QRP-Balun 1,8 MHz bis 52 MHz

Die 100k Widerstände

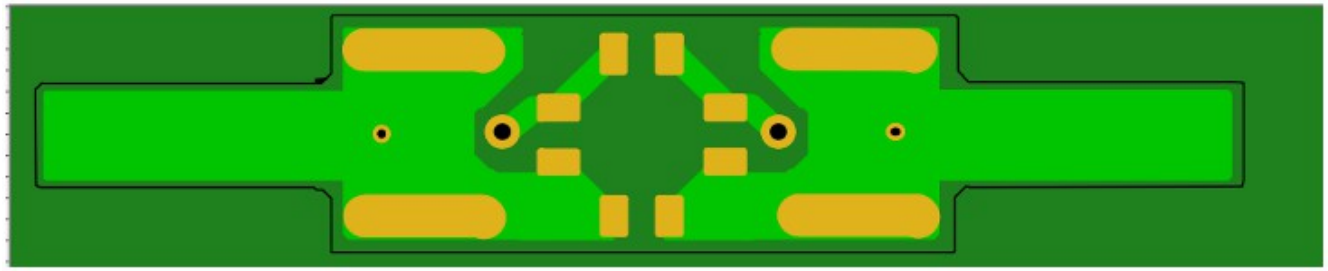
vermeiden für alle

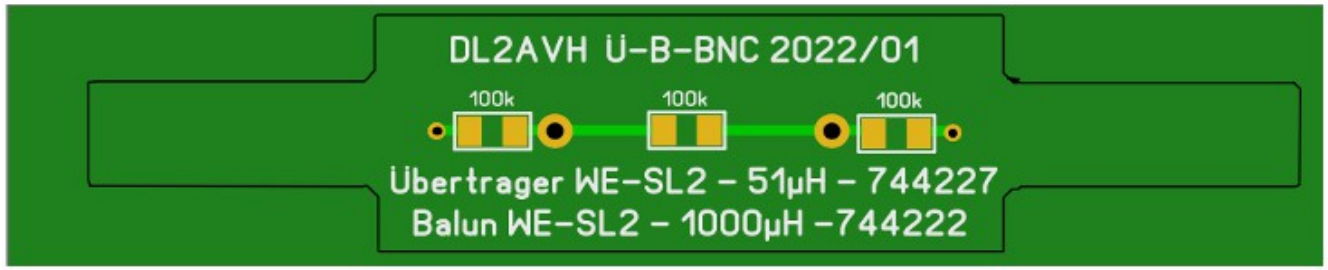
Varianten

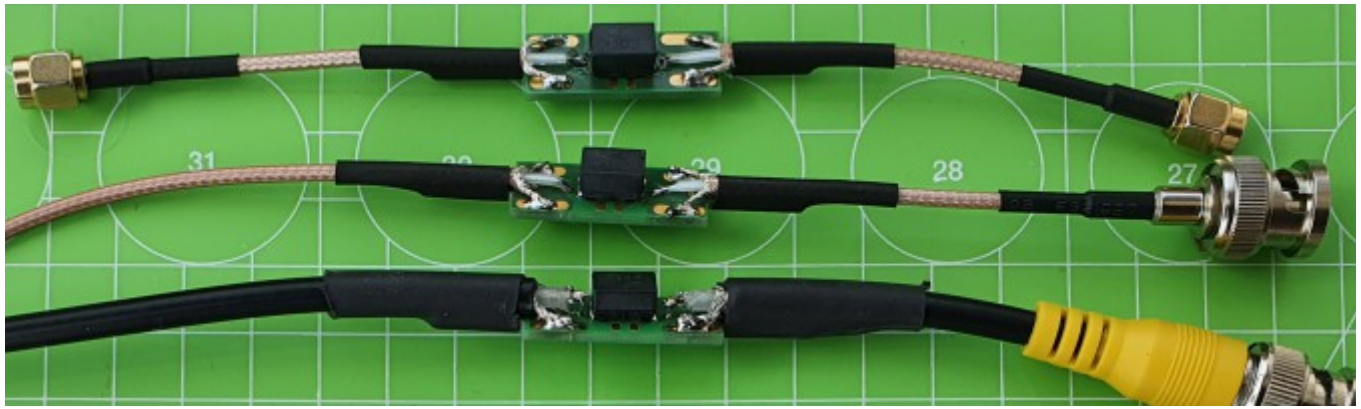
eine elektrostatische

Aufladung

der Antenne







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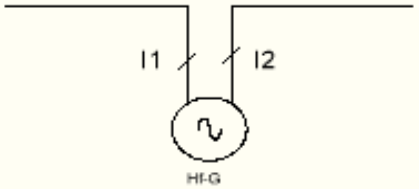
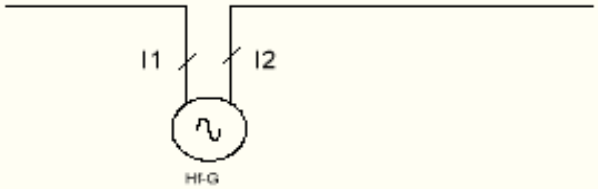
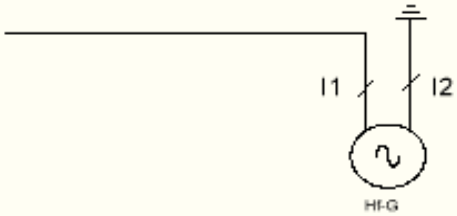
Erdfreie Antennenspeisung



I1 = I2

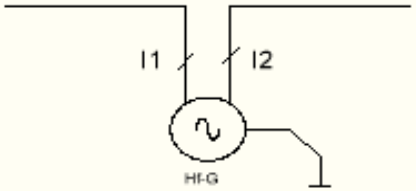


I1 = I2

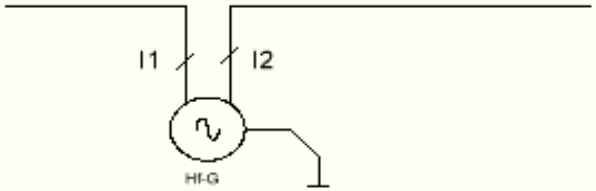


I1 = I2

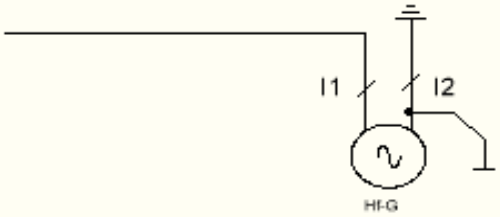
Alle Antennen die erdfrei gespeist werden sind symmetrisch I1 = I2



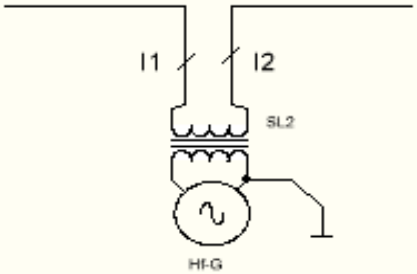
I1 < oder > I2



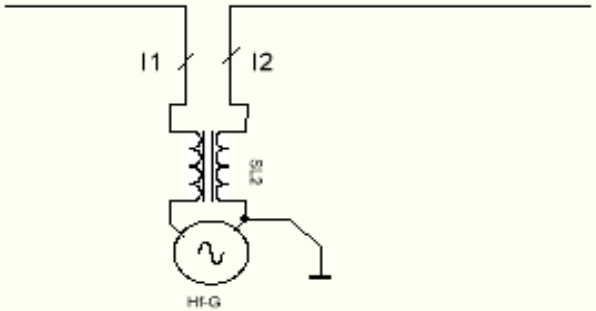
I1 < oder > I2



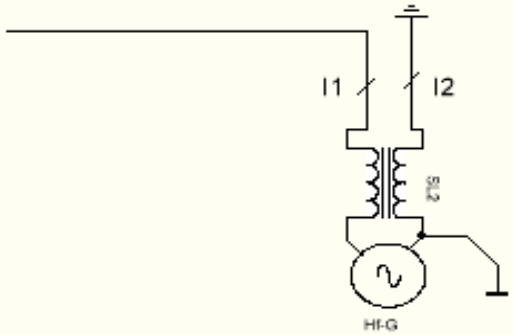
I1 < oder > I2



I1 = I2



I1 = I2



I1 = I2

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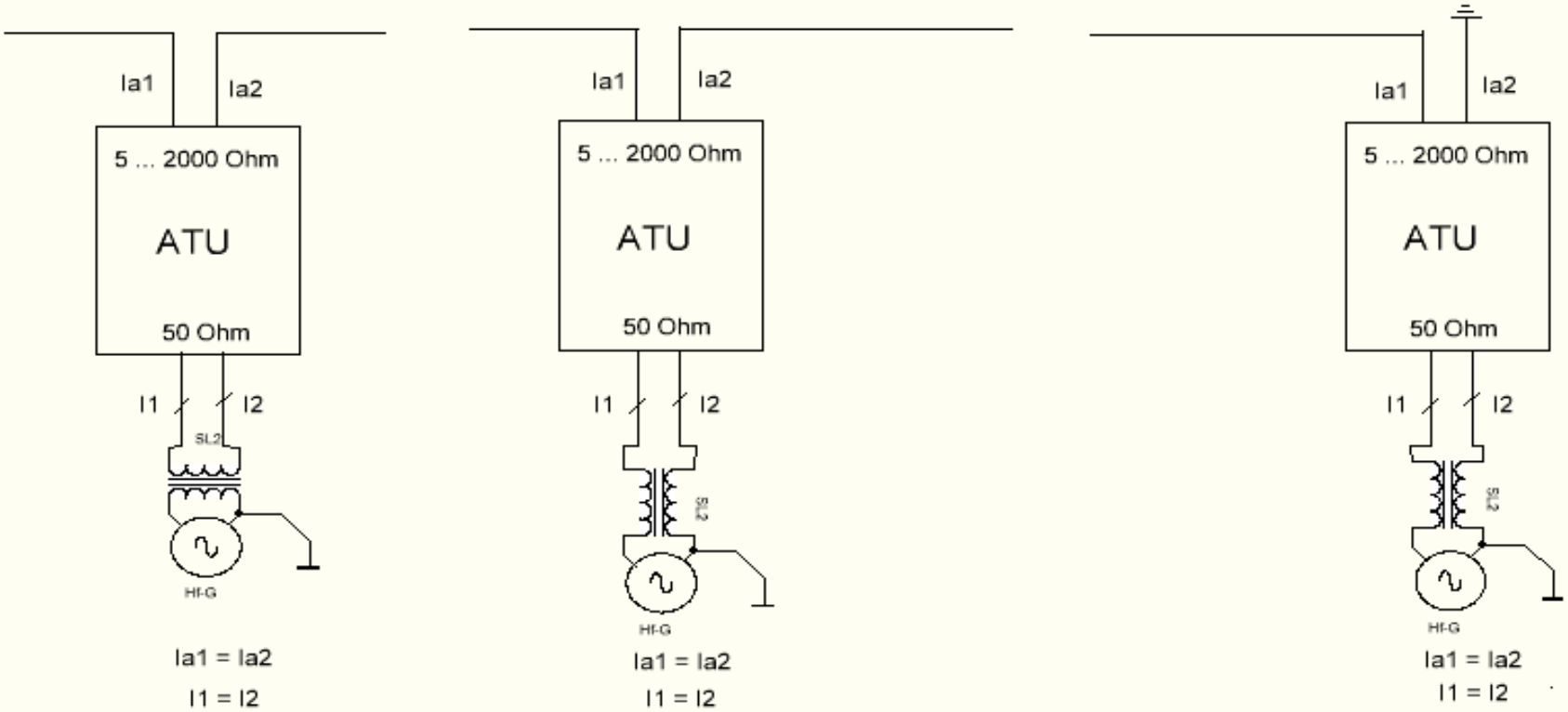
Serba 6/2022

Erdfreie Antennenspeisung



Alle Antennentuner erdfrei betrieben sind symmetrisch

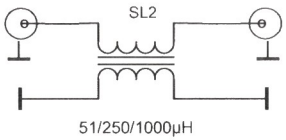
Helmut - DL2AVH

Serba 6/2022

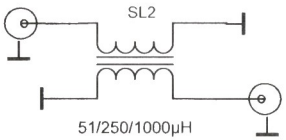
Erdfreie Antennenspeisung

Prüfung SL2 - Balun

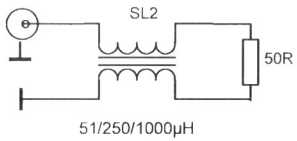
S21 - Prüfung Übertragungsverluste



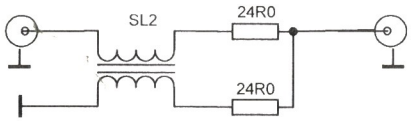
1:1 - S21 - Prüfung Übertragungsverluste



Prüfung SWR

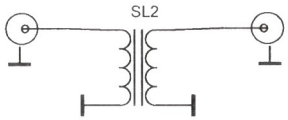


C - Prüfung Sperrdämpfung

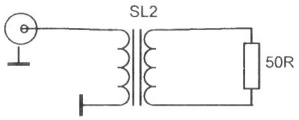


Prüfung SL2 - Übertrager

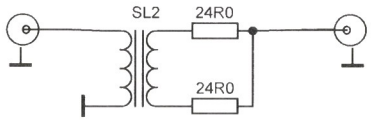
S21 - Prüfung Übertragungsverluste



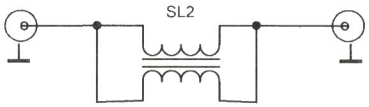
Prüfung SWR



C - Prüfung Sperrdämpfung



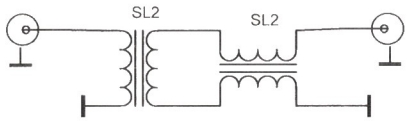
WE - Prüfung



WE-SL2 - 744226 - 10µH
WE-SL2 - 744228 - 25µH
WE-SL2 - 744227 - 51µH
WE-SL2 - 744224 - 250µH
WE-SL2 - 744222 - 1000µH

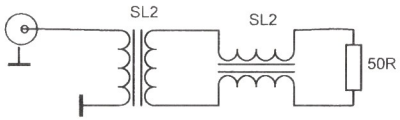
Prüfung SL2 - Übertrager/ Balun

S21 - Prüfung Übertragungsverluste



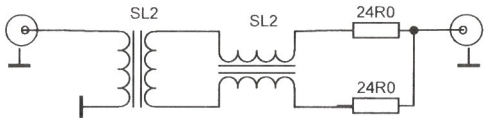
25/51µH 51/51µH 51/250µH 51/1000µH

Prüfung SWR



25/51µH 51/51µH 51/250µH 51/1000µH

C - Prüfung Sperrdämpfung



25/51µH 51/51µH 51/250µH 51/1000µH

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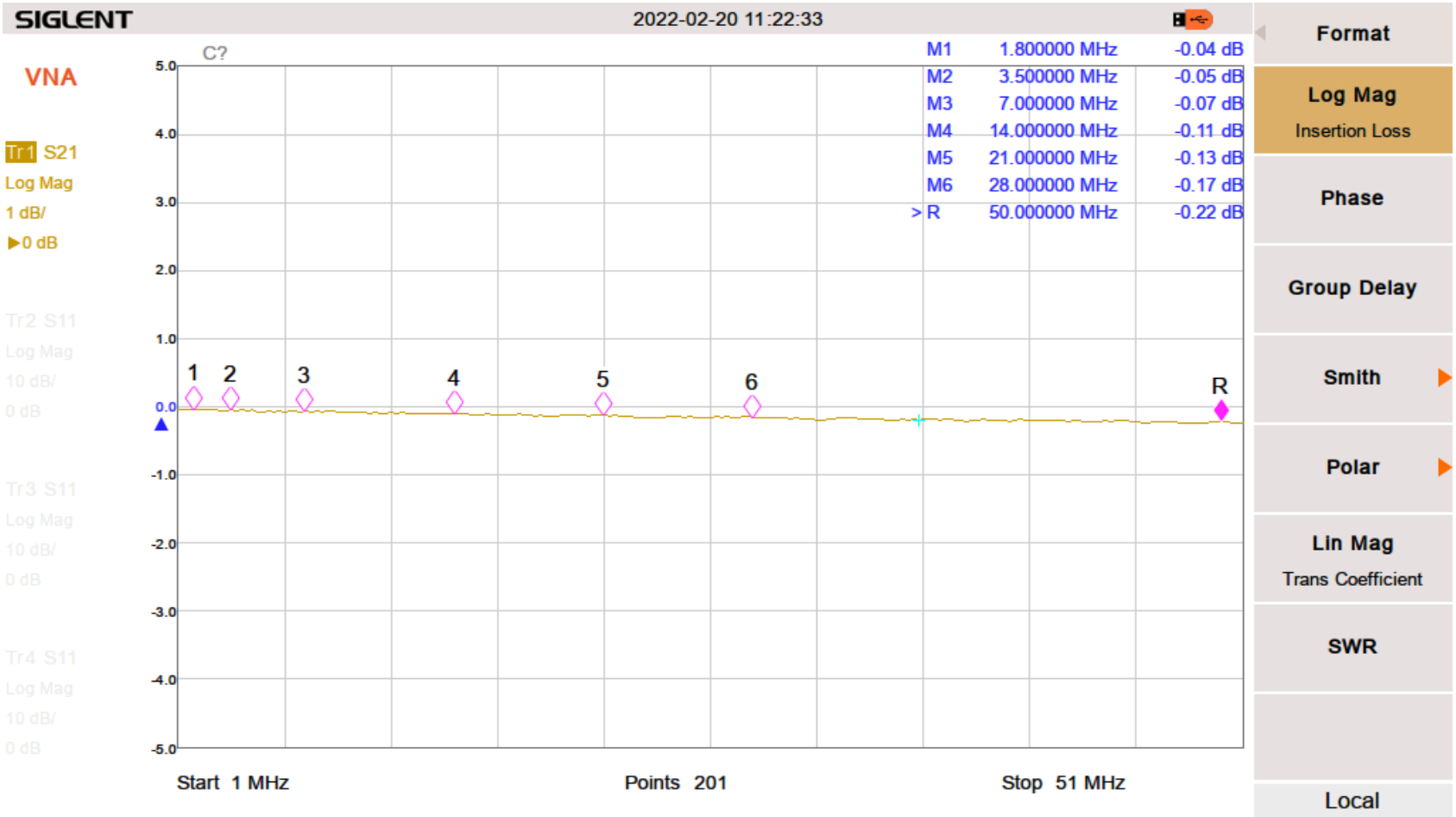

WE-SL2 – 1000µH/744222 als Balun **Übertragungsverluste S21**

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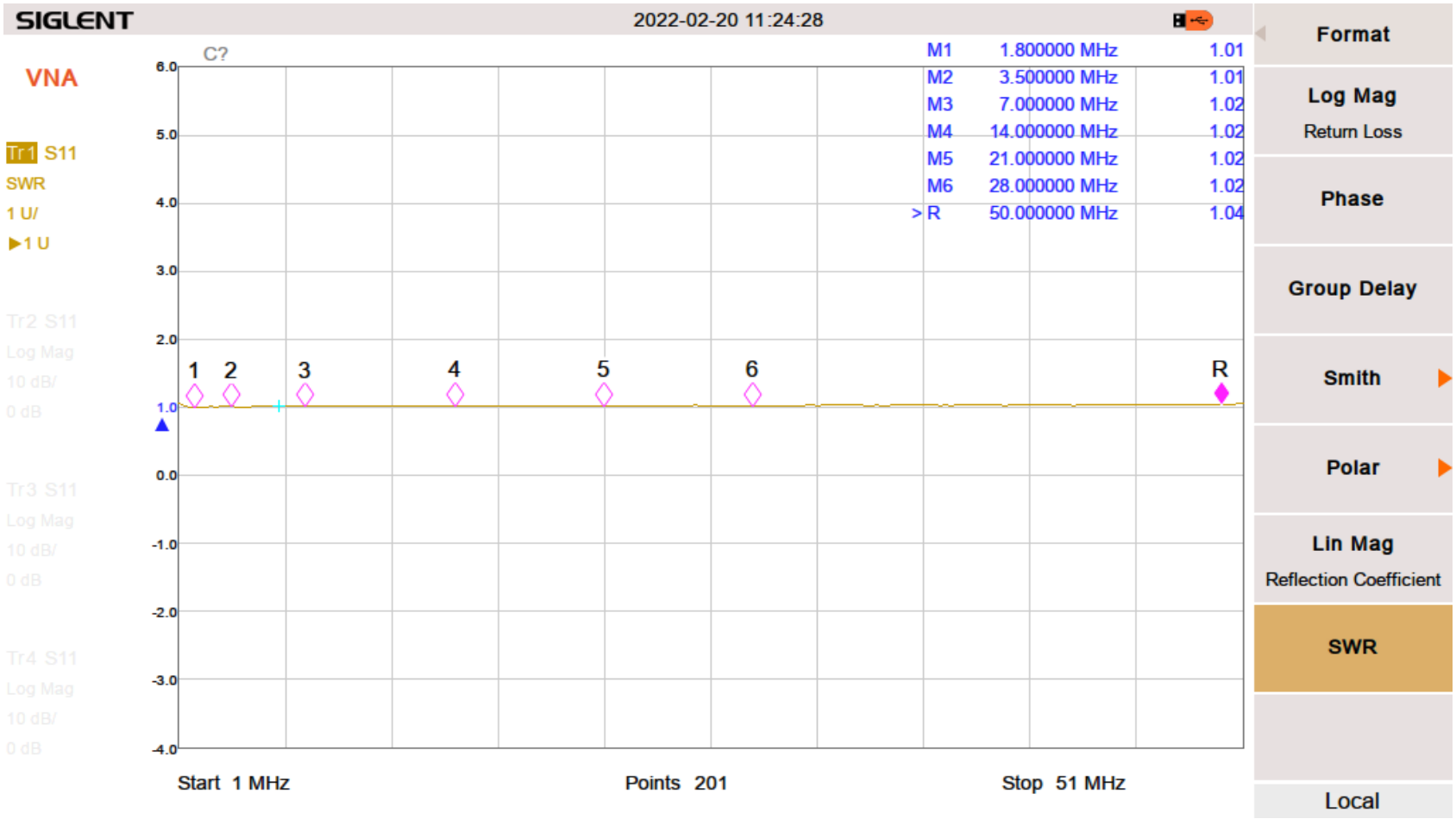
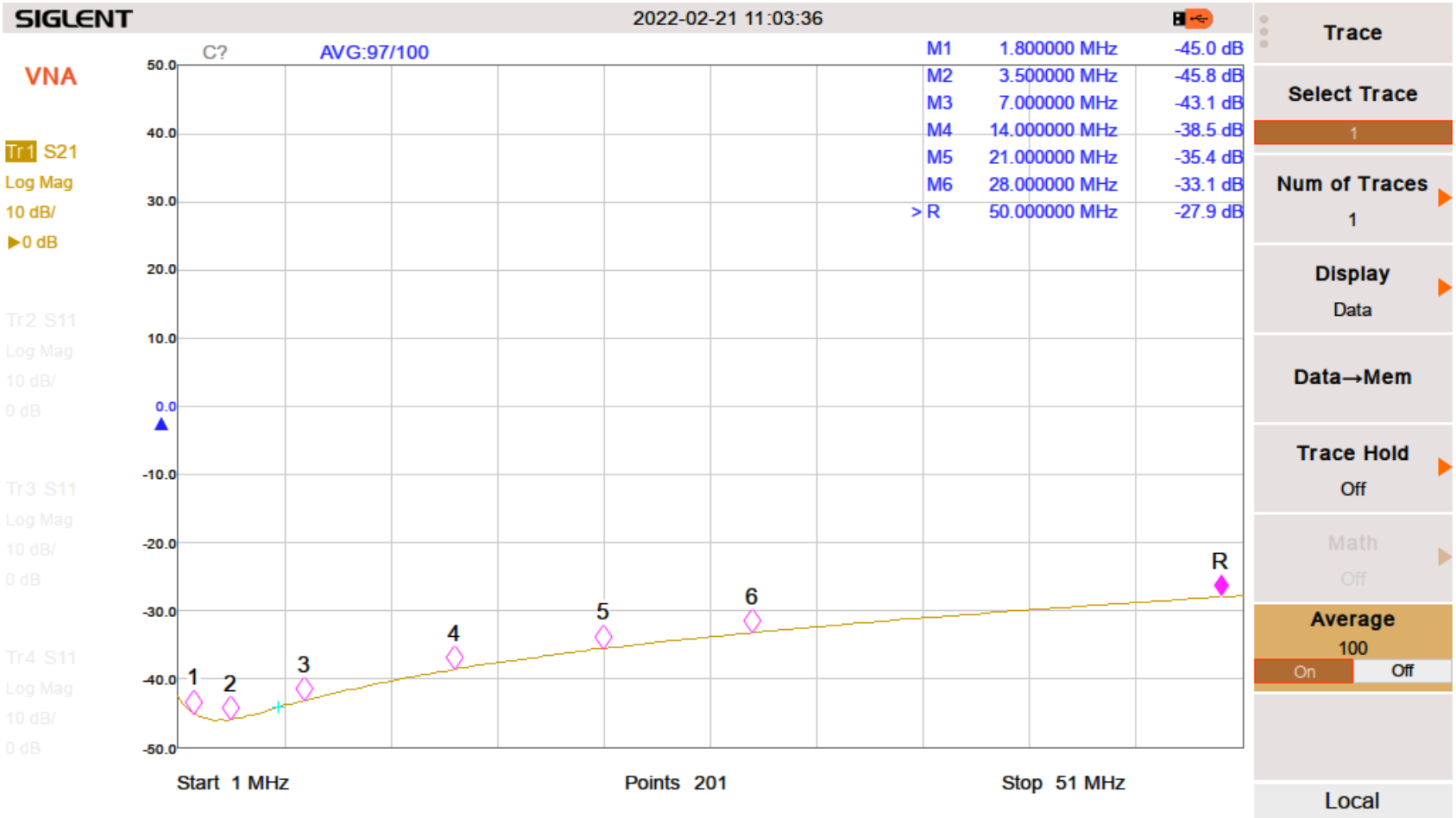


WE-SL2 – 1000µH/744222 als Balun **Prüfung SWR**

Helmut – DL2AVH **Serba 6/2022**



WE-SL2 – 1000µH/744222 als Balun **Sperrdämpfung S21**

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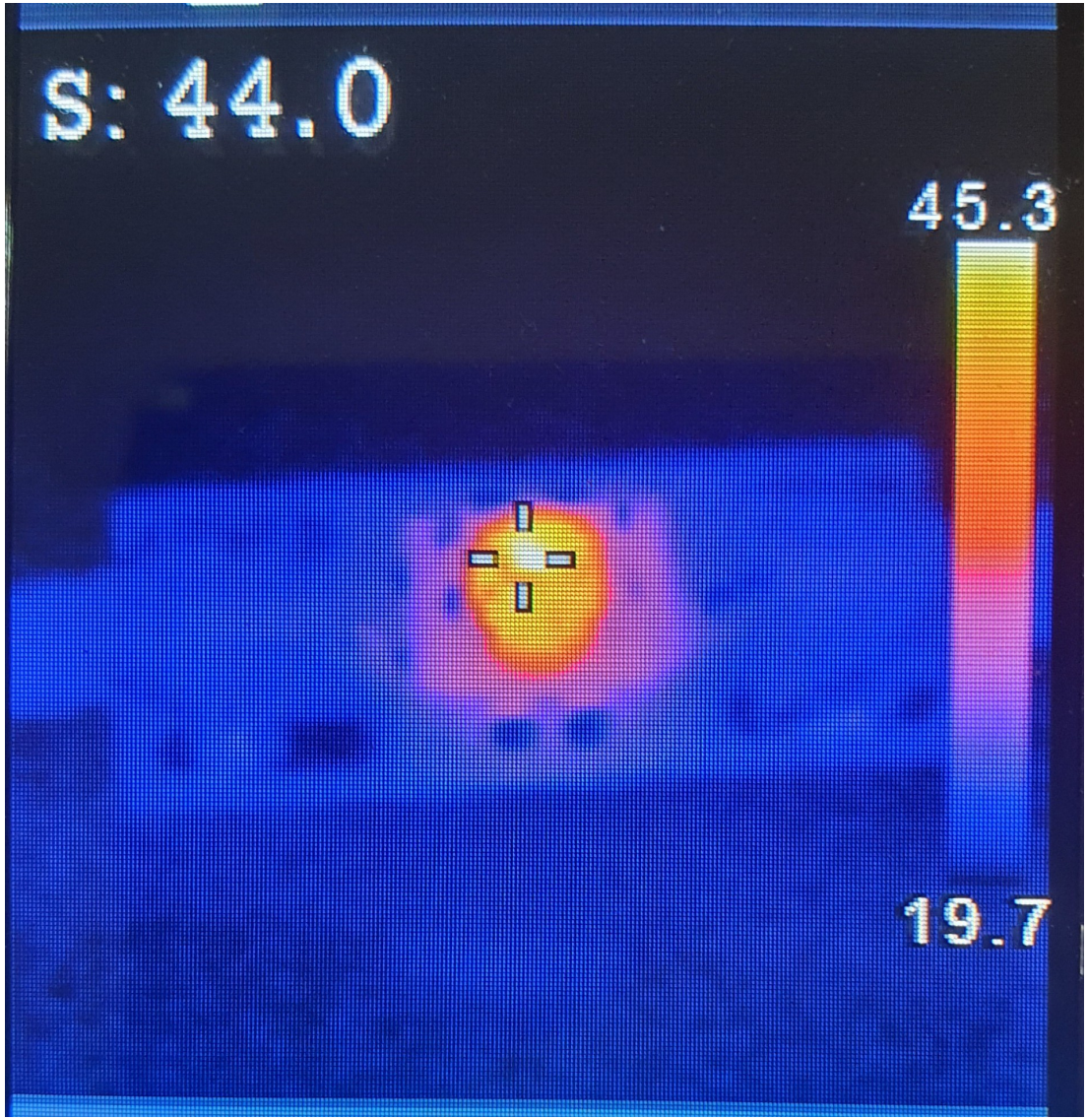
Test DC-Belastung 800mA / WE-SL2 – 1000µH



U_L = 2 x 122mV = 244mV

R_L = 2 x 0,153 Ω = 0,305 Ω

P_L = 0,195 W

R_{th} = 125 grd/W

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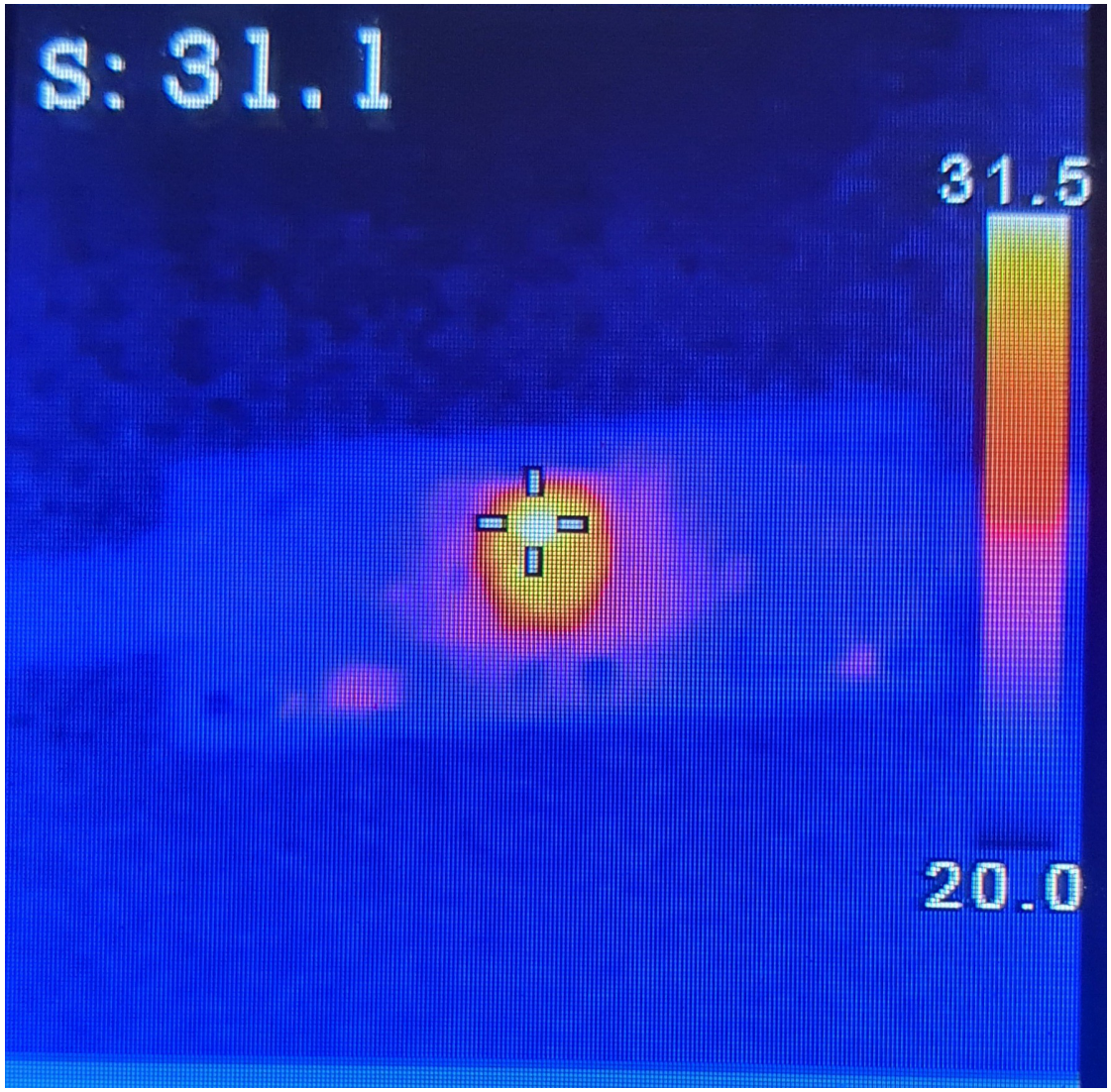
Test 10W – 1,8MHz / WE-SL2 – 1000µH

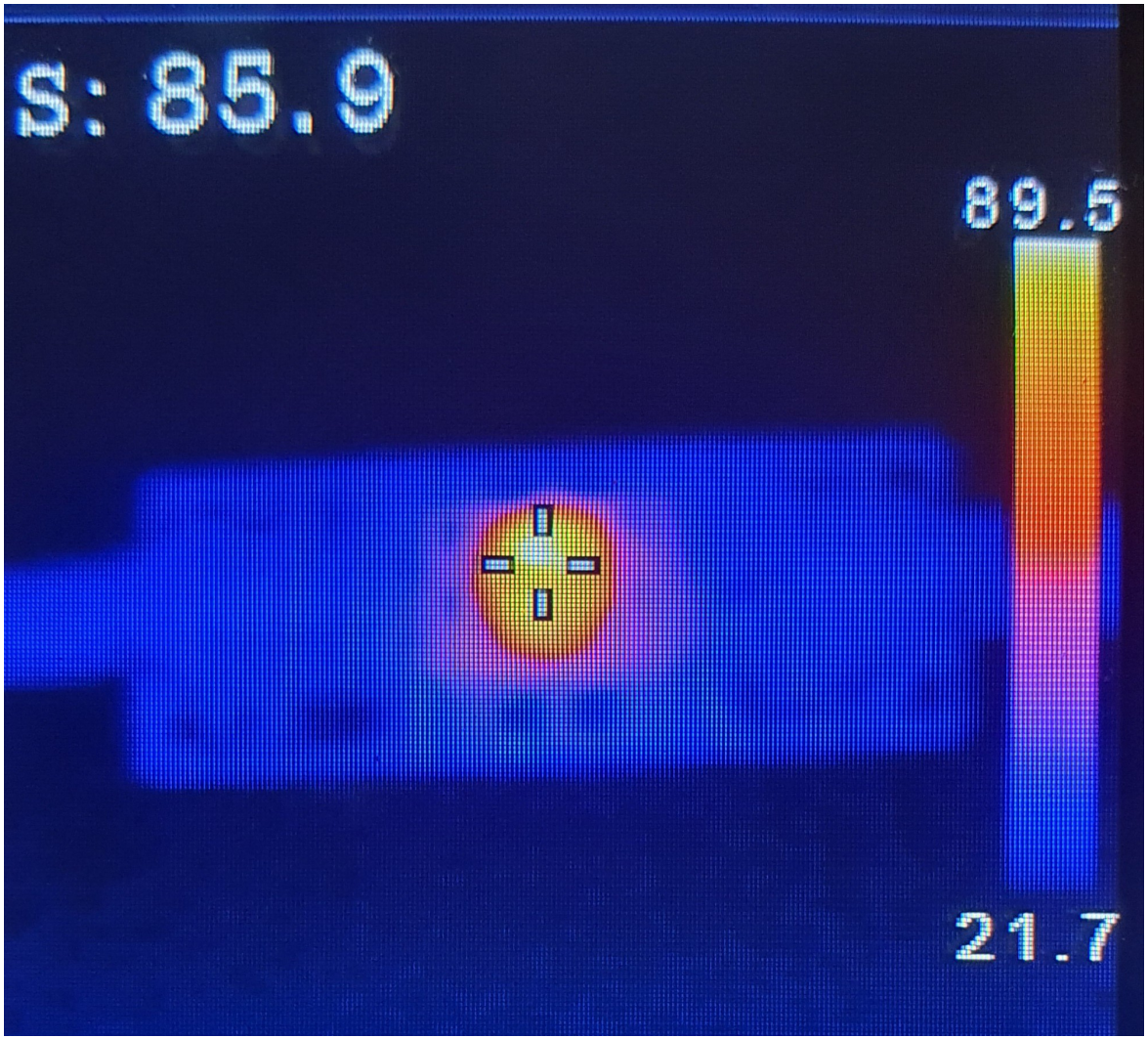


R_{th} = 1,11 grd/W

Helmut – DL2AVH

Serba 11/2022

Test 10W – 28MHz / WE-SL2 – 1000µH



R_{th} = 6,8 grd/W

Verluste durch frequenzabhängige Eindringtiefe

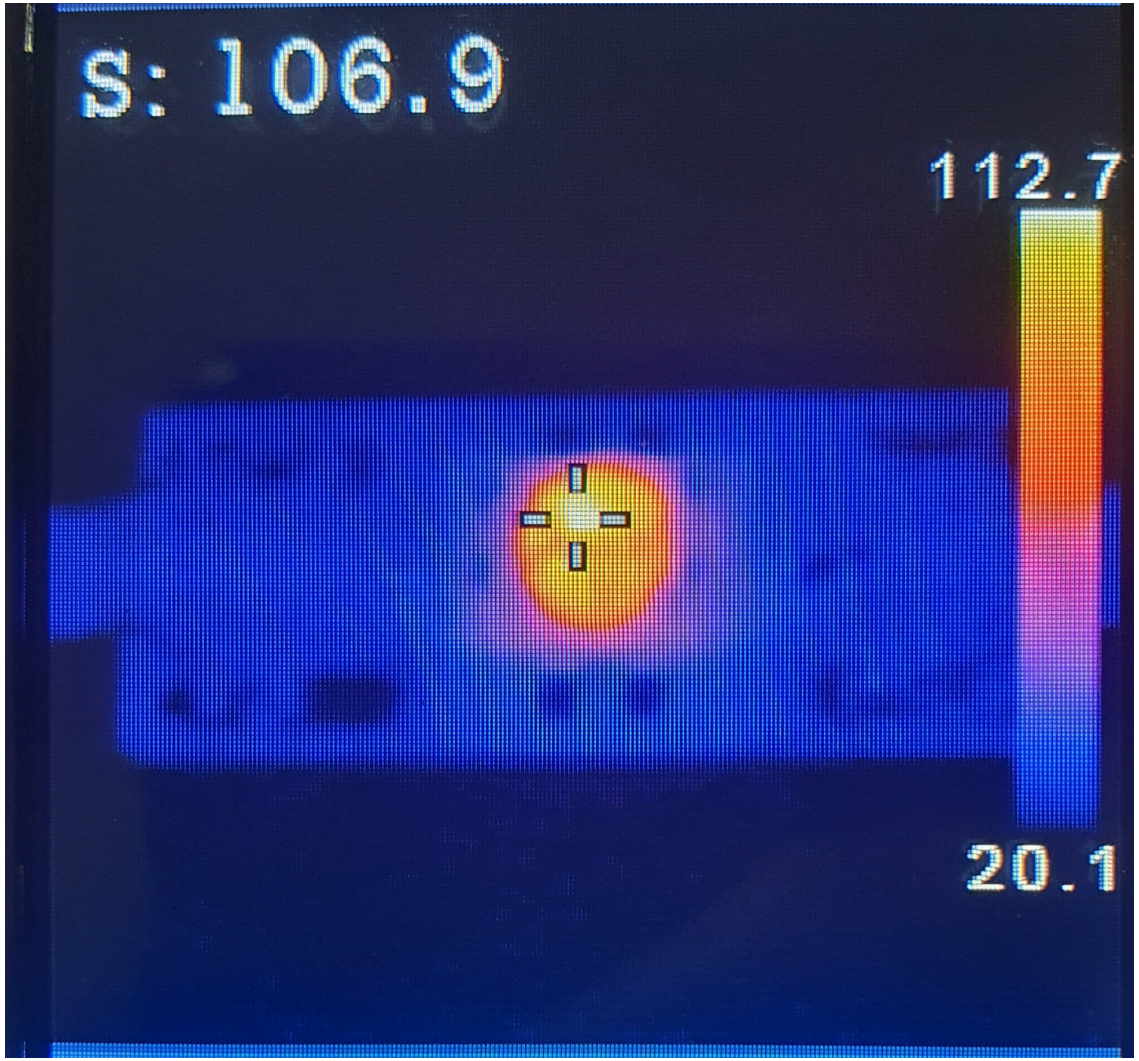
28 MHz / 1,8 MHz = 3,94

1,11 grd/W x 3,94 = 4,4 grd/W

Helmut – DL2AVH

Serba 11/2022

Test 10W – 50MHz / WE-SL2 – 1000µH



R_{th} = 9,26 grd/W

Verluste durch frequenzabhängige Eindringtiefe

50 MHz / 28 MHz = 1,34

6,8 grd/W x 1,34 = 9,1 grd/W

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Serba 11/2022

Viel Erfolg beim Antennenbau – Antennen immer erdfrei speisen
Mehr Infos unter www.DL2AVH.eu

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