

# preliminary specification for release

Kunde / customer : \_\_\_\_\_  
 Artikelnummer / part number : **7488910043**  
 Bezeichnung : **SMD Antenne WE-MCA**  
 description : **Chip-Antenna WE-MCA**

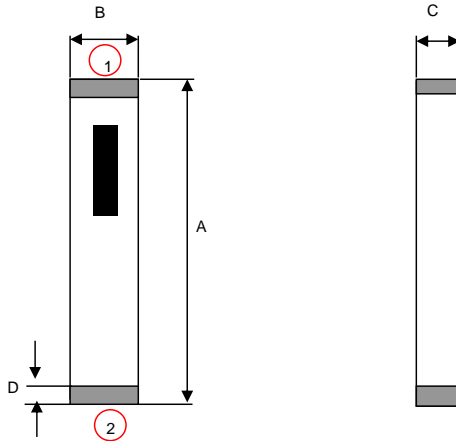
LF



DATUM / DATE : 2012-08-07

**A Mechanische Abmessungen / dimensions:**

|      |               |  |
|------|---------------|--|
| size | <b>25 x 5</b> |  |
|------|---------------|--|



|   |                      |    |
|---|----------------------|----|
| A | <b>25 ± 0,2</b>      | mm |
| B | <b>5 ± 0,2</b>       | mm |
| C | <b>1,2 ± 0,1</b>     | mm |
| D | <b>1,0 ± 0,2</b>     | mm |
|   |                      |    |
| 1 | <b>Feeding Point</b> |    |
| 2 | <b>NC</b>            |    |

**B Elektrische Eigenschaften / electrical properties:**

| Eigenschaften / properties        | Testbedingungen / test conditions |   | Wert / value       | Einheit / unit | tol.        |
|-----------------------------------|-----------------------------------|---|--------------------|----------------|-------------|
| Frequenzbereich / frequency range |                                   | f | <b>423 ... 443</b> | MHz            |             |
| VSWR                              |                                   |   | <b>2,0</b>         |                | <b>max.</b> |
| Impedanz / impedance              |                                   | Z | <b>50</b>          | Ω              |             |
| Antennengewinn / peak gain        | <b>(XZ-V)</b>                     | A | <b>-4,0</b>        | dBi            | <b>typ.</b> |
| Antennengewinn / average gain     | <b>(XZ-V)</b>                     | A | <b>-4,0</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: 5°C ~ 35°C  
 45 ~ 75% RH  
 Leistung / power capacity : 2 W max.

|                                     |                          |      |                         |
|-------------------------------------|--------------------------|------|-------------------------|
| Freigabe erteilt / general release: | <b>Kunde / customer</b>  |      |                         |
| Datum / date                        | Unterschrift / signature |      |                         |
|                                     | <b>Würth Elektronik</b>  |      |                         |
| Geprüft / checked                   | Kontrolliert / approved  | HBH  | Version 1               |
|                                     |                          | Name | Änderung / modification |
|                                     |                          |      | Datum / date            |

**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  
<http://www.we-online.de>

# Spezifikation für Freigabe / specification for release

Kunde / customer : \_\_\_\_\_  
Artikelnummer / part number : **7488910043**  
Bezeichnung : **SMD Antenne WE-MCA**  
description : **Chip-Antenna WE-MCA**

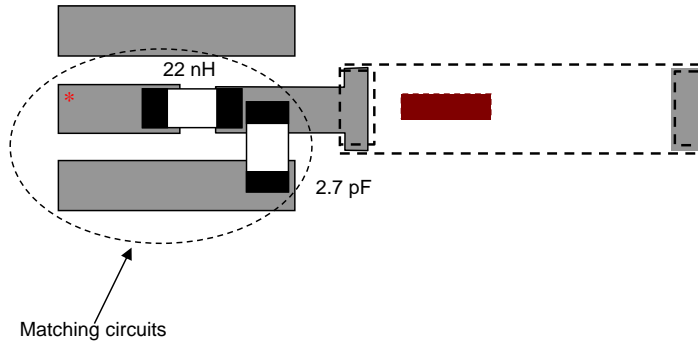
LF



DATUM / DATE : 2012-08-07

## H Lötpadempfehlung / solder pads:

With Matching Circuit:

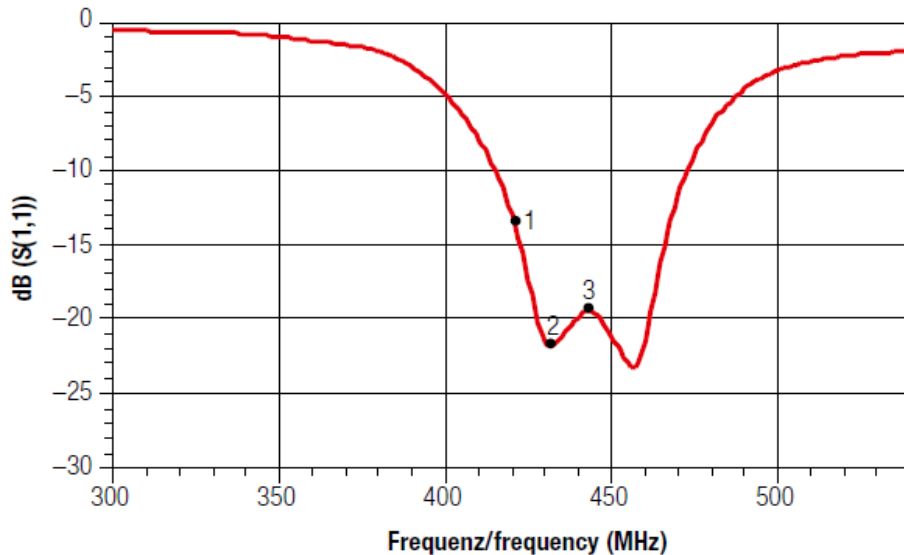


(Matching circuit and component values will be different, depending on PCB layout)

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

## K Messdiagramme/ measuring diagrams:

With Matching Circuit:



1: 423 MHz -15.4 dB  
2: 433 MHz -21.7 dB  
3: 443 MHz -19.4 dB

**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  
<http://www.we-online.de>

# Spezifikation für Freigabe / specification for release

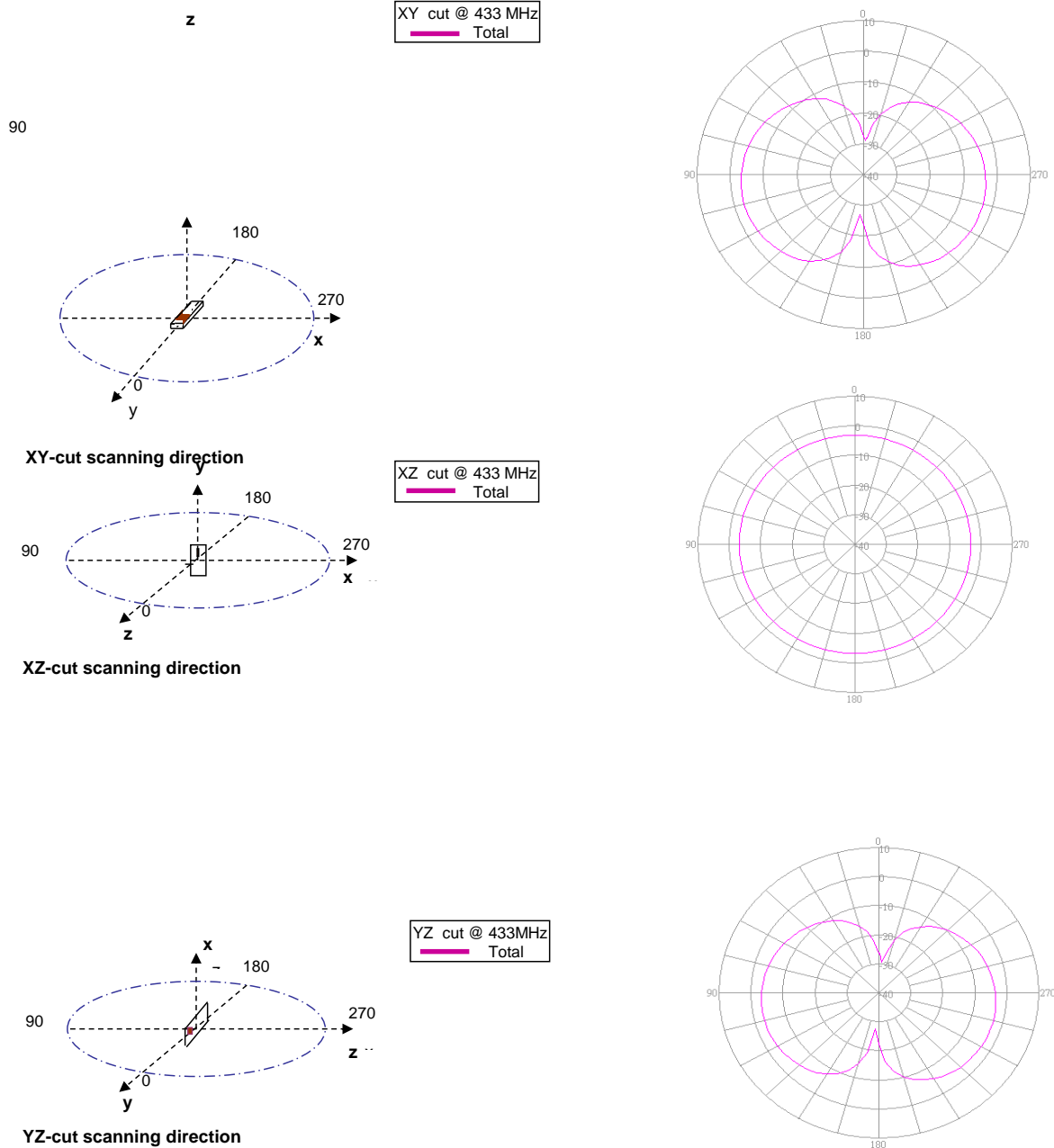
Kunde / customer : \_\_\_\_\_  
 Artikelnummer / part number : **7488910043**  
 Bezeichnung : **SMD Antenne WE-MCA**  
 description : **Chip-Antenna WE-MCA**

LF



DATUM / DATE : 2012-08-07

## L Richtdiagramme / radiation patterns:



**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  
<http://www.we-online.de>

# Spezifikation für Freigabe / specification for release

Kunde / customer : \_\_\_\_\_

Artikelnummer / part number : **7488910043**

LF

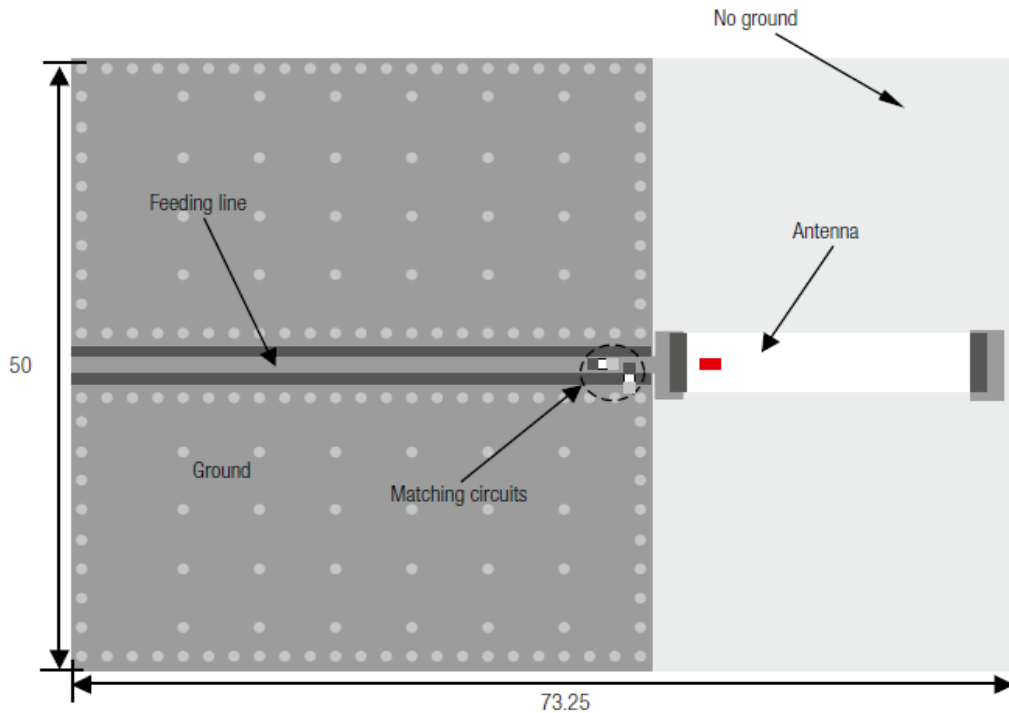


Bezeichnung : **SMD Antenne WE-MCA**

description : **Chip-Antenna WE-MCA**

DATUM / DATE : 2012-08-07

## 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.

### 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  
<http://www.we-online.de>