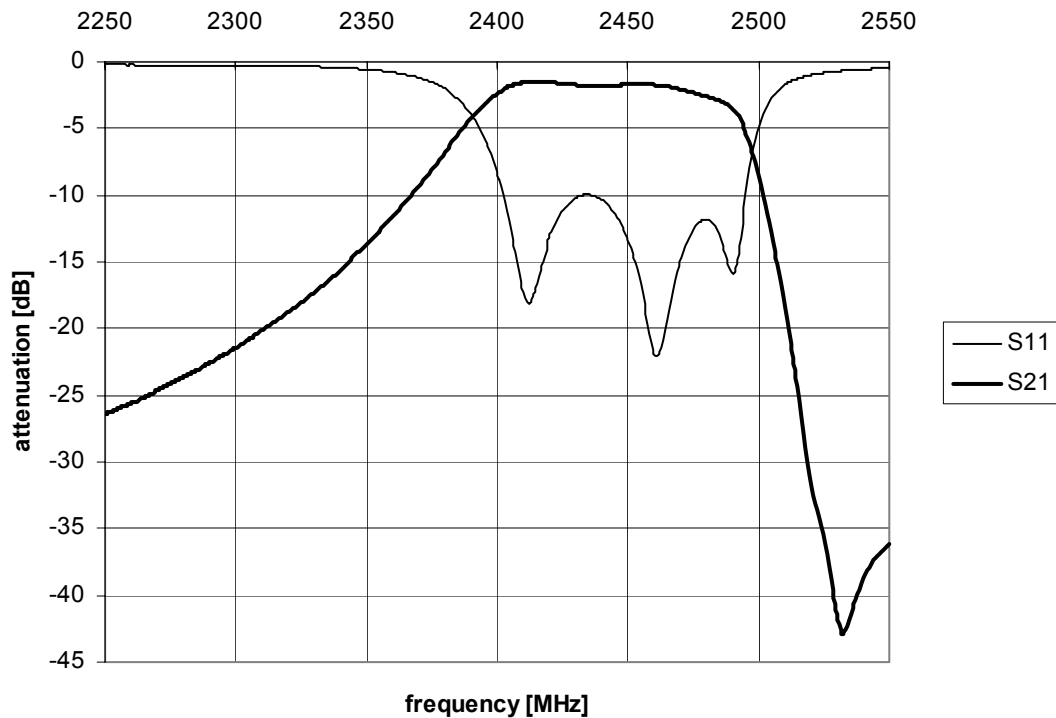


Data sheet
Characteristics (over whole temperature range)

		min.	typ.	max.	
Center frequency	f_c	–	2448	–	MHz
Insertion loss in passband	α_{IL}		4.5	5.0	dB
Passband (2402 ... 2494 MHz)	B	92			MHz
Amplitude ripple (peak – peak)	$\Delta\alpha$		2.5	3	dB
Standing wave ratio			1.8	2.1	
Impedance	Z		50		Ω
Attenuation	α				
	at 2504 to 2519 MHz	11	12		dB
	at 2519 MHz	25	28		dB

Maximum ratings

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

Typical passband characteristic


Data sheet

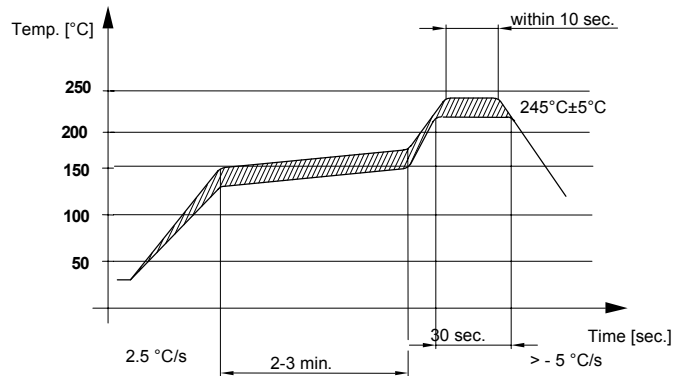
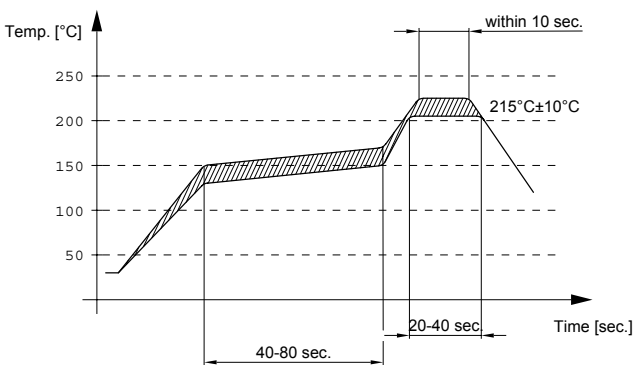
Processing information

- 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 (measuring point on top surface of the component)	235 (max. 2 sec.) 225 (max. 10 sec.)	260 (max. 2 sec.) 250 (max. 10 sec.)	$^{\circ}\text{C}$ $^{\circ}\text{C}$

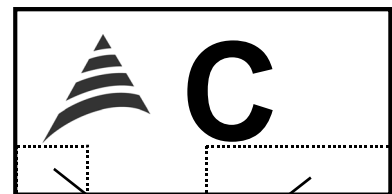
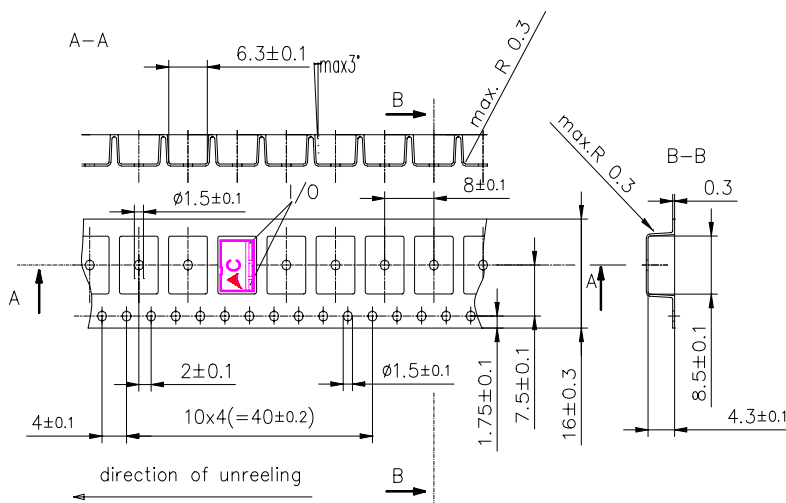
Recommended soldering conditions (infrared):



Delivery mode

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

- in series production



I/O -Pads on bottom side

- preseries parts are marked with **three dots** only

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