

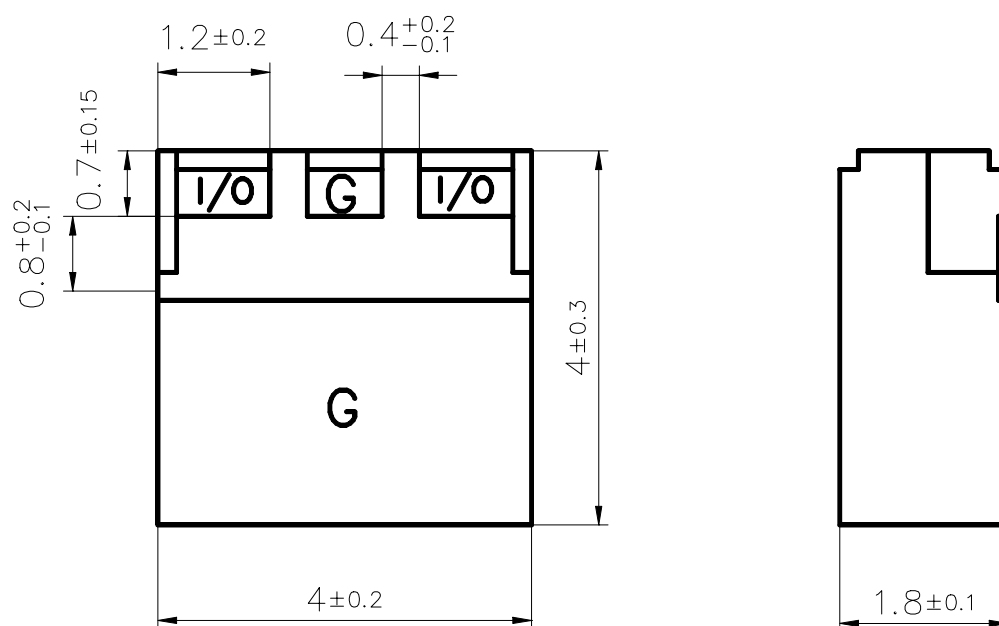
Features

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

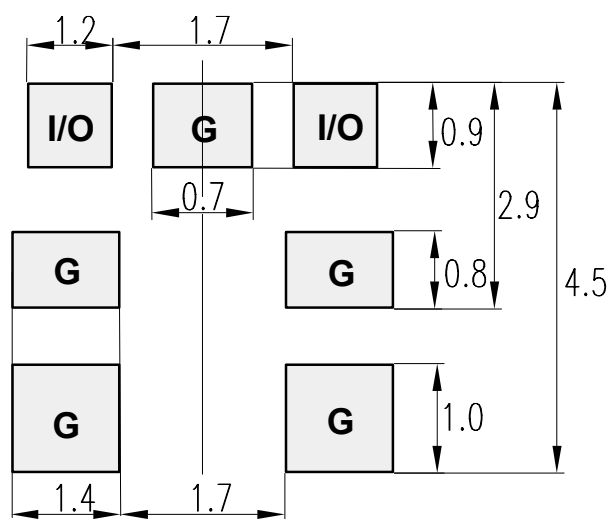
Index

- | | |
|--------|---|
| Page 2 | <ul style="list-style-type: none"> ● Component drawing ● Recommended footprint |
| Page 3 | <ul style="list-style-type: none"> ● Characteristics ● Maximum ratings ● Typical passband characteristic |
| Page 4 | <ul style="list-style-type: none"> ● Processing information ● Soldering requirements ● Delivery mode |

ISSUE DATE	27.08.03	ISSUE	P3	PUBLISHER	SAW MWC PD F	PAGE	1/4
------------	----------	-------	----	-----------	--------------	------	-----

Component drawing


View from below onto the solder terminals and view from beside

Recommended footprint


FPS3P91X.DOC

ISSUE DATE	27.08.03	ISSUE	P3	PUBLISHER	SAW MWC PD F	PAGE	2/4
------------	----------	-------	----	-----------	--------------	------	-----

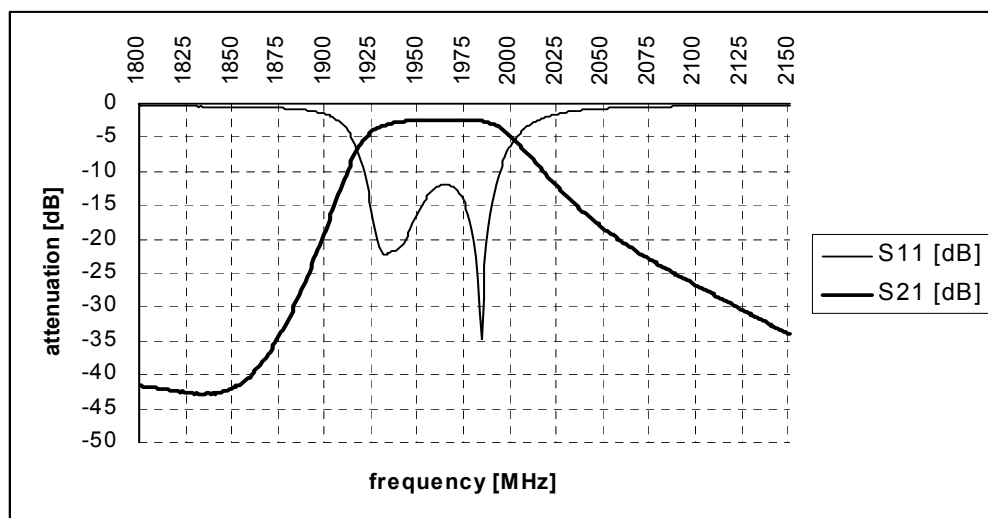
Preliminary Datasheet

Characteristics (items marked with * must still be correlated to customer print, top surface may have additional contact to ground)

		min.	typ.	max.	
Center frequency	f_C	-	1960,0	-	MHz
Insertion loss	α_{IL}		2.9	3.4*	dB
Passband	B	60			MHz
Amplitude ripple (peak - peak)	$\Delta\alpha$		1.2	1.5	dB
Power				15	dBm
Standing wave ratio (S11, S22)	SWR		1.5	2.2	
Impedance	Z		50		Ω
Attenuation	α				
	at DC to 1830 MHz	38	40		dB
	at 1830 to 1910 MHz	11*			dB
	at 2010 to 2020 MHz	7.5*			dB
	at 2020 to 2070 MHz	10*			dB
	at 2070 to 3000 MHz	18*			dB
	at 3000 to 5000 MHz	15			dB

Maximum ratings

IEC climatic category (IEC 68-1)		- 40 / + 90/56	
Storage temperature	T_{st}	- 40 / + 85	
Operating temperature	T_{op}	- 20 / + 80	°C

Typical passband characteristic


S_Z460.XLS

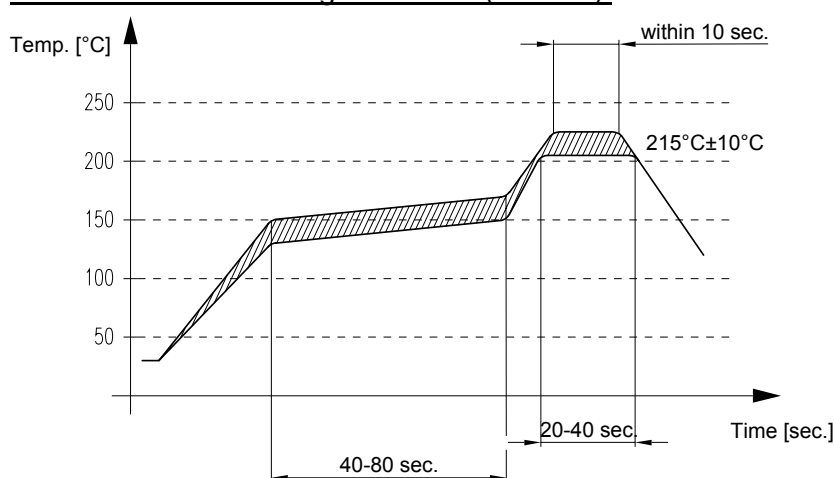
ISSUE DATE	27.08.03	ISSUE	P3	PUBLISHER	SAW MWC PD F	PAGE	3/4
------------	----------	-------	----	-----------	--------------	------	-----

Preliminary Datasheet
Processing information
ZNr.: 452 (FILT95_2)

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

Soldering requirements

Soldering type	reflow	
Maximum soldering temperature (measuring point on top surface of the component)	235 (max. 2 sec.) 225 (max. 10 sec.)	°C °C

Recommended soldering conditions (infrared):


LOETPROF.DOC

Delivery mode

- Blister tape acc. to IEC 286-3, polystyrol, grey
- Pieces/ tape: 3000

t.b.d.

S2P3.DOC

© EPCOS AG 2001. All Rights Reserved. Reproduction, publication and dissemination of this data sheet, enclosures hereto and the information contained therein without EPCOS' prior express consent is prohibited.

The information contained in this data sheet describes the type of component and shall not be considered as guaranteed characteristics. Purchase orders are subject to the General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry recommended by the ZVEI (German Electrical and Electronic Manufacturers' Association), unless otherwise agreed.

ISSUE DATE	27.08.03	ISSUE	P3	PUBLISHER	SAW MWC PD F	PAGE	4/4
------------	----------	-------	----	-----------	--------------	------	-----