



Microwave Ceramics Filters

Series/Type: C201

The following products presented in this data sheet are being withdrawn.

Ordering Code	Substitute Product	Date of Withdrawal	Deadline Last Orders	Last Shipments
B69812N2457C201	CF61B1701-2450-100	2012-04-27	2012-07-31	2012-10-31

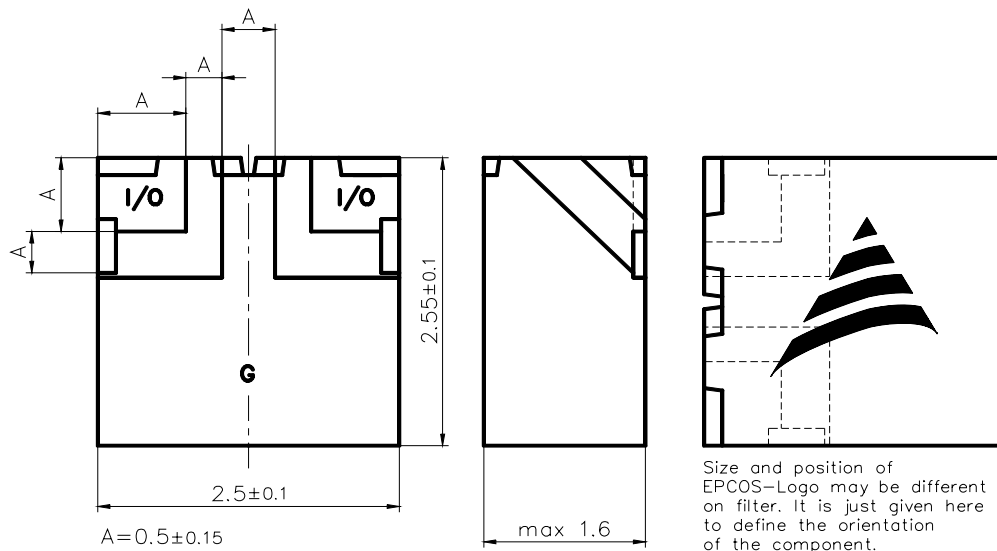
For further information please contact your nearest EPCOS sales office, which will also support you in selecting a suitable substitute. The addresses of our worldwide sales network are presented at www.epcos.com/sales.

Data sheet**Modification**

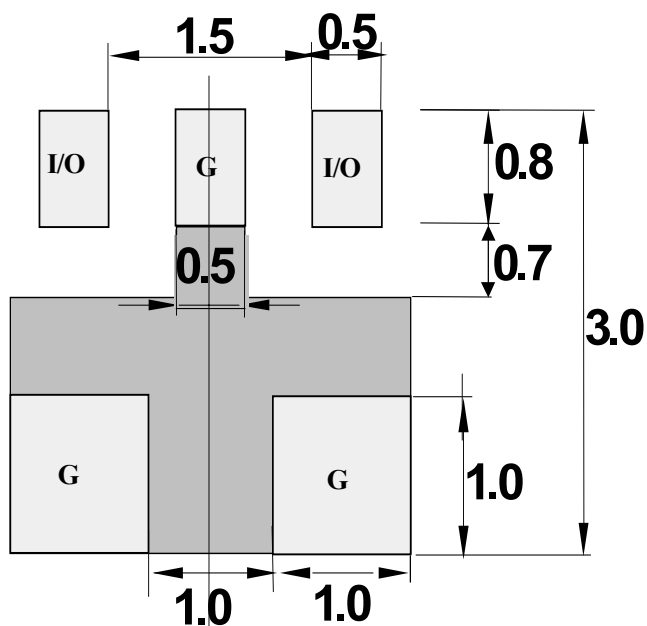
A		08.07.03	Stadler
B	Upgraded to new form	16.02.10	Reichel

Features

- 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 ($\epsilon_r = 88$ / $TC_f = 0 \pm 10$ 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

Data sheet
Component drawing


View from below onto the solder terminals and view from beside

Recommended footprint


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

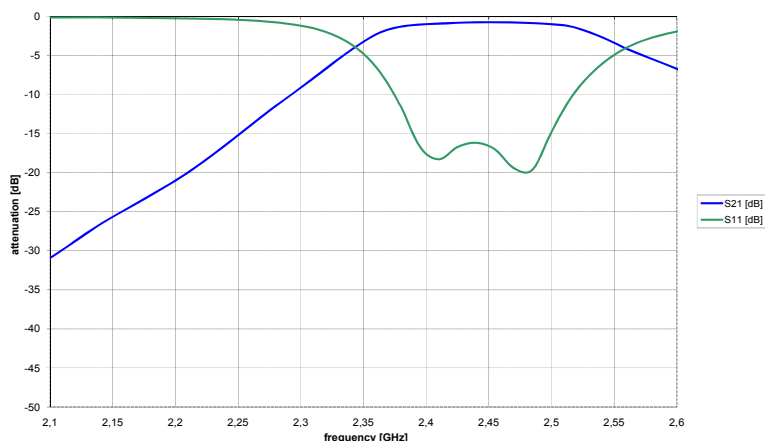
Ground, covered with solder resist, connected to lower ground plane by vias with maximum diameter of 0.3mm and max. distance of 1mm

Data sheet
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 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 4800 MHz	27	30		dB
	at 4800 to 5000 MHz	25	30		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

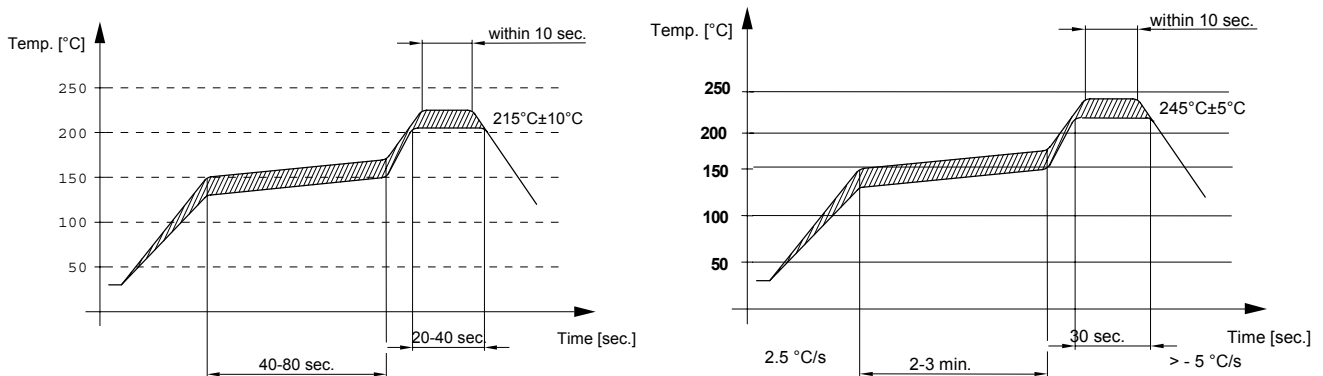
Processing information

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

Soldering requirements

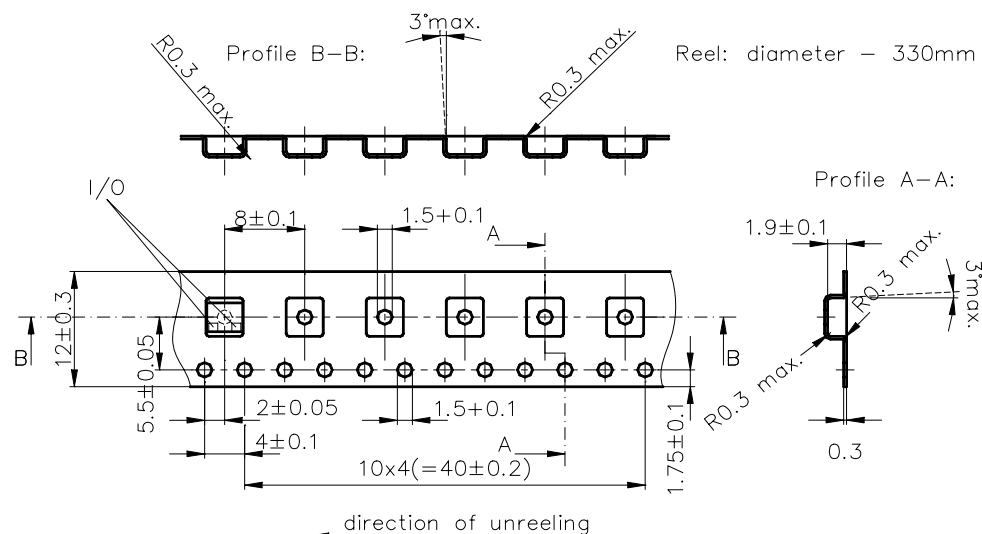
	Profile for eutectic SnPb solder paste	Profile for leadfree solder paste	
Soldering type	reflow	reflow	
Maximum soldering temperature	235 (max. 2 sec.)	260 (max. 2 sec.)	°C
(measuring point on top surface of the component)	225 (max. 10 sec.)	250 (max. 10 sec.)	°C

Recommended soldering conditions (infrared):



Delivery mode

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



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