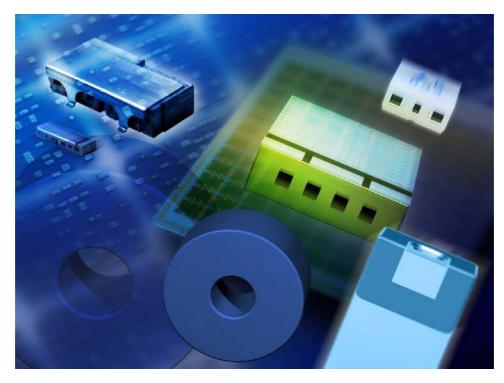


Filter

4-Pole Filter XM Radio

F4052

Design Goal



Features

- SMD filter consisting of coupled resonators with stepped impedances
- MgTiO₃ CaTiO₃ ($\varepsilon_r = 21/TC_f = 0\pm 10 \text{ ppm/K}$) with a coating of copper (10 $\times m$) and tin (>5 $\times m$)
- Excellent reflow solderability, no migration effect due to copper/tin metallization
- ESD insensitivity and ESD protecting due to filter characteristics

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 - Maximum ratings
 - Typical passband characteristic
- Page 4 Processing information
 - Soldering requirements
 - Delivery mode

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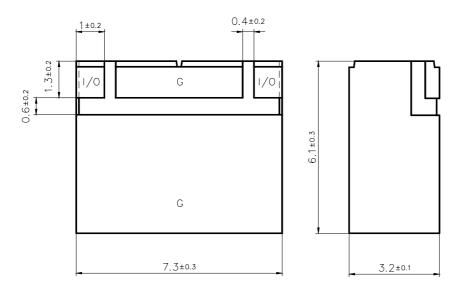
Filter

4-Pole Filter XM Radio

F4052

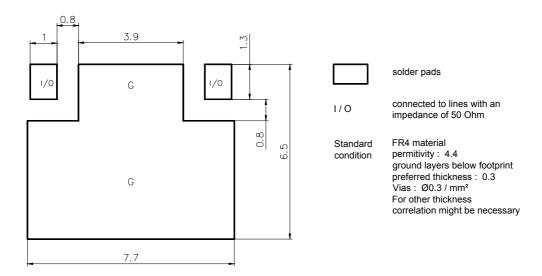
Design Goal

Component drawing



View from below onto the solder terminals and view from beside

Recommended footprint



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Filter

4-Pole Filter XM Radio

F4052

Design Goal

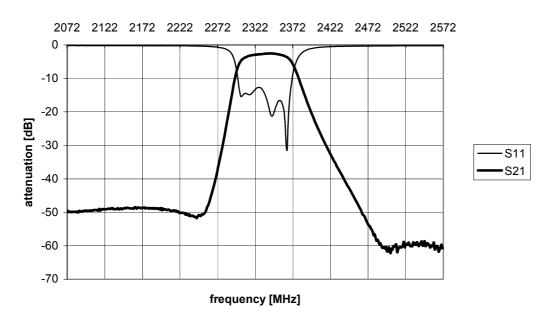
Characteristics

			min.	typ.	max.	
Center frequency		f_{C}	-	2338.755	-	MHz
Insertion loss α_{IL}			2.2	2.5	dB	
Passband		В	5.5			MHz
Amplitude ripple (pe	ak - 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		Ω
Attenuation	at 2198.755 (f _c -140MHz)	α	45	49		dB
	at 2478.755 (f _c +140MHz)		50	54		dB

Maximum ratings

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

Typical passband characteristic



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Filter

4-Pole Filter XM Radio

F4052

Design Goal

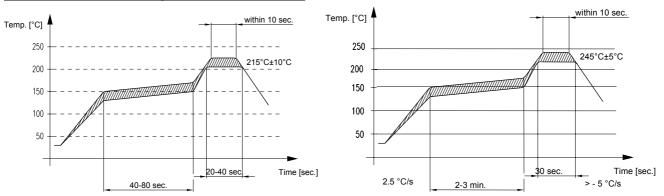
Processing information

Wettability acc. to IEC 68-2-58: ≥ 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)		260 (max. 2 sec.) 250 (max. 10 sec.)	°C °C

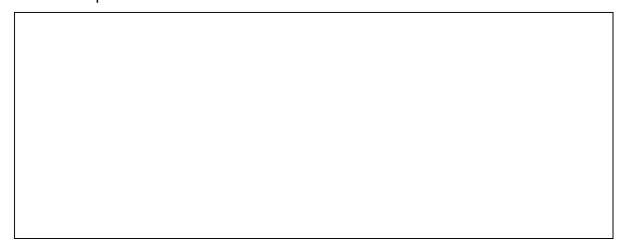
Recommended soldering conditions (infrared):



Delivery mode

• Blister tape acc. to IEC 286-3, polyester, grey

Pieces/tape: t.b.d.



Note: This document is PRELIMINARY. All specifications are subject to change and are not guaranteed.

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