

# Spezifikation für Freigabe / specification for release

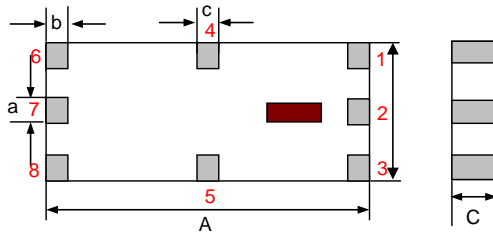
Kunde / customer : \_\_\_\_\_  
 Artikelnummer / part number : **7488910092**  
 Bezeichnung : **SMD Antenne WE-MCA**  
 description : **Chip-Antenna WE-MCA**

LF



DATUM / DATE : 2007-01-12

## A Mechanische Abmessungen / dimensions:



size	<b>11 x 5,1</b>	
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A	<b>11,0 ± 0,3</b>	mm
B	<b>5,1 ± 0,3</b>	mm
C	<b>1,5 ± 0,2</b>	mm
a	<b>1,0 ± 0,2</b>	mm
b	<b>0,5 ± 0,3</b>	mm
c	<b>0,5 ± 0,3</b>	mm
1	<b>NC</b>	
2	<b>Feeding Point</b>	
3 - 8	<b>NC</b>	

## B Elektrische Eigenschaften / electrical properties:

Eigenschaften / properties	Testbedingungen / test conditions		Wert / value	Einheit / unit	tol.
Frequenzbereich / frequency range		f	<b>868 ... 960</b>	MHz	
VSWR			<b>2,5</b>		<b>max.</b>
Impedanz / impedance		Z	<b>50</b>	Ω	
Antennengewinn / peak gain	<b>(XZ-V)</b>	A	<b>-0,7</b>	dBi	<b>typ.</b>
Antennengewinn / average gain	<b>(XZ-V)</b>	A	<b>-2,6</b>	dBi	<b>typ.</b>

## C Abbildung / appearance:

## D Prüfgeräte / test equipment:

Agilent E5071A

## E Testbedingungen / test conditions:

Luftfeuchtigkeit / humidity: 50 ~ 70%  
 Umgebungstemperatur / temperature: 20°C ~ 25°C

## F Werkstoffe & Zulassungen / material & approvals:

Basismaterial / base material: Keramik / ceramic  
 Kontakt Material / contact plating: Ag + Ni + Sn

## G Eigenschaften / general specifications:

Betriebstemp. / operating temperature: -40°C ~ +85°C  
 Lagerbedingung / storage conditions: 15°C ~ 35°C  
 45 ~ 75% RH  
 Leistung/ power capacity : 5 W max.

Freigabe erteilt / general release:	<b>Kunde / customer</b>		
.....	.....		
Datum / date	Unterschrift / signature		
.....	<b>Würth Elektronik</b>		
.....	.....		
Geprüft / checked	Kontrolliert / approved		
	Name	Änderung / modification	Datum / date
	Skle	Version 3	07-01-12
	AWe	Version 2	05-02-09
	AWe	Version 1	04-10-11

Würth Elektronik eiSos GmbH & Co.KG

D-74638 Waldenburg · Max-Eyth-Str. 1 · Germany · Telefon (+49) (0) 7942 - 945 - 0 · Telefax (+49) (0) 7942 - 945 - 400  
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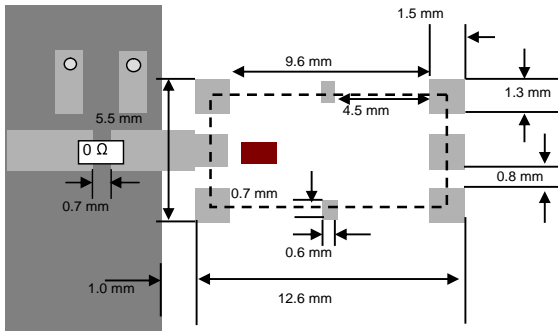
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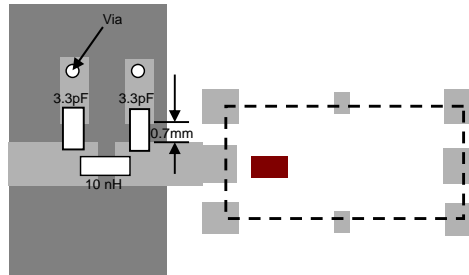
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## H Lötpadempfehlung / solder pads:

Without Matching Circuit:



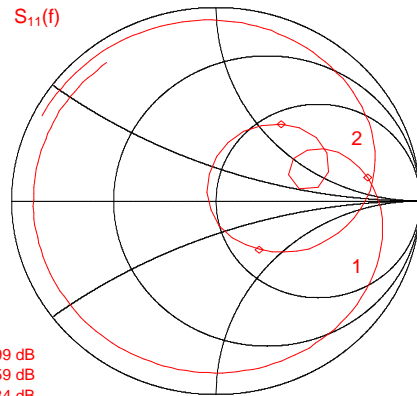
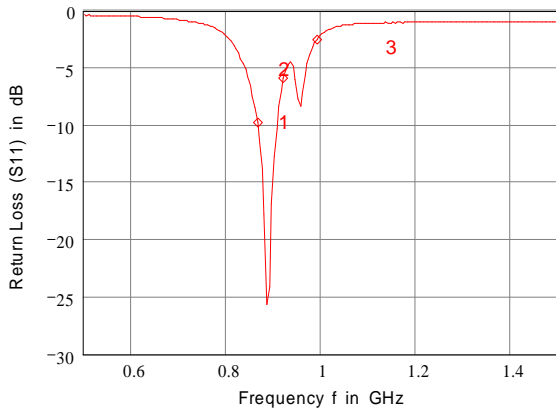
With Matching Circuit:



\*Line width should be designed to match 50 $\Omega$  characteristic impedance, depending on PCB material and thickness.  
 (Matching circuit and component values will be different, depending on PCB layout)

## K Messdiagramme/ measuring diagrams:

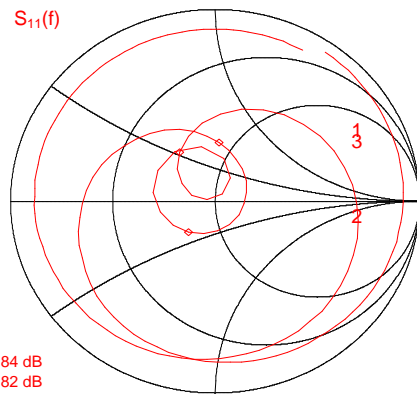
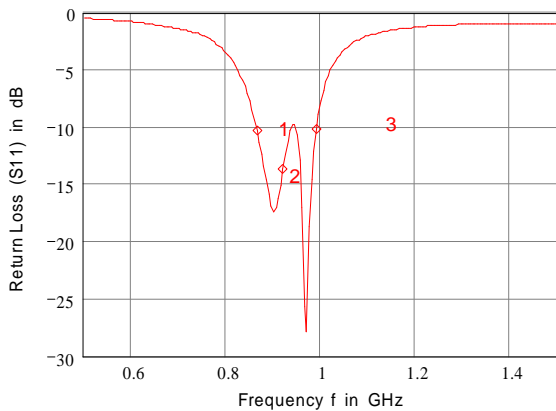
Without Matching Circuit:



1: 865 MHz     -9.699 dB  
 2: 920 MHz     -5.859 dB  
 3: 990 MHz     -2.484 dB

f = 0.5 GHz ... 1.5 GHz

With Matching Circuit:



1: 865 MHz     -10.284 dB  
 2: 920 MHz     -13.682 dB  
 3: 990 MHz     -10.215 dB

f = 0.5 GHz ... 1.5 GHz

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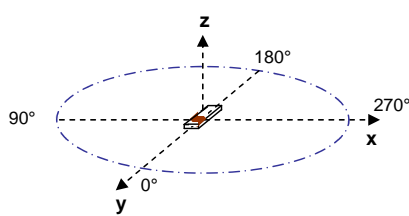
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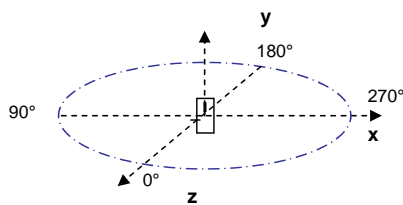
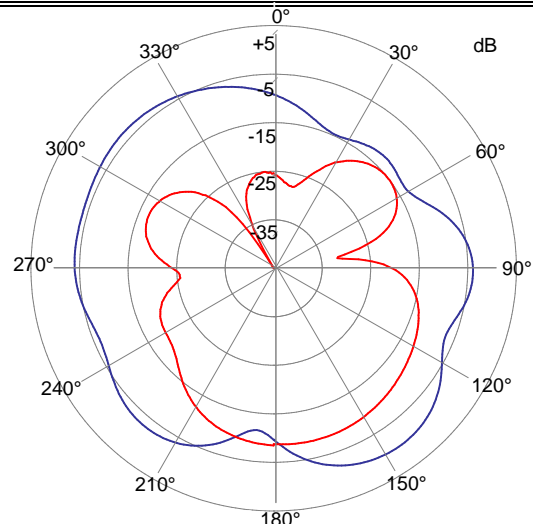
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## L Richtdiagramme / radiation patterns:



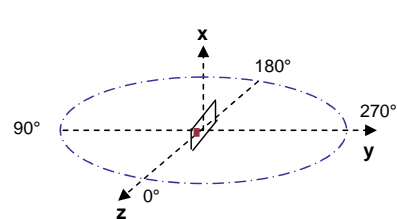
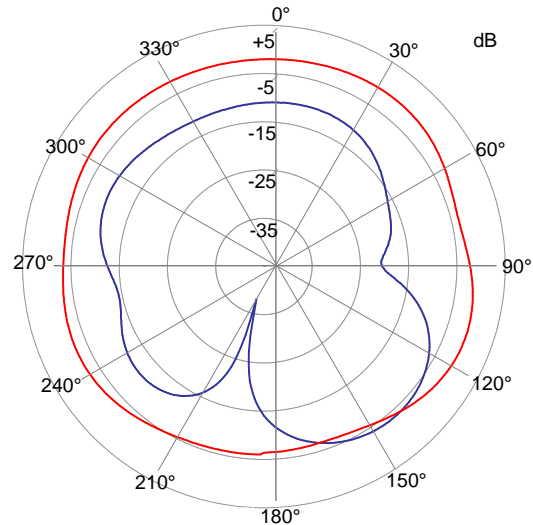
XY-cut scanning direction

XY cut @ 920 MHz  
 — Horizontal  
 — Vertical



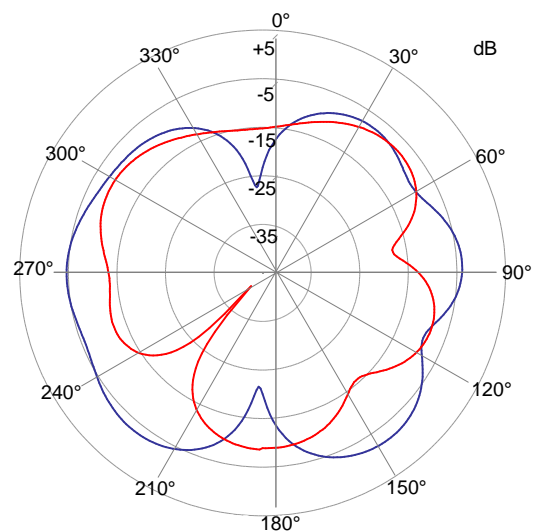
XZ-cut scanning direction

XZ cut @ 920 MHz  
 — Horizontal  
 — Vertical



YZ-cut scanning direction

YZ cut @ 920 MHz  
 — Horizontal  
 — Vertical



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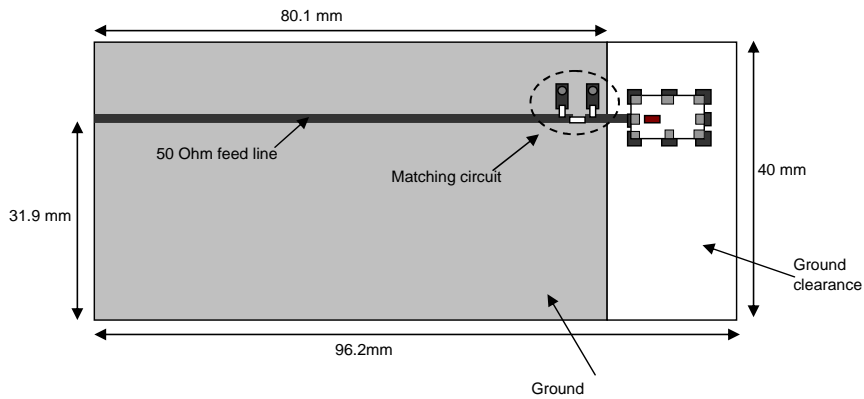


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## M Testboard / evaluation board:



This electronic component has been designed and developed for usage in general electronic equipment. Before incorporating this component into any equipment where higher safety and reliability is especially required or if there is the possibility of direct damage or injury to human body, for example in the range of aerospace, aviation, nuclear control, submarine, transportation, (automotive control, train control, ship control), transportation signal, disaster prevention, medical, public information network etc, Würth Elektronik eiSos GmbH must be informed before the design-in stage. In addition, sufficient reliability evaluation checks for safety must be performed on every electronic component which is used in electrical circuits that require high safety and reliability functions or performance.

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