Design Overview

Manufacturer of the original component: Würth Elektronik eiSos GmbH & Co. KG

PN: 74482210002

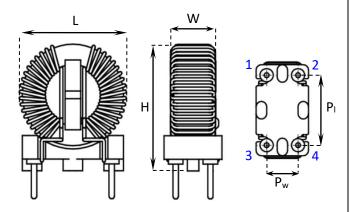


Fig. 1. Schematic representation



Fig. 2. CMC sample

Size: S Design: Vertical

WE-CMB HC Common Mode Power Line Choke

Properties

Geometry parameters [mm]		
Max. dimensions, W × H × L	14.5 × 18.5 × 22	
Distance between pins, P _I	7.7	
Distance between pins, P _w	5	
Core dimensions	14.4 × 7.6 × 9.4	
Core chamfer	0.7	
Length of pins	3.5	
Diameter of pins	1	
Diameter of winding wire	1.3	
Number of turns per winding	4	
Material parameters		
Core material type	Mn-Zn	
μ initial (10kHz)	6 200	
Electrical parameters		
Nominal inductance (10kHz), L [mH]	0.175	
DC resistance, $R_{DC}[m\Omega]$	2.7	
Rated current, Ir [A]	10	

Model Information

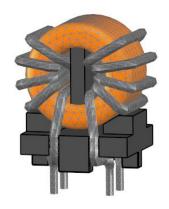


Fig. 3. EMCoS Studio 3D model

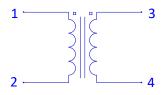
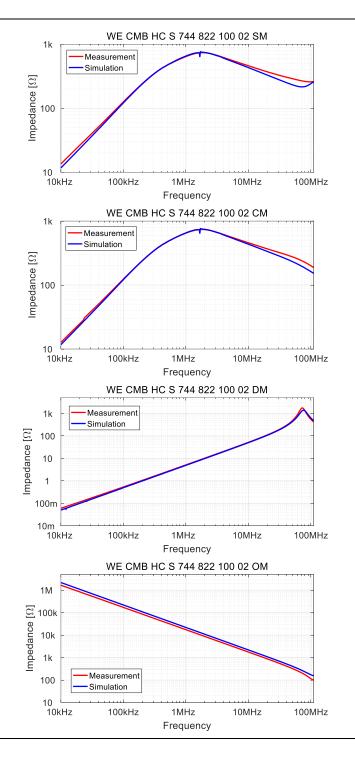


Fig. 4. Circuit element

Model parameters	
Dielectric triangles	1 336
Metallic triangles	4 080

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Working group	DI	
	MO	
Responsible person	DE	
Executed for	EMCoS	



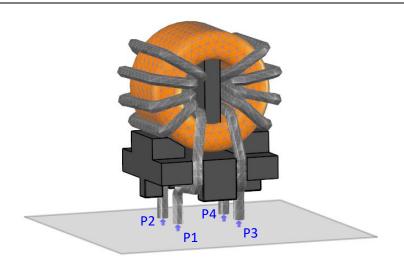


Fig. 5. EMCoS Studio 3D model for multi-port calculation

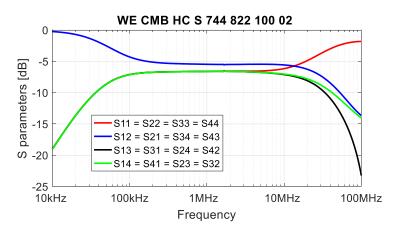


Fig. 6. Calculated S parameters

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