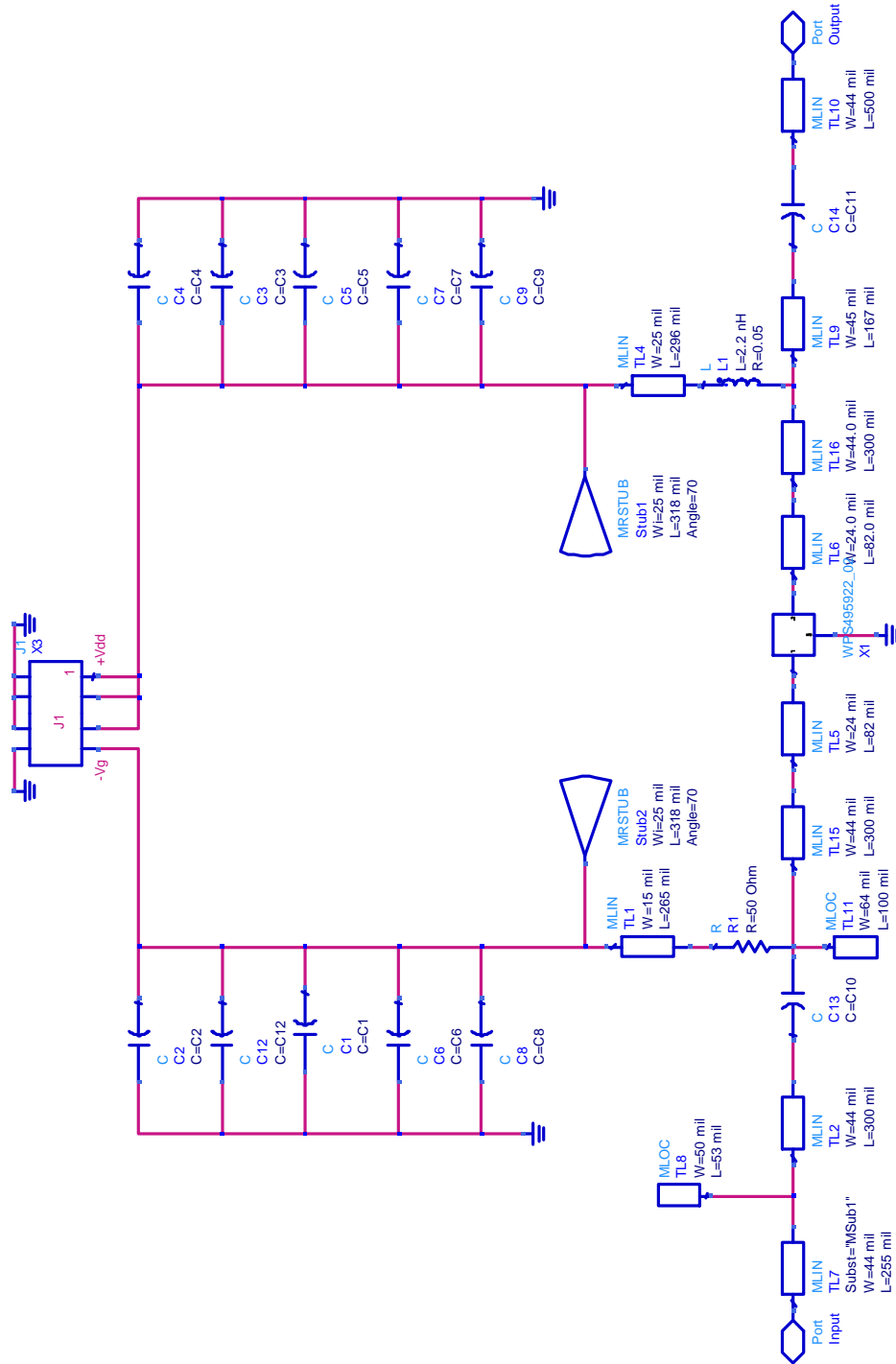


MwT WPS495940-02EV Test Fixture Setup Instructions

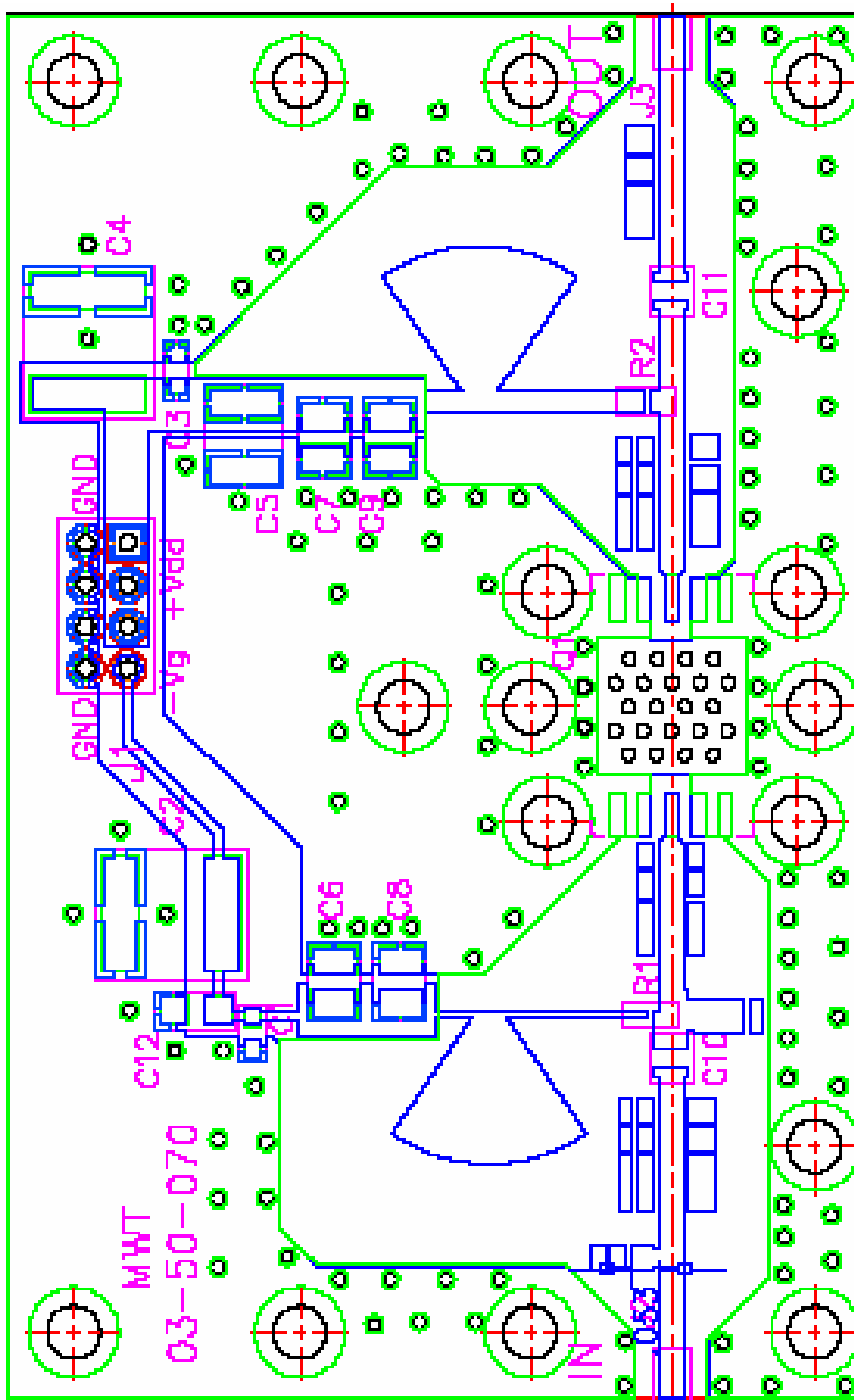
Note: Please ensure the test fixture is connected to a 50-ohm input and output impedance before beginning.

1. Connect the 8-pin bias cable. It only fits one way.
2. Verify all power supplies are at 0 volts before turning on.
3. Connect the test fixture Red wires(s) to the Drain power supply.
4. Connect the test fixture Green wire to the Gate power supply.
5. Connect the test fixture Black wires to the return (common) terminal of the Gate and Drain power supplies.
6. Turn on the power supply to the Gate: set it to nominal -5.0 volts. There should be no current flow on the gate.
7. Turn on the power supply to the Drain: set it to nominal 28 volts. Adjust the gate voltage so that current flow (I_{dq}) is 100 mA. (Gate voltage is -2.8V)
8. You are now ready to provide RF power.



Notes:

1. This drawing is to be used in conjunction with assembly drawing of WPS495940-02EV.
2. Component values can be found on the bill of materials.



Assembly drawing for WPS495940-02EV.

Bill of material for WPS495940-02EV

BOM for WPS-495940-02EV

MWT P/N	QTY	REF DES	DESCRIPTION
03-02-593	2	C1,C3	CAP,SMD, 0.1UF,10%,0603
03-02-594	2	C2,C4	CAP,SMD,4.7UF,10%,2220
03-02-595	1	C5	CAP,SMD,4700p,10%,0805
03-02-596	2	C7,C6	CAP,SMD, 100PF,10%,100A
03-02-597	2	C8,C9	CAP,SMD, 3.6PF,100A
	2	C10,C11	CAP,SMD 3.9PF,100A
	1	J1	CONNECTOR,2 MM,RT ANGLE,8 POSITION PIN
	2	J2,J3	SMA/4HOLE
03-50-070	1	N1	PCB 2 LAYER,2 OZ COPPER,20 MIL ROGERS R04003C
	1	Q1	WPS495922-02
03-02-601	1	R1	RESISTOR, 47 OHMS,0.5%,0603
03-02-602	1	R2	Inductor, 2.5nH,5%,0603

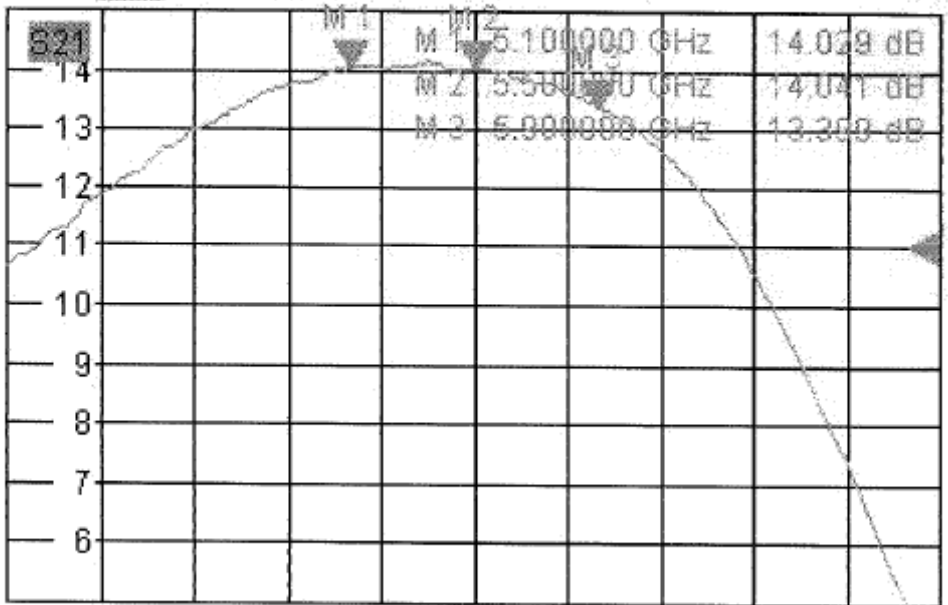
Electrical Performance Summary

Performance Summary for WPS495922-02EV Vdd=28 volts, Vg=-2.9			
Parameter Description	Temperature (°C)		
Temperature (°C)	0	25	70
Small Signal Gain (dB)	13.4	13.1	12.7
Gain Flatness (dB)	0.5	0.5	0.5
VSWR (Input/ Output)	3.0:1/2.5:1	3.0:1/2.5:1	3.0:1/2.5:1
P3dB (measured at 5.5 GHz)	40.3	39.7	39.2
Burst Power 2.5%		33.3 dBm	
Ids (small signal condition)	508	210	456

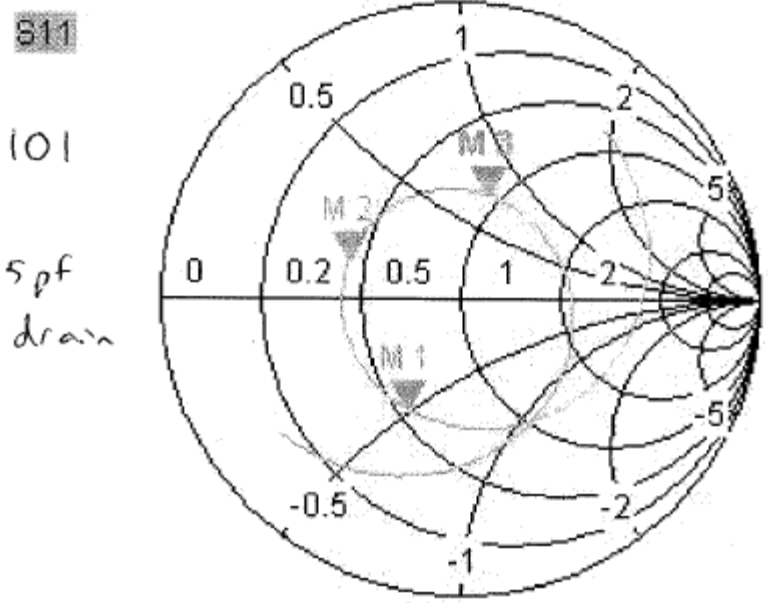
Gain and Return Loss Performance at 25°C

Ch1 Start 4 GHz Pwr -20 dBm Stop 7 GHz

Trc3 S21 dB Mag 1 dB / Ref 11 dB Cal Offs 3

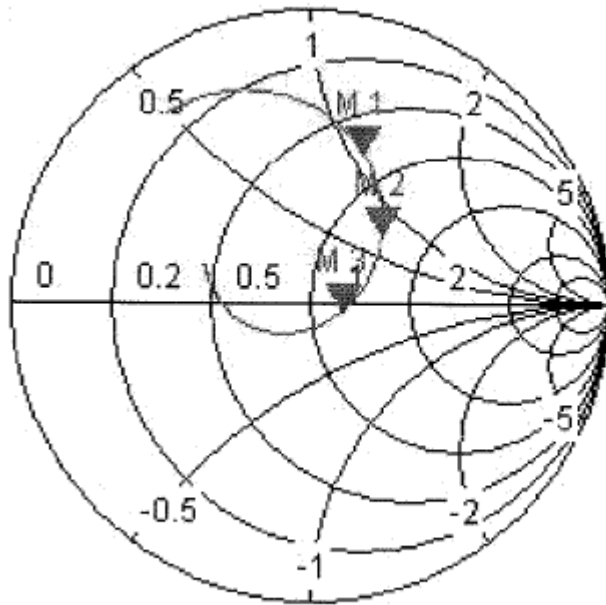


Ch1 Start 4 GHz Pwr -20 dBm Stop 7 GHz



Smith Ref1 U Cal Offs

4



t 4 GHz

Pwr -20 dBm

Stop 7 GHz