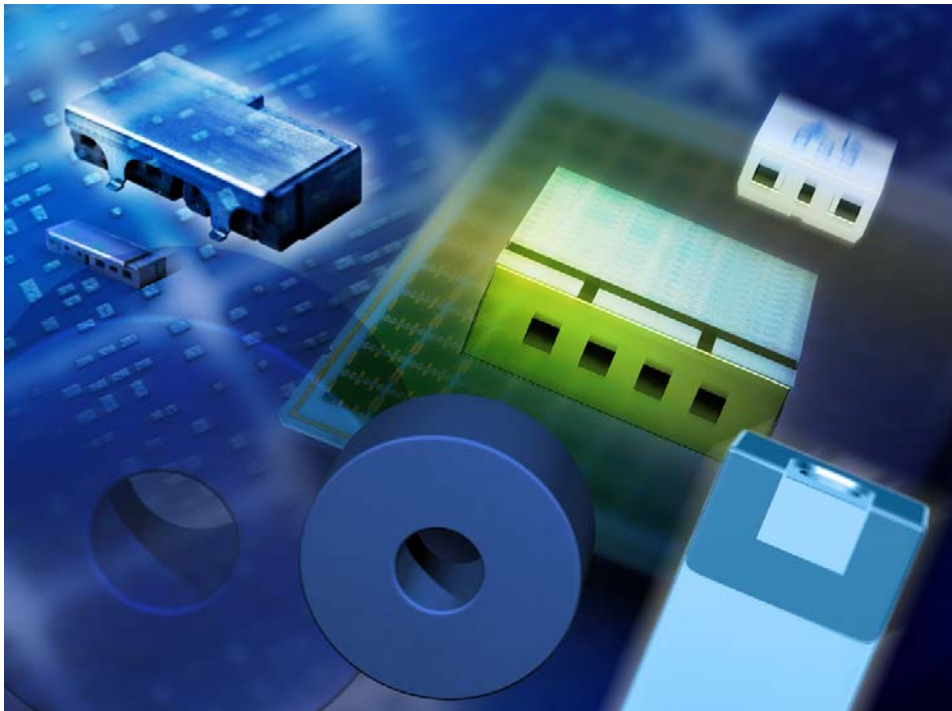


**Design Goal**

**Features**

- SMD filter consisting of coupled resonators with stepped impedances
- $\text{MgTiO}_3 - \text{CaTiO}_3$  ( $\epsilon_r = 21 / TC_f = 0 \pm 10$  ppm/K) with a coating of copper ( $10\mu\text{m}$ ) and tin ( $>5\mu\text{m}$ )
- Excellent reflow solderability, no migration effect due to copper/tin metallization
- ESD insensitivity and ESD protecting due to filter characteristics

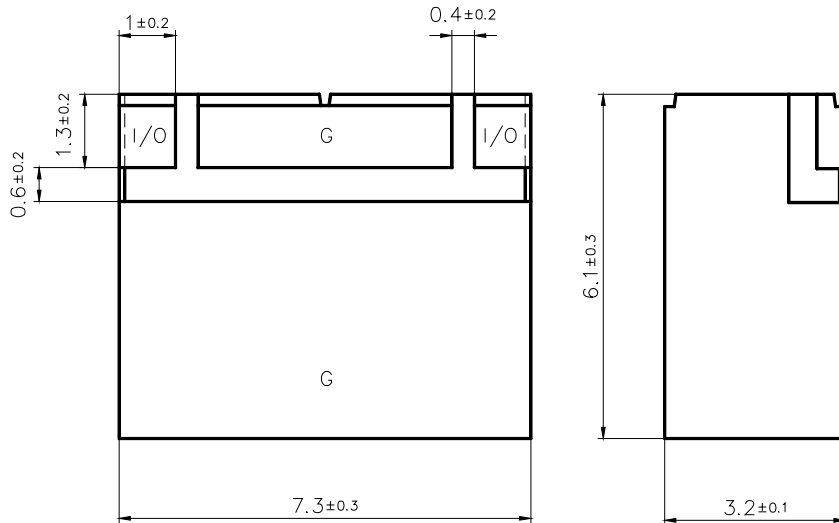
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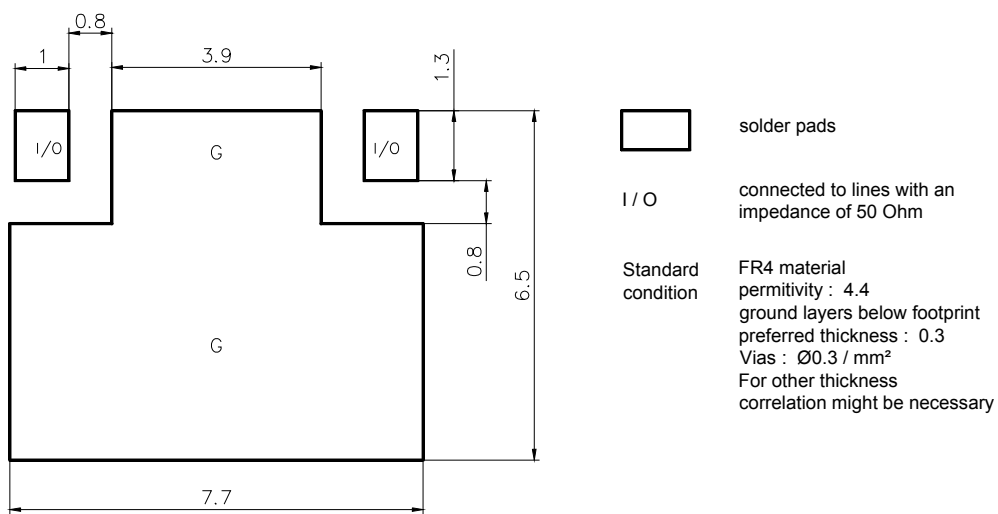
Design Goal

Component drawing



View from below onto the solder terminals and view from beside

Recommended footprint



Design Goal

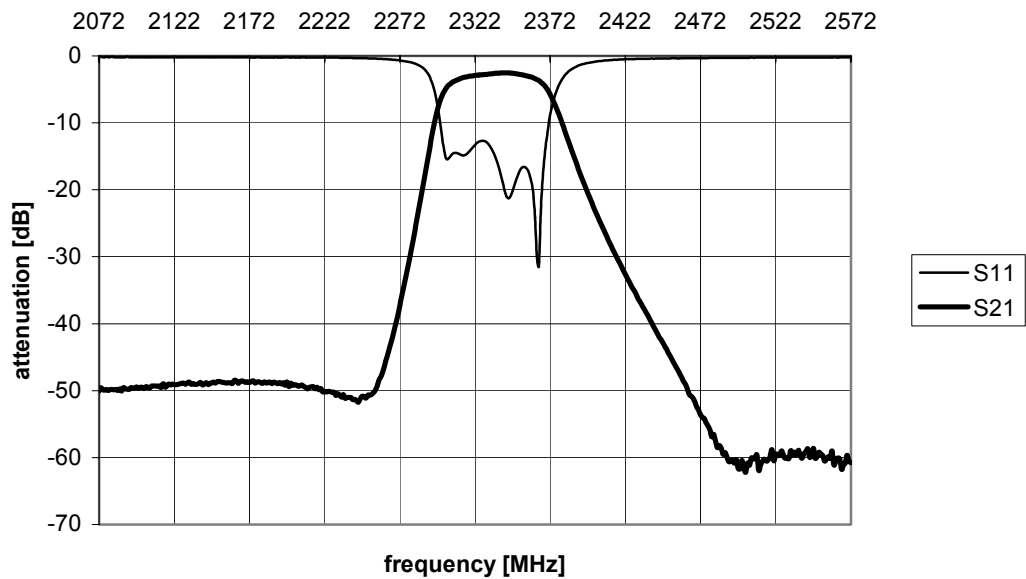
Characteristics

		min.	typ.	max.	
Center frequency	$f_c$	-	2338.755	-	MHz
Insertion loss	$\alpha_{IL}$		2.2	2.5	dB
Passband	$B$	5.5			MHz
Amplitude ripple (peak - peak)	$\Delta\alpha$		0.2	0.5	dB
Standing wave ratio	$SWR$		1.4	2.0	
Group delay in Passband			15	40	
Impedance	$Z$		50		$\Omega$
Attenuation	at 2198.755 ( $f_c - 140\text{MHz}$ )	45	49		dB
	at 2478.755 ( $f_c + 140\text{MHz}$ )	50	54		dB

Maximum ratings

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

Typical passband characteristic



**Design Goal**

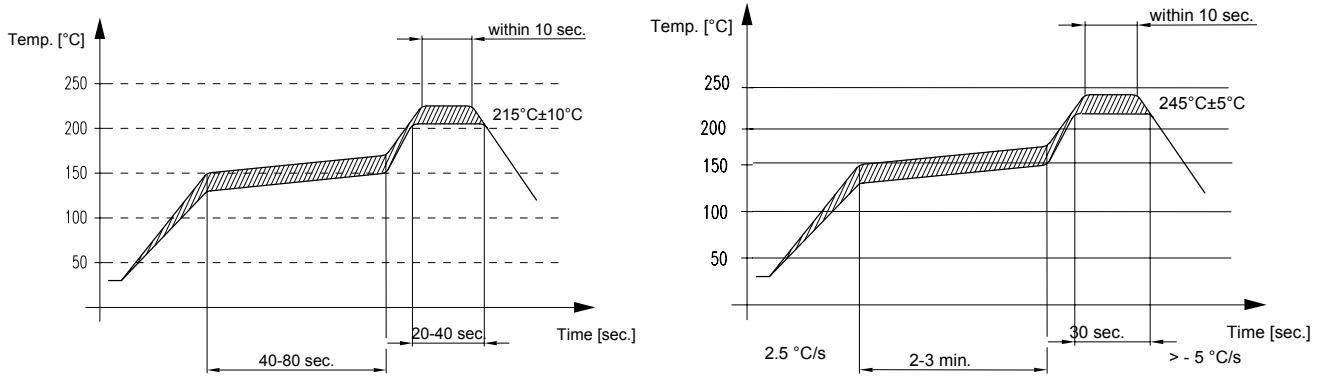
**Processing information**

- 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.)	°C °C

**Recommended soldering conditions (infrared):**



**Delivery mode**

- Blister tape acc. to IEC 286-3, polyester, grey
- Pieces/tape: **t.b.d.**



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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.

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