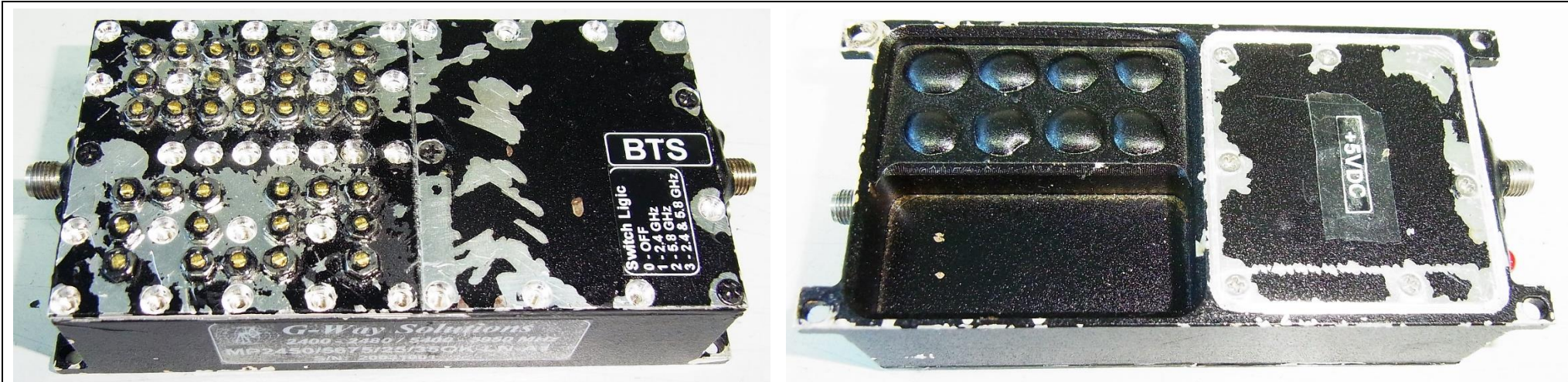
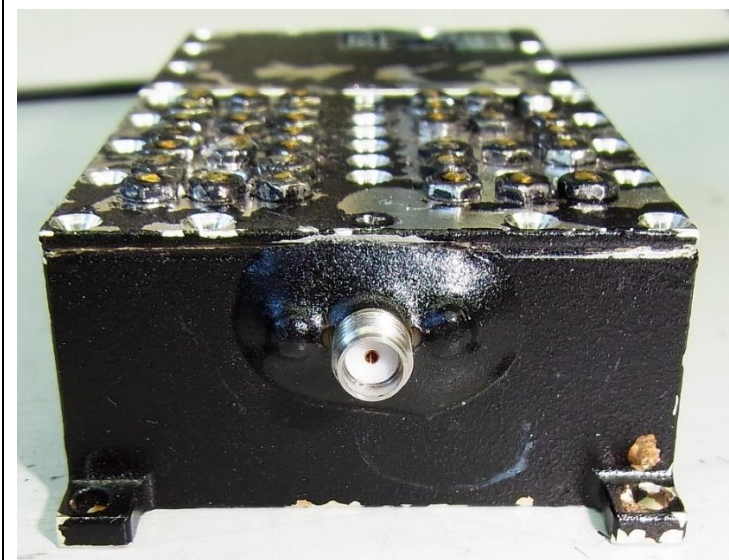


G-Way Vorverstärker mit Diplexer für 2,4GHz / 5,6GHz, Ub 5V



(Verklebung teilweise entfernt)



HF-Eingang



oben: HF-Ausgang
unten: Ub 5V
links: Betriebsart



Durchgang 2GHz - 7GHz

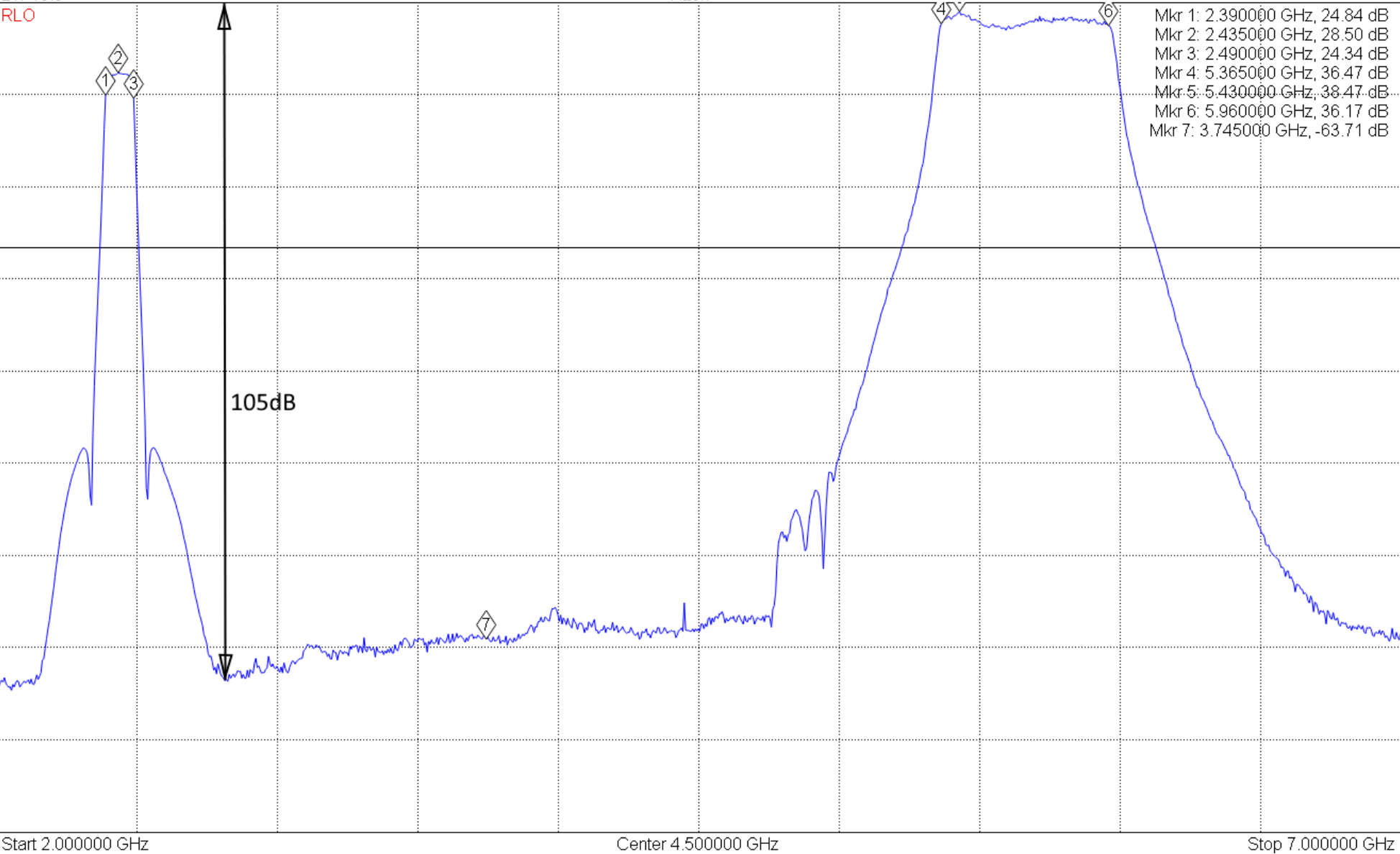


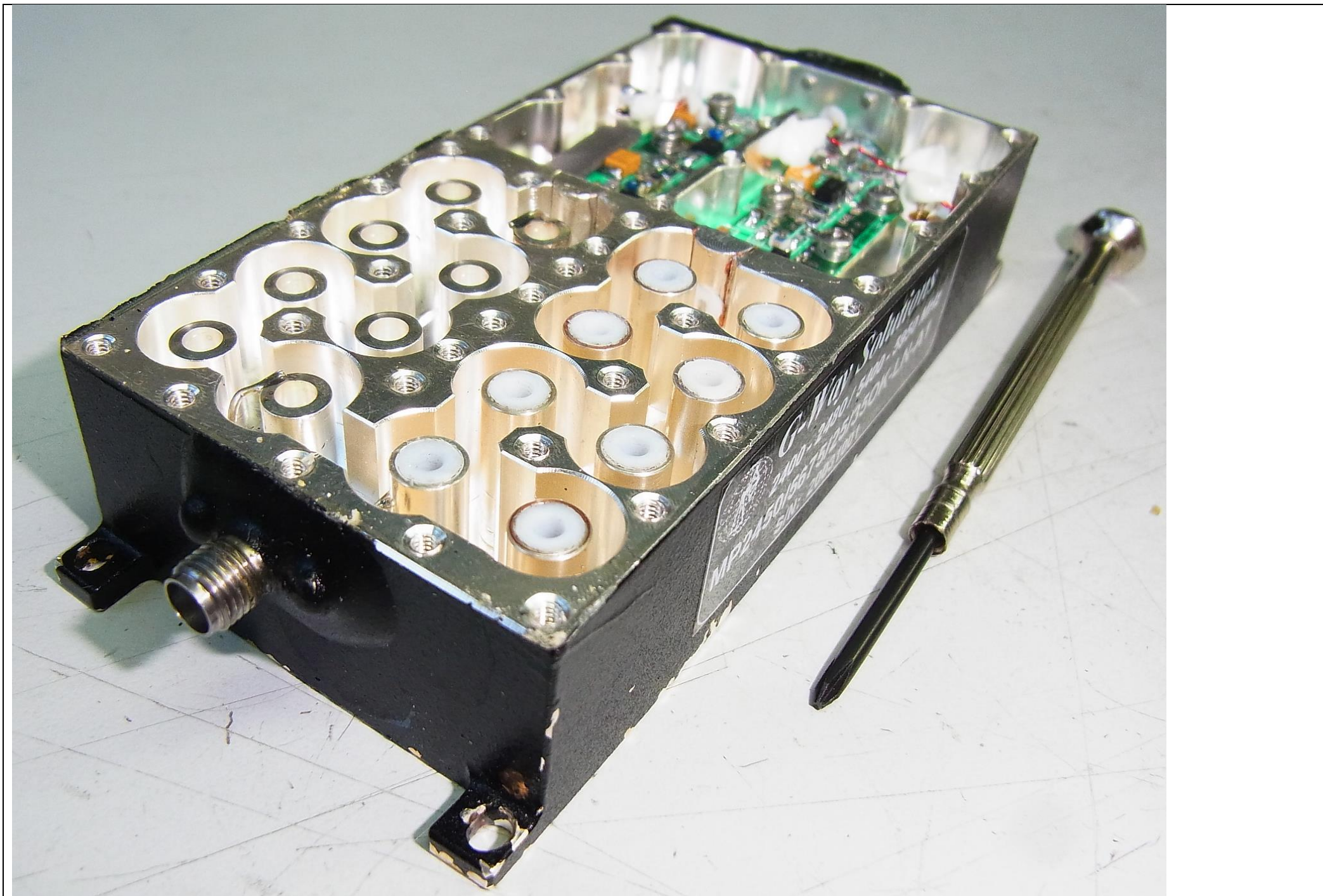
Version 3.9.0

Ref 40.00 dB
Div 15.0

Step 5.000000 MHz
Atten --

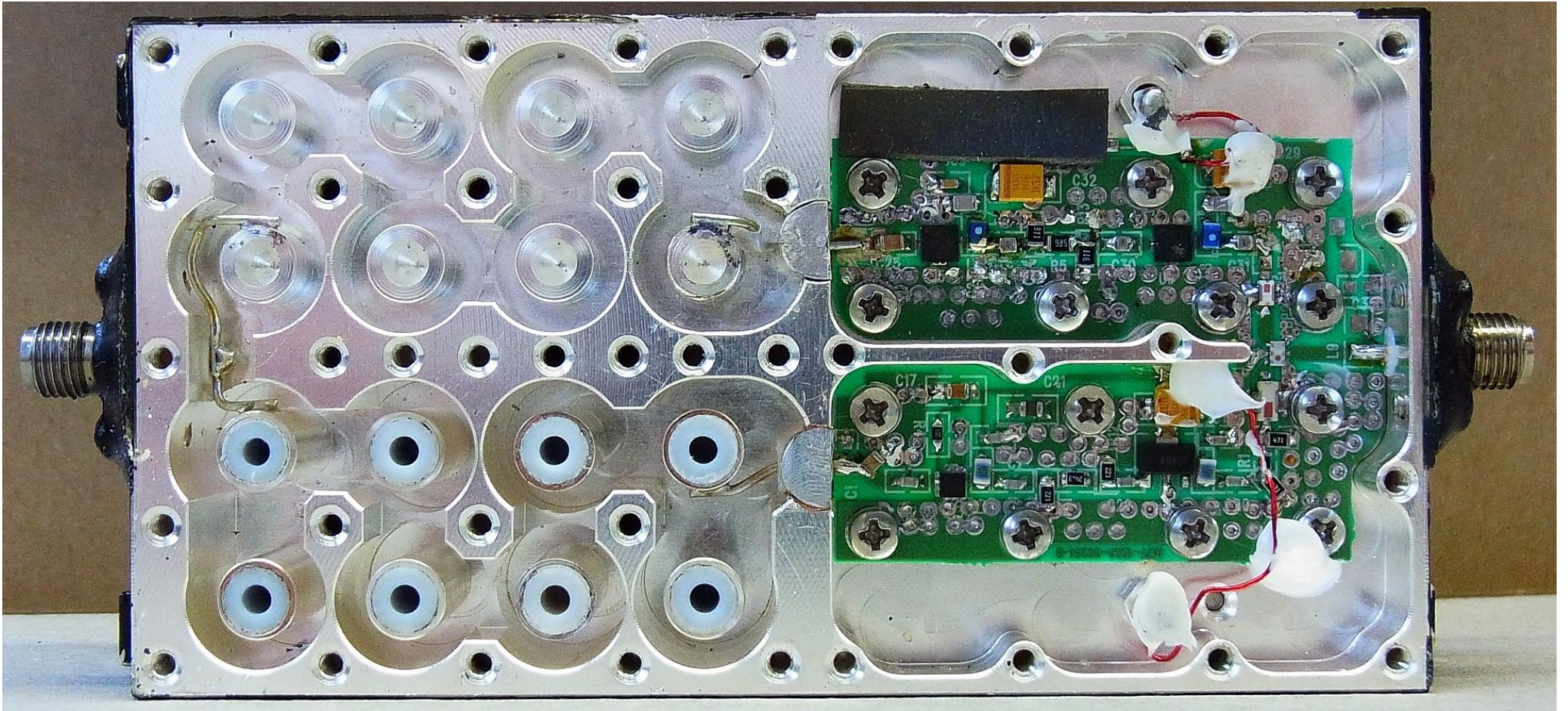
VBW --





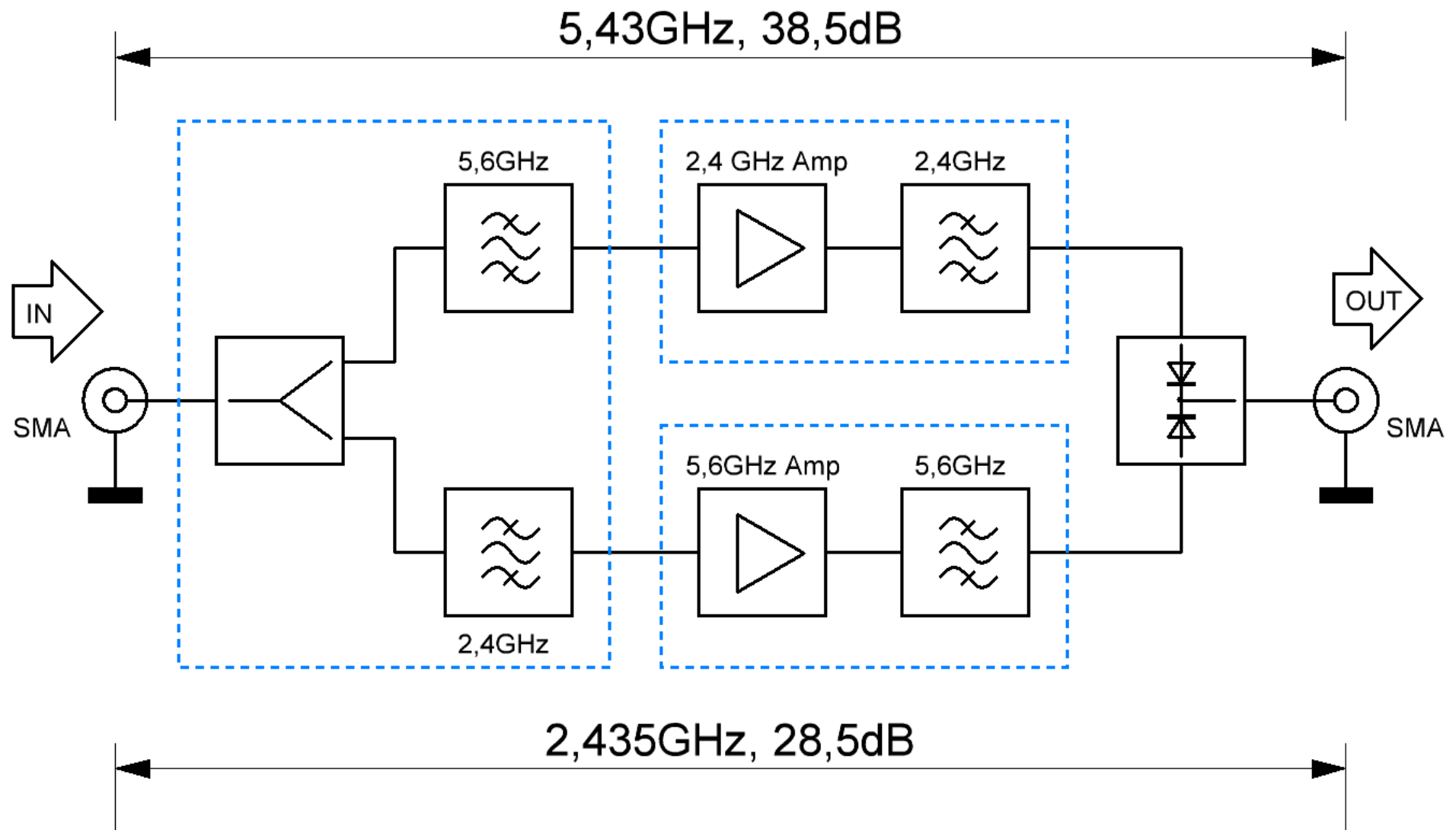
Diplexer mit Doppel-Vorverstärker

5,6GHz-Pfad oben

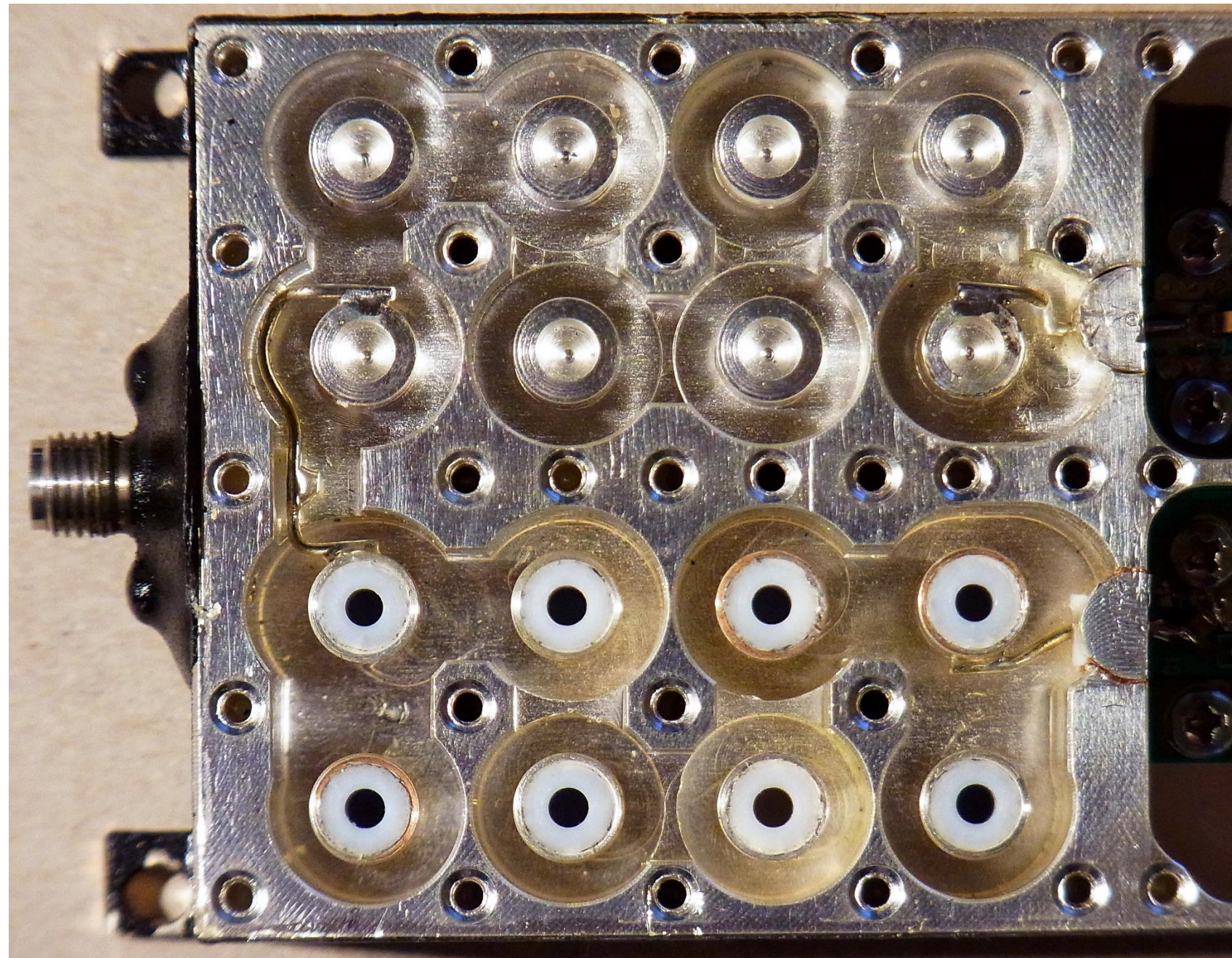


2,4GHz-Pfad unten

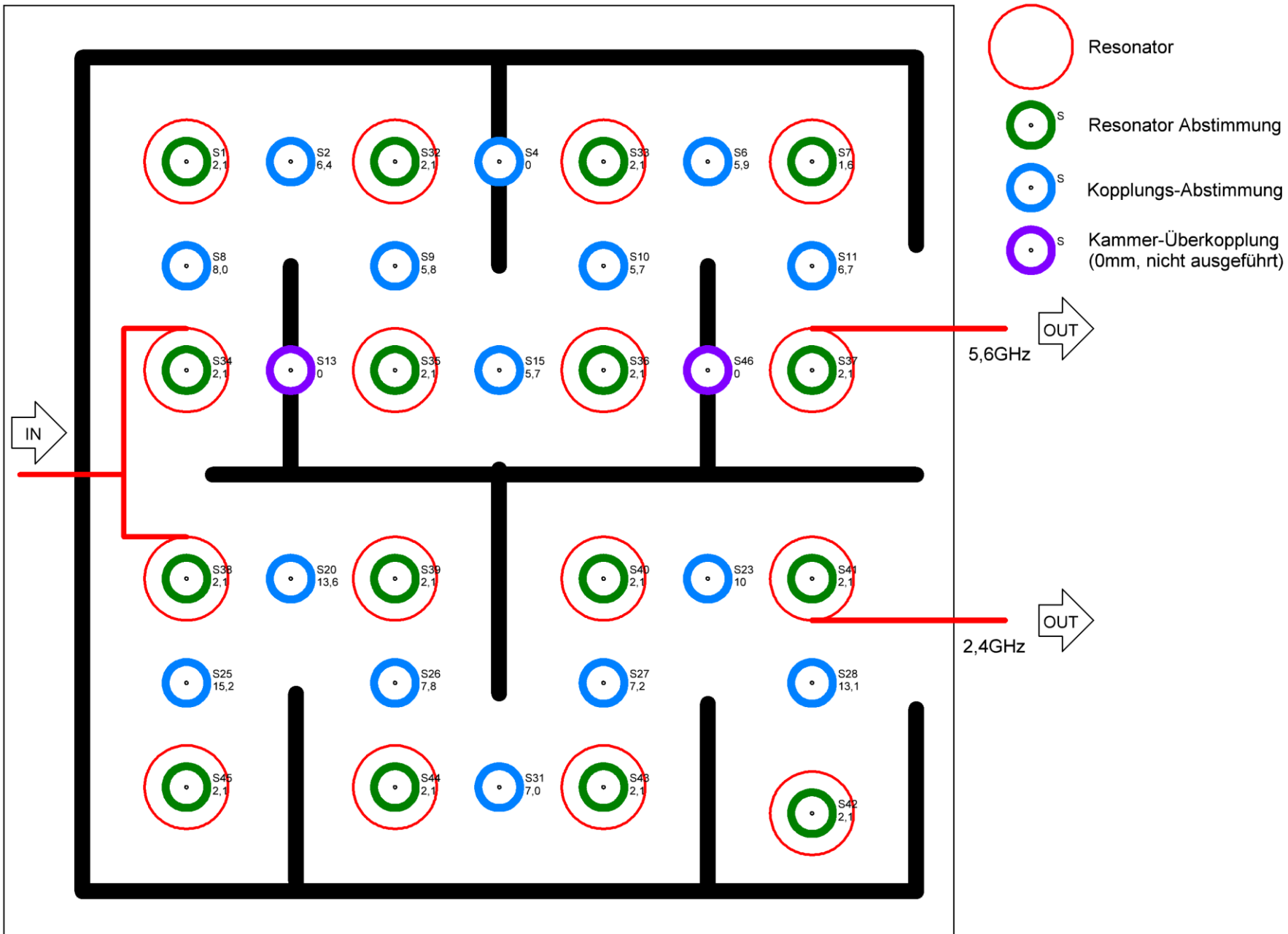
Schema mit Diplexer, Vorverstärkern und Zusammenführung



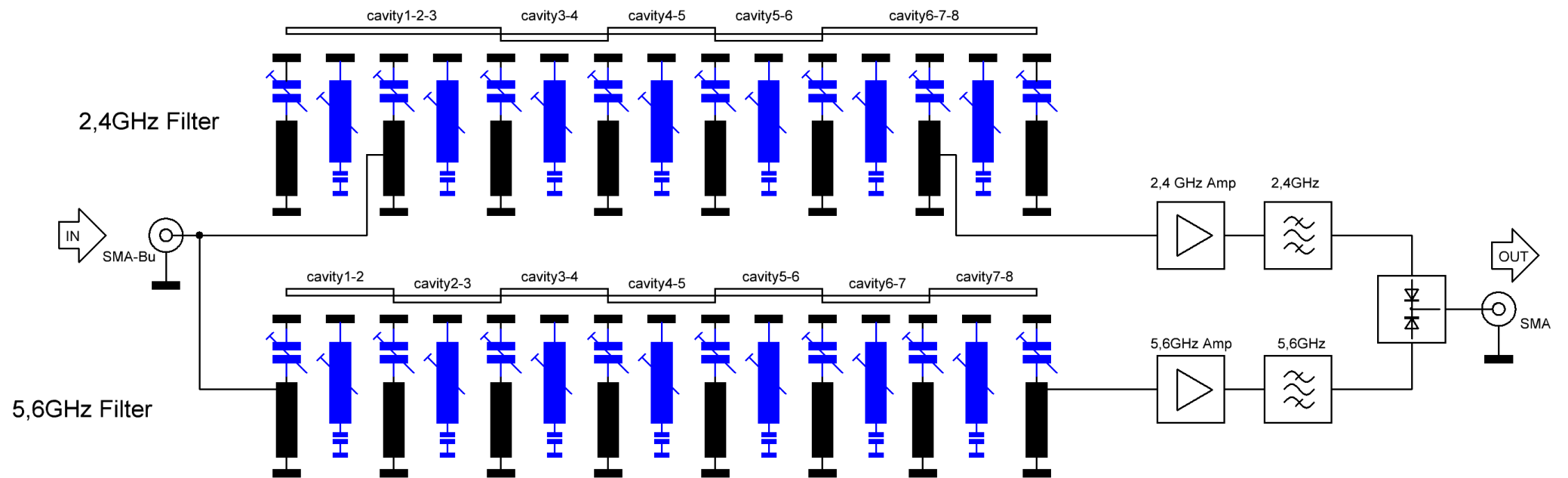
Diplexer



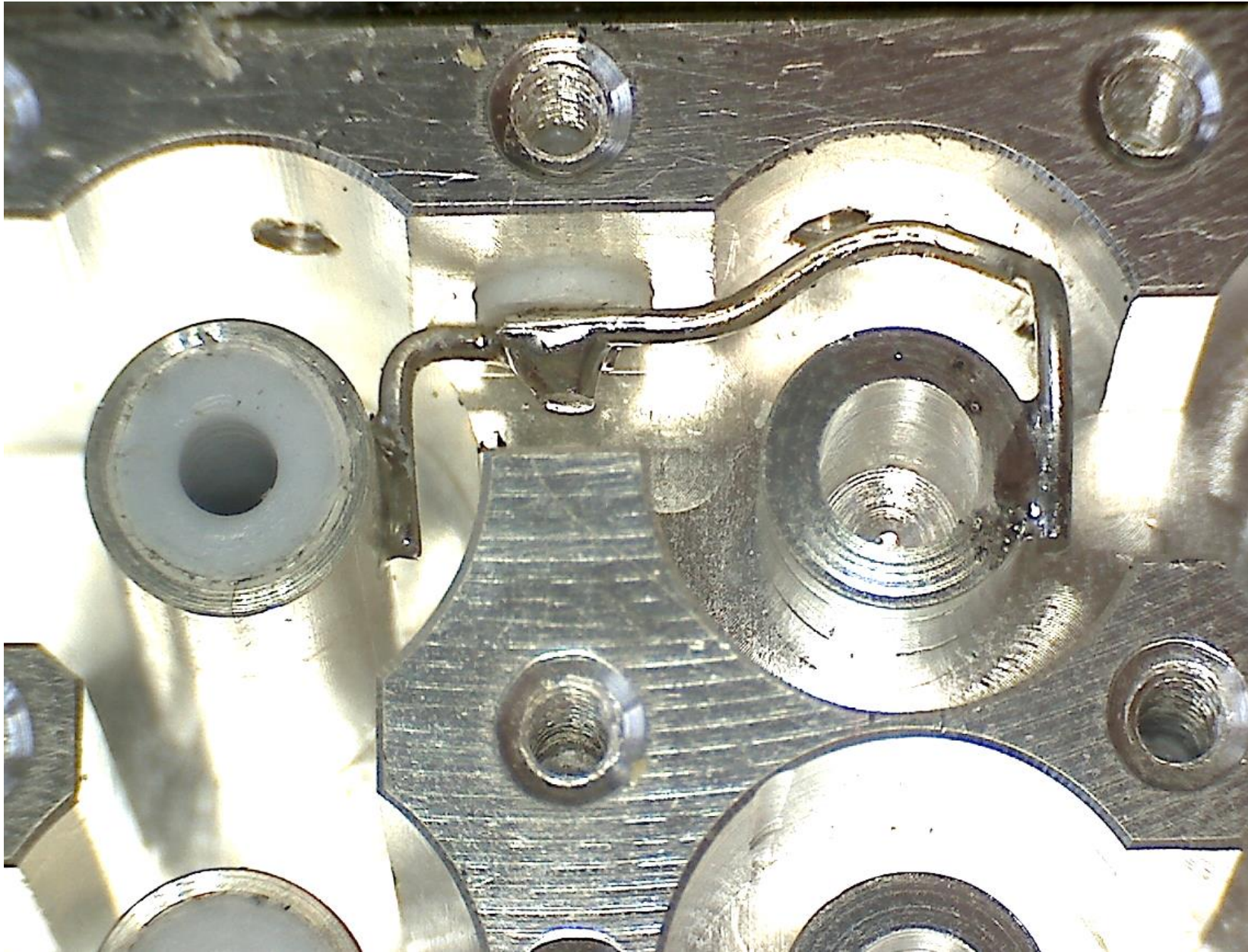
Diplexer-Schema



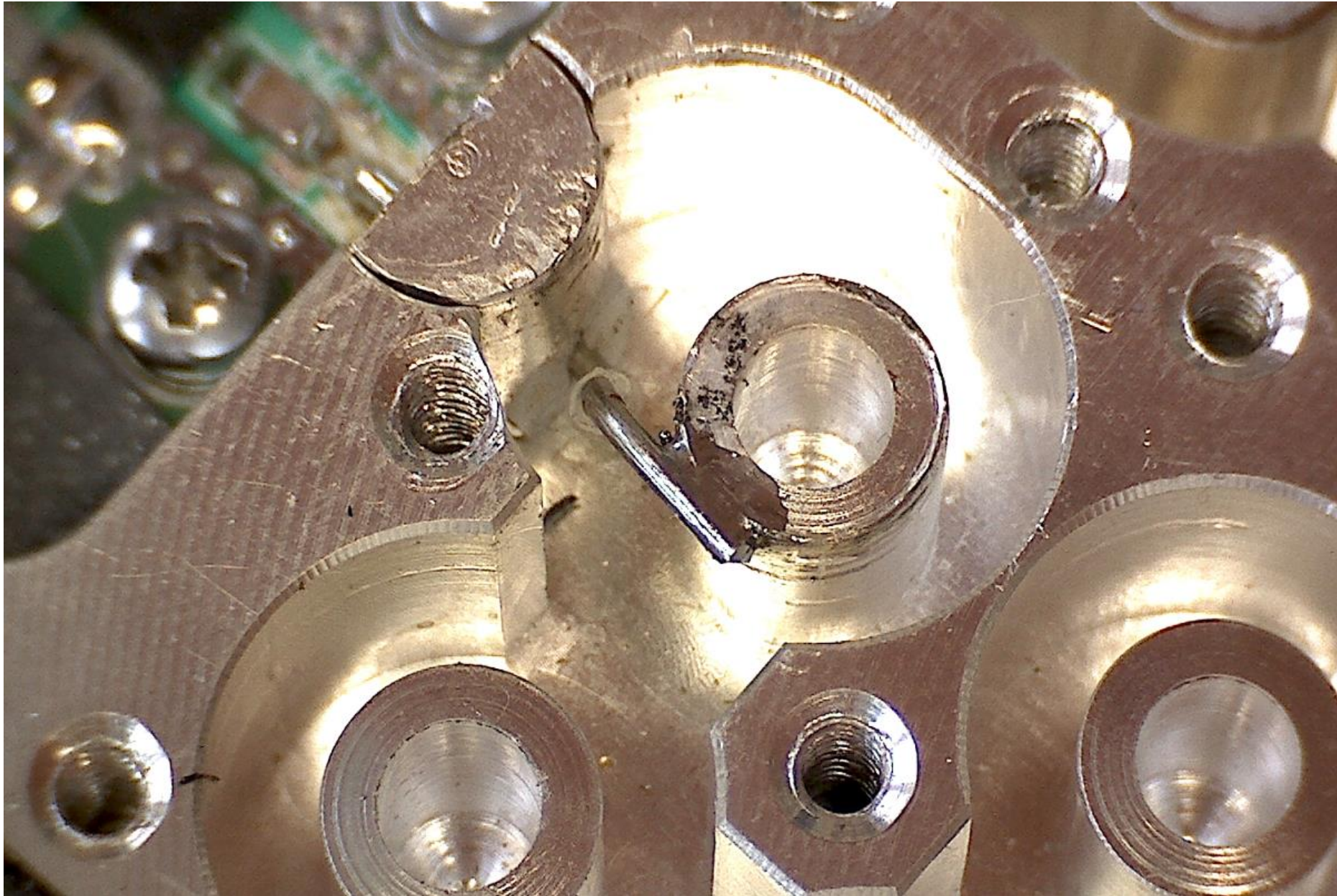
Diplexer Schaltung



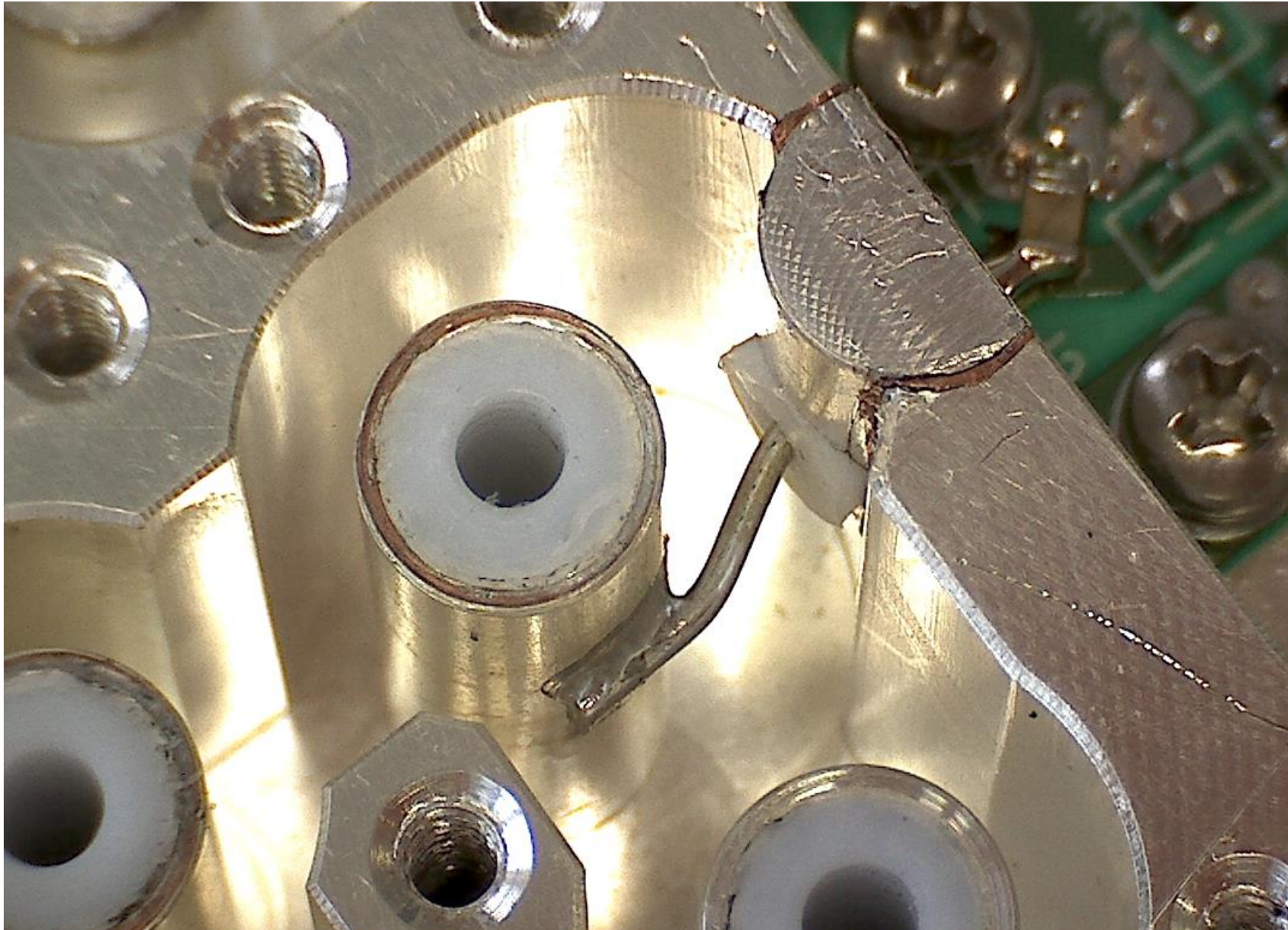
Einkopplung des gemeinsamen Eingangs



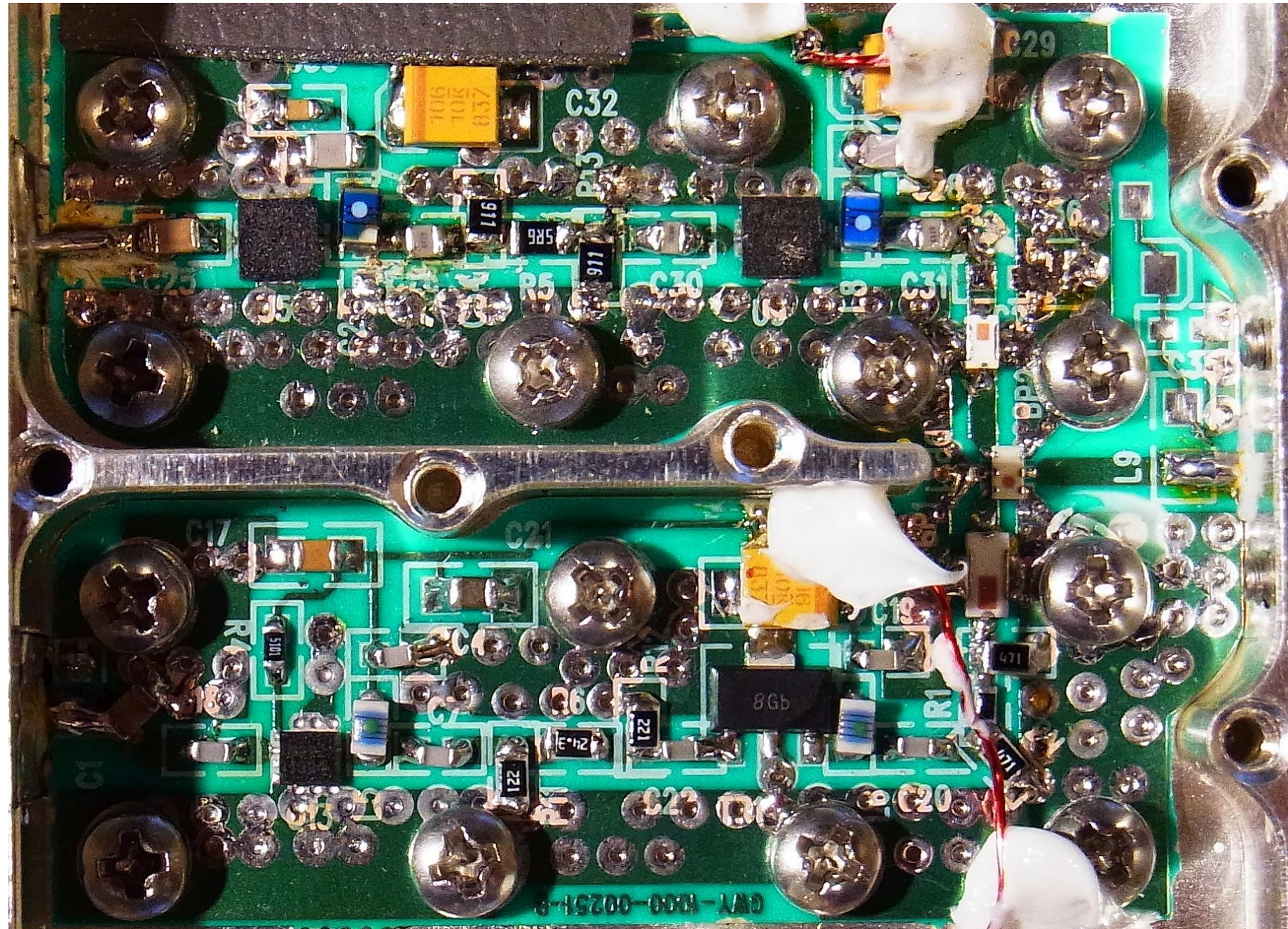
Auskopplung 5,6GHz zum Vorverstärker



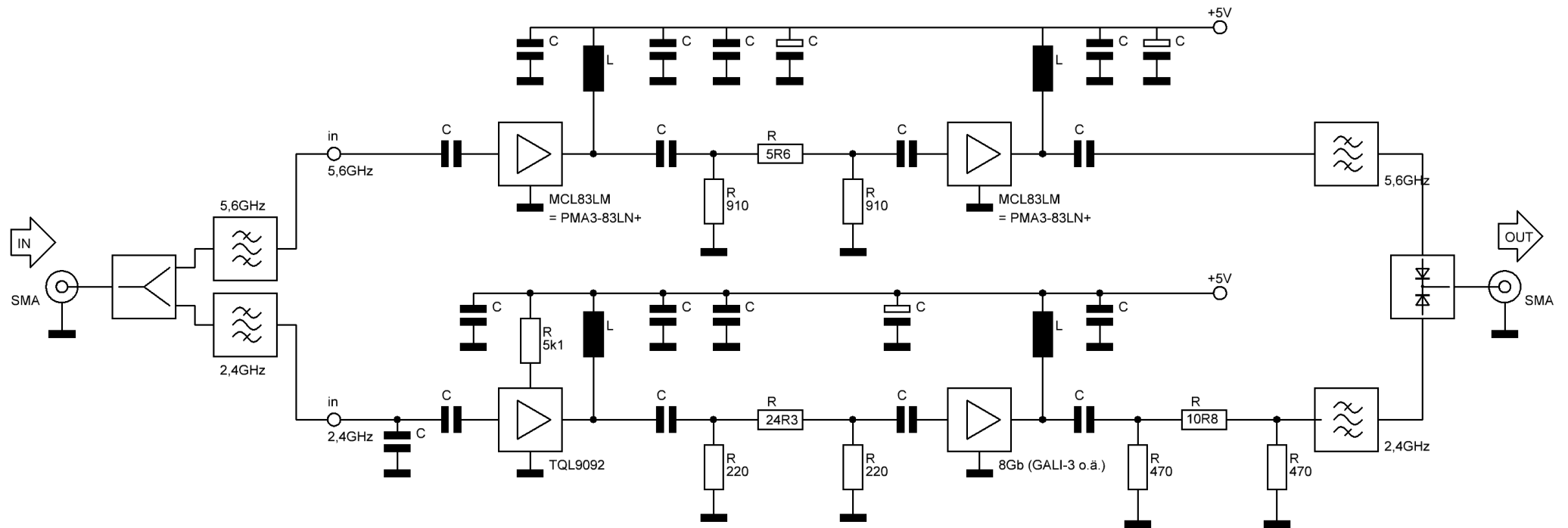
Auskopplung 2,4GHz zum Vorverstärker



Doppel- Vorverstärker, oben: 5,6GHz, unten 2,4GHz

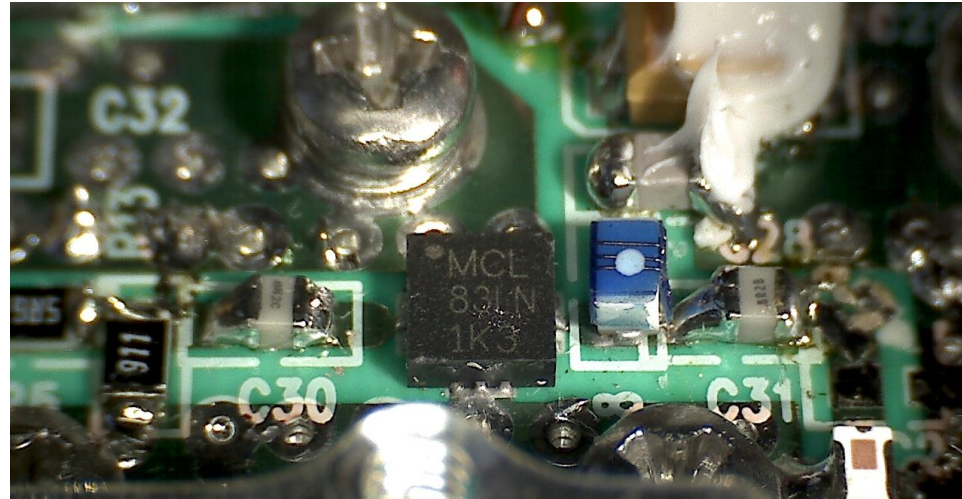
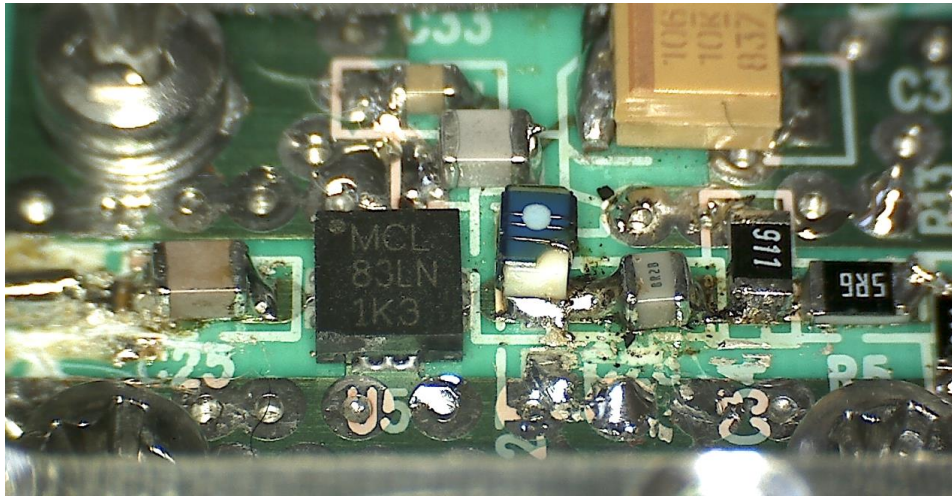


Schaltung Doppel-Vorverstärker



Daten (ermittelt vor Demontage)	13cm	6cm
Frequenzbereich	2390 MHz - 2490 MHz	5365 MHz - 5960 MHz
Bandbreite	100MHz	600MHz
Verstärkung g_max	28,5dB	38,5dB
max. Eingangsleistung (1dBcomp)	ca. -10dBm	ca. -21dBm

5,6 GHz VV

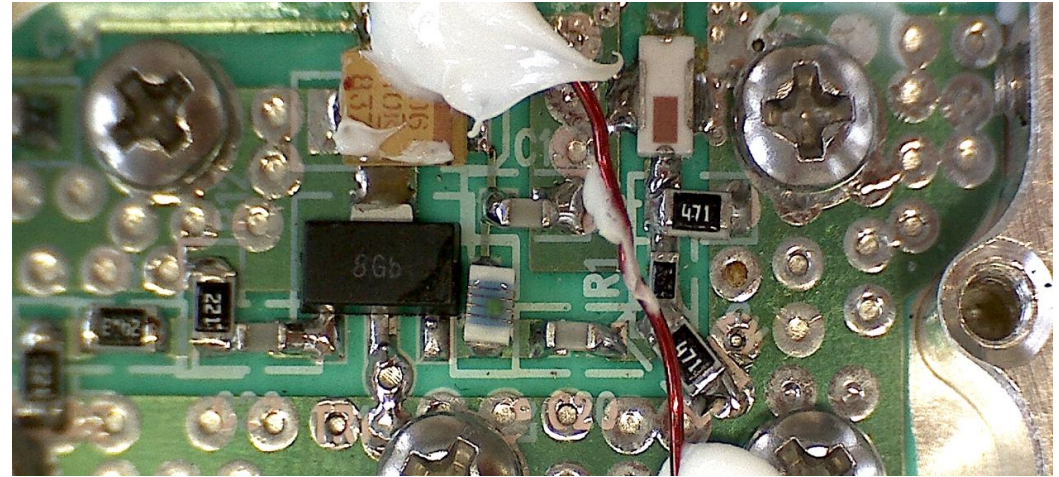
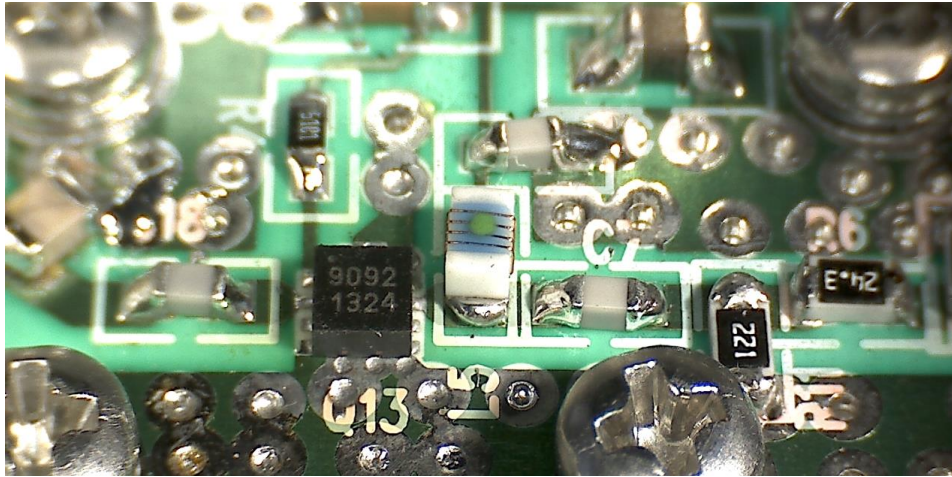


MCL83LM = PMA3-83LN+

Condition: Vdd 5V, Temp +25°C, Z 50Ω, f 5.0GHz

Parameter	Min.	Typ.	Max.	Units
Frequency Range	0.5		8.0	GHz
Noise Figure		1,6		dB
Additive Phase Noise 2.0 GHz, 10KHz offset		-155		dBc/Hz
Gain	18.7	20.5		dB
Input Return Loss		12.4		dB
Output Return Loss		18.4		dB
Output Power at 1dB Compression	17.2	18.9		dBm
Output IP3	24.0	29.7		dBm
Device Operating Voltage (VDD)		5.0		V
Device Operating Current (IDD)		60		mA

2,4 GHz VV



TQL 9092

Condition: Vdd 5V, Temp +25°C, Z 50Ω

Parameter	Min.	Typ.	Max.	Units
Frequency Range	600		4200	MHz
Noise Figure		0,65	0,95	dB
Gain	21	22,6	24,5	dB
Input Return Loss		11		dB
Output Return Loss		17		dB
Output Power at 1dB Compression		19		dBm
Output IP3	33	37		dBm
Device Operating Current (IDD)	45	65	85	mA

Ausgangsfilter und Signalzusammenführung: von links 2,4GHz, von rechts 5,6GHz, Mitte unten: Ausgang

