

PDF_Support

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

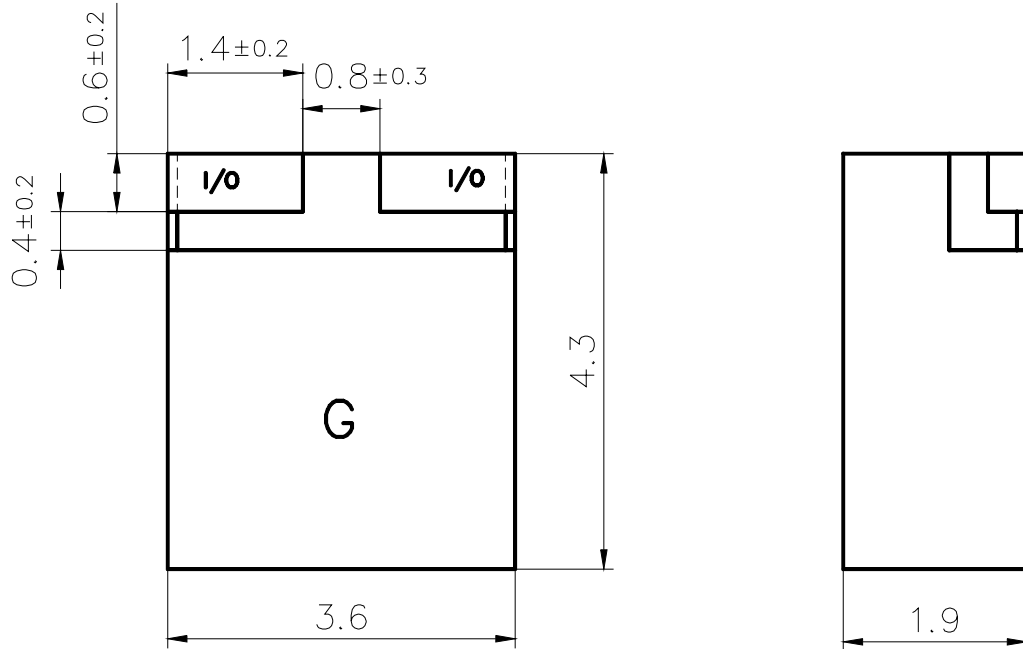
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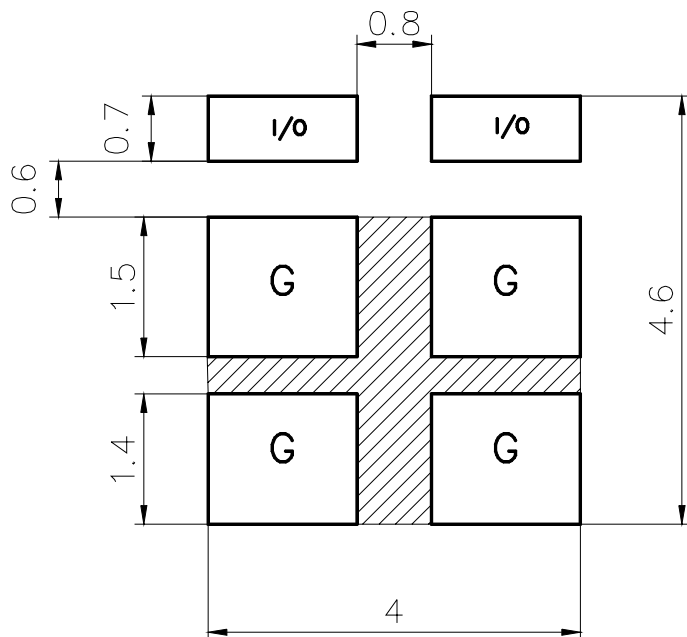
Data Sheet



Component drawing



View from below onto the solder terminals and view from

Recommended footprint



-  solder pads
-  ground area below solder resist with vias to second ground layer
- 1/0** connected to lines with an impedance of 50 Ohm
- Standard condition** FR4 material
 permittivity : 4.4
 preferred thickness : 0.3
 Vias: $\varnothing 0.3\text{mm} / \text{mm}^2$
 For other thickness correlation might be necessary

Data Sheet

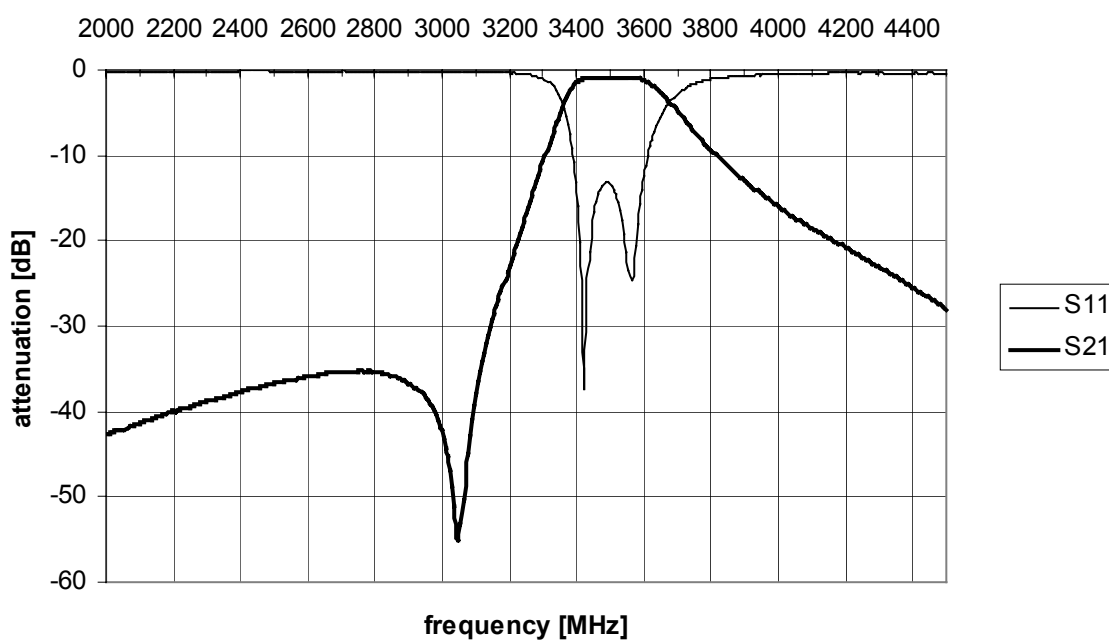
Characteristics

		min.	typ.	max.	
Center frequency	f_C	-	3487.5	-	MHz
Insertion loss	α_{IL}		0.8	1.6	dB
Passband	B	185			MHz
Amplitude ripple (peak - peak)	$\Delta\alpha$		0.4	1.0	dB
Standing wave ratio	SWR		1.7	2.0	
Impedance	Z		50		Ω
Attenuation	α				
	at 3100 MHz	27	33		dB
	at 3242 MHz	10	14		dB
	at 3875 MHz	9	10		dB

Maximum ratings

IEC climatic category (IEC 68-1)		- 40/+ 90/56	
Operating temperature	T_{op}	-30 / +85	°C

Typical passband characteristic



Data Sheet

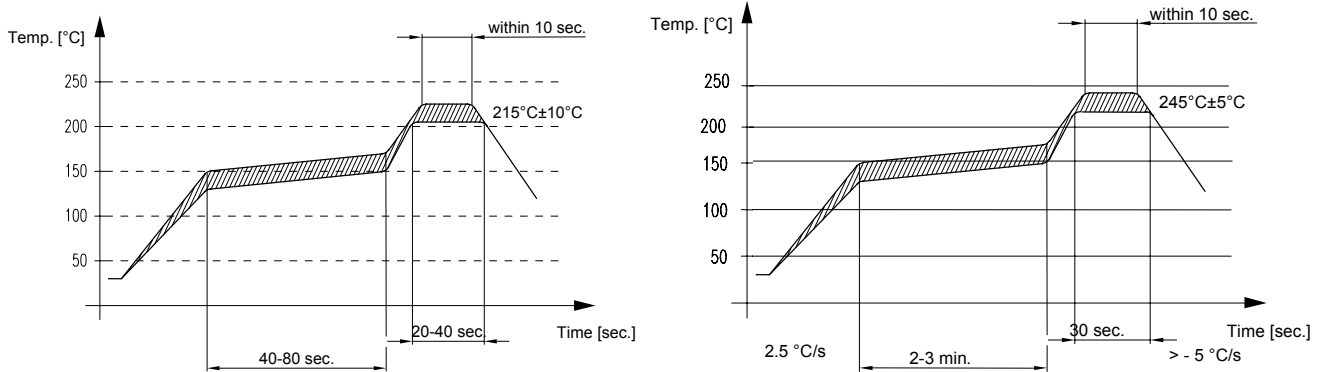
Processing information

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

Soldering Requirements

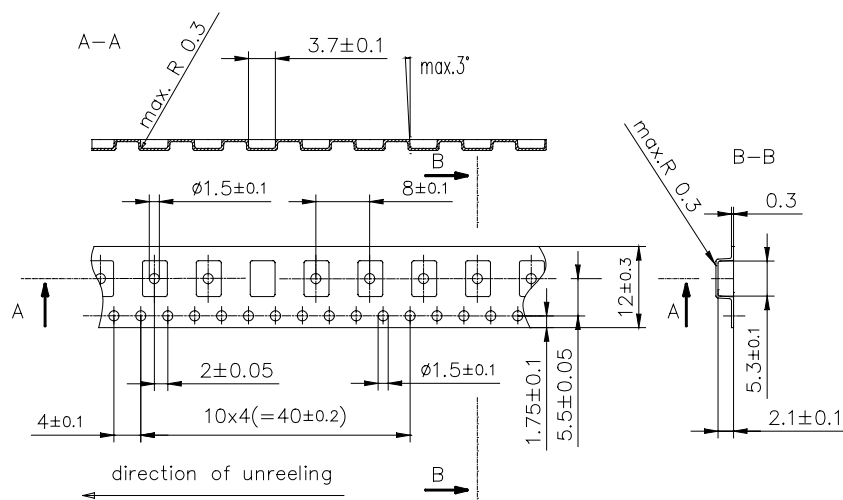
	Profile for eutectic SnPb solder paste	Profile for leadfree solder paste	
Soldering type	reflow	reflow	
Maximum soldering temperature (measuring point on top surface of the component)	235 (max. 2 sec.) 225 (max. 10 sec.)	260 (max. 2 sec.) 250 (max. 10 sec.)	$^{\circ}\text{C}$ $^{\circ}\text{C}$

Recommended soldering conditions (infrared):



Delivery mode

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



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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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