

Spezifikation für Freigabe / specification for release

Kunde / customer :

Artikelnummer / part number : 748411245

LF



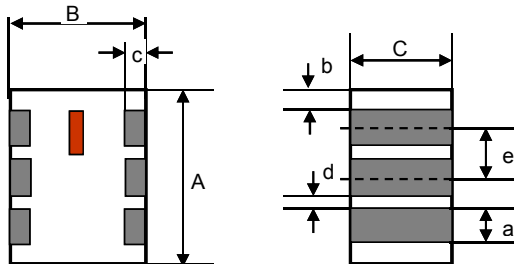
Bezeichnung : SMD-Balun WE-BAL

description : Chip-Balun WE-BAL

DATUM / DATE : 2004-12-14

A Mechanische Abmessungen / dimensions:

size	0603
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A	1,6 ± 0,1	mm
B	0,8 ± 0,1	mm
C	0,6 ± 0,1	mm
a	0,2 ± 0,1	mm
b	0,2 + 0,1/-0,2	mm
c	0,15 ± 0,1	mm
d	0,3 ± 0,1	mm
e	0,5 ± 0,05	mm

B Elektrische Eigenschaften / electrical properties:

Eigenschaften / properties	Testbedingungen / test conditions		Wert / value	Einheit / unit	tol.
Frequenzbereich / frequency range		f	2400 ... 2500	MHz	
Einfügedämpfung / insertion loss	2400 ... 2500 MHz		1,3	dB	max.
Einfügedämpfung / insertion loss	2400 ... 2500 MHz		1,00	dB	typ.
VSWR / VSWR	2400 ... 2500 MHz		2,0		max.
VSWR / VSWR	2400 ... 2500 MHz		1,22		typ.
Phasendifferenz / phase imbalance			180	°	± 10°
Amplitudendifferenz / amplitude imbalance			2,0	dB	max.
Eingangsimpedanz / unbalanced impedance		Z	50	Ω	typ.
Ausgangsimpedanz / balanced impedance		Z	100	Ω	typ.

C Abbildung / appearance:



D Prüfgeräte / test equipment:

Network Analyzer Agilent E5071B

E Testbedingungen / test conditions:

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

F Werkstoffe & Zulassungen / material & approvals

Basismaterial / base material: Keramik / ceramic
Kontaktmaterial / contact plating: AG + Ni + Sn

G Eigenschaften / general specifications:

Betriebstemp. / operating temperature: -40°C ~ +85°C
Lagerbedingungen / storage conditions: 15°C ~ 35°C
45 ~ 75% RH
Leistung / power capacity: 0,5 W max.

Freigabe erteilt / general release:	Kunde / customer			
Datum / date	Unterschrift / signature			
	Würth Elektronik	OO	Version 3	10-11-02
		AWe	Version 2	05-07-06
		AWe	Version 1	04-12-14
Geprüft / checked	Kontrolliert / approved	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
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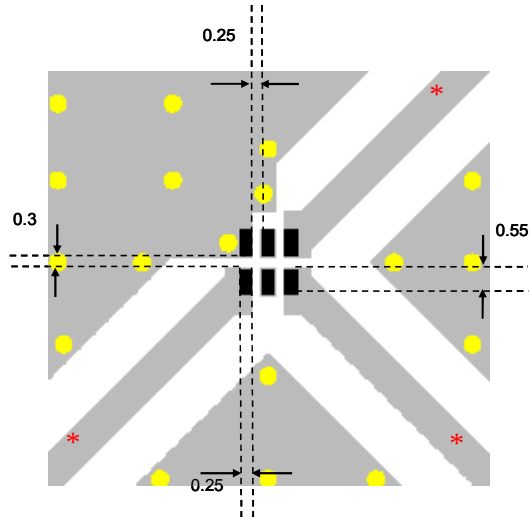


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H Lötadempfehlung / solder pads:



* Line width should be designed to provide proper impedance matching characteristics, depending on PCB material and thickness.

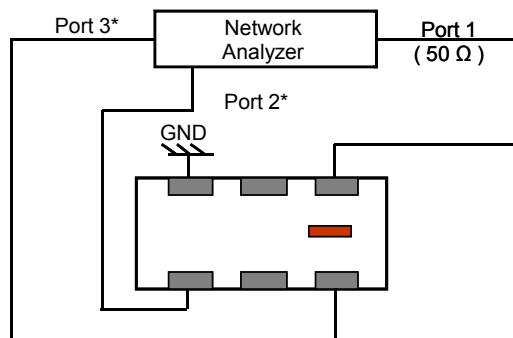
Solder Resist

Land

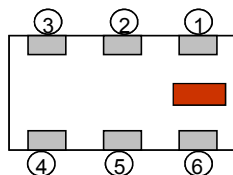
Through-hole (Ø 0.3)

Units: mm

K Messdiagramme/ measuring diagrams:



* Impedance for ports 2 and 3 = $\frac{1}{2}$ (Balanced Impedance)



No.	Terminal Name	No.	Terminal Name
①	Unbalanced Port (IN)	④	Balanced Port (OUT 1)
②	NC	⑤	NC
③	GND / DC-Feed / RF-GND	⑥	Balanced Port (OUT 2)

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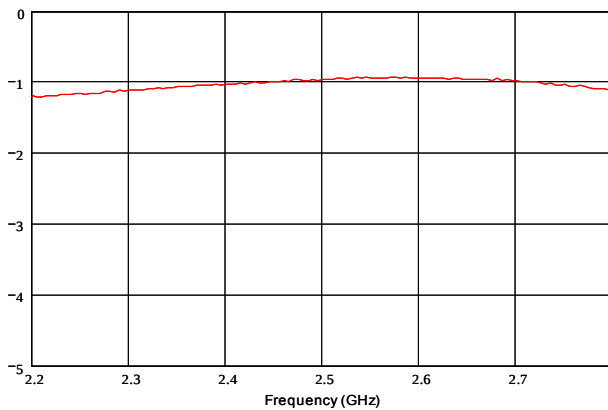
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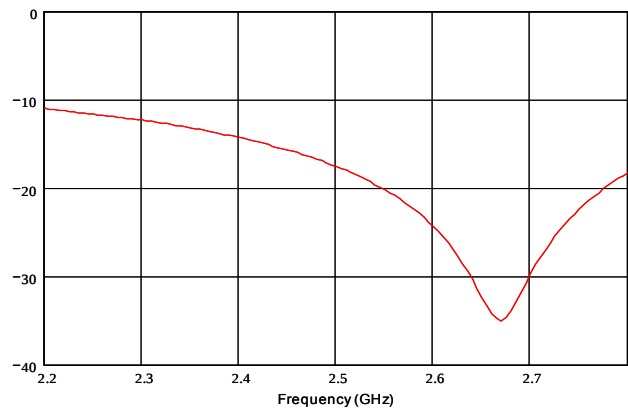
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L Messdiagramme / measuring diagrams:

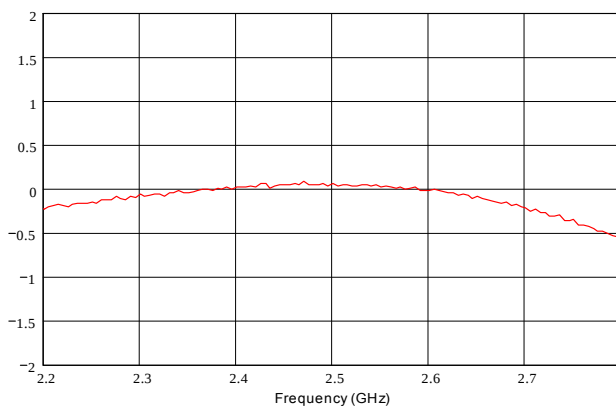
Insertion Loss (dB)



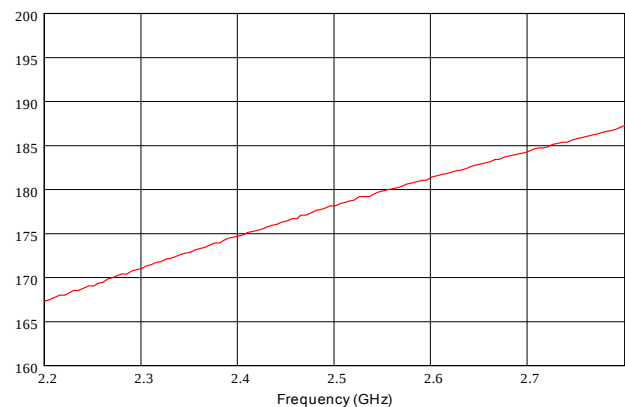
Return Loss (dB)



Amplitude Balance (dB)



Phase Balance (degree)



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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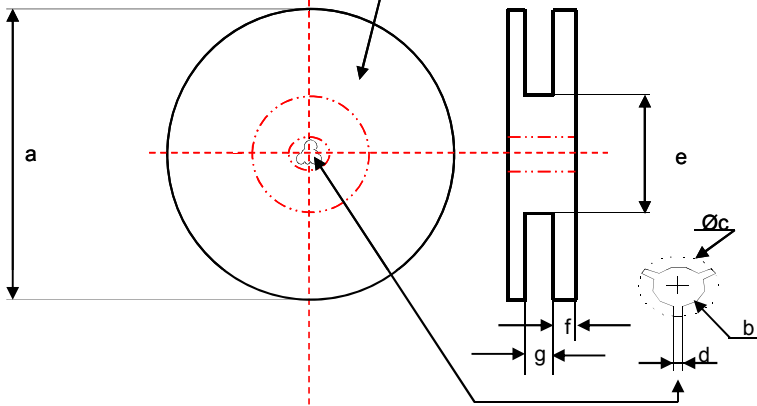
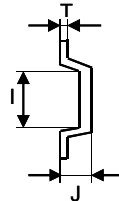
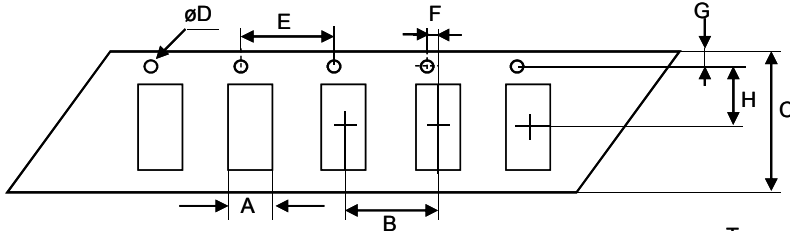


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I Rollenspezifikation / tape and reel specification :



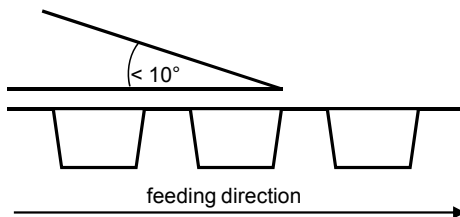
Gurtspezifikation / Tape specification:

A	$0,95 \pm 0,1$	mm
B	$4,0 \pm 0,1$	mm
C	$8,0 \pm 0,2$	mm
D	$1,5 +0,1/-0,0$	mm
E	$4,0 \pm 0,1$	mm
F	$2,0 \pm 0,05$	mm
G	$1,75 \pm 0,1$	mm
H	$3,5 \pm 0,1$	mm
I	$1,8 \pm 0,1$	mm
J	0,85 max.	mm
T	$0,2 \pm 0,05$	mm

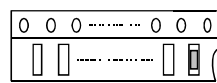
Rollenspezifikation / Reel specification:

a	$178,0 \pm 2,0$	mm
b	$13,0 \pm 0,3$	mm
c	$21,8 \pm 0,8$	mm
d	$2,0 \pm 0,5$	mm
e	$60,0 \pm 0,5$	mm
f	$1,2 \pm 2,0$	mm
g	$9,0 \pm 0,3$	mm

The force for tearing off cover tape is
10 to 130 grams in arrow direction

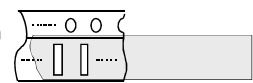


Trailer End



Trailer (80mm min.)

Leader End



Empty Compartments
with Cover Tape (100mm min.)
Cover Tape Only
(250mm min.)

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Würth Elektronik

Geprüft / checked

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