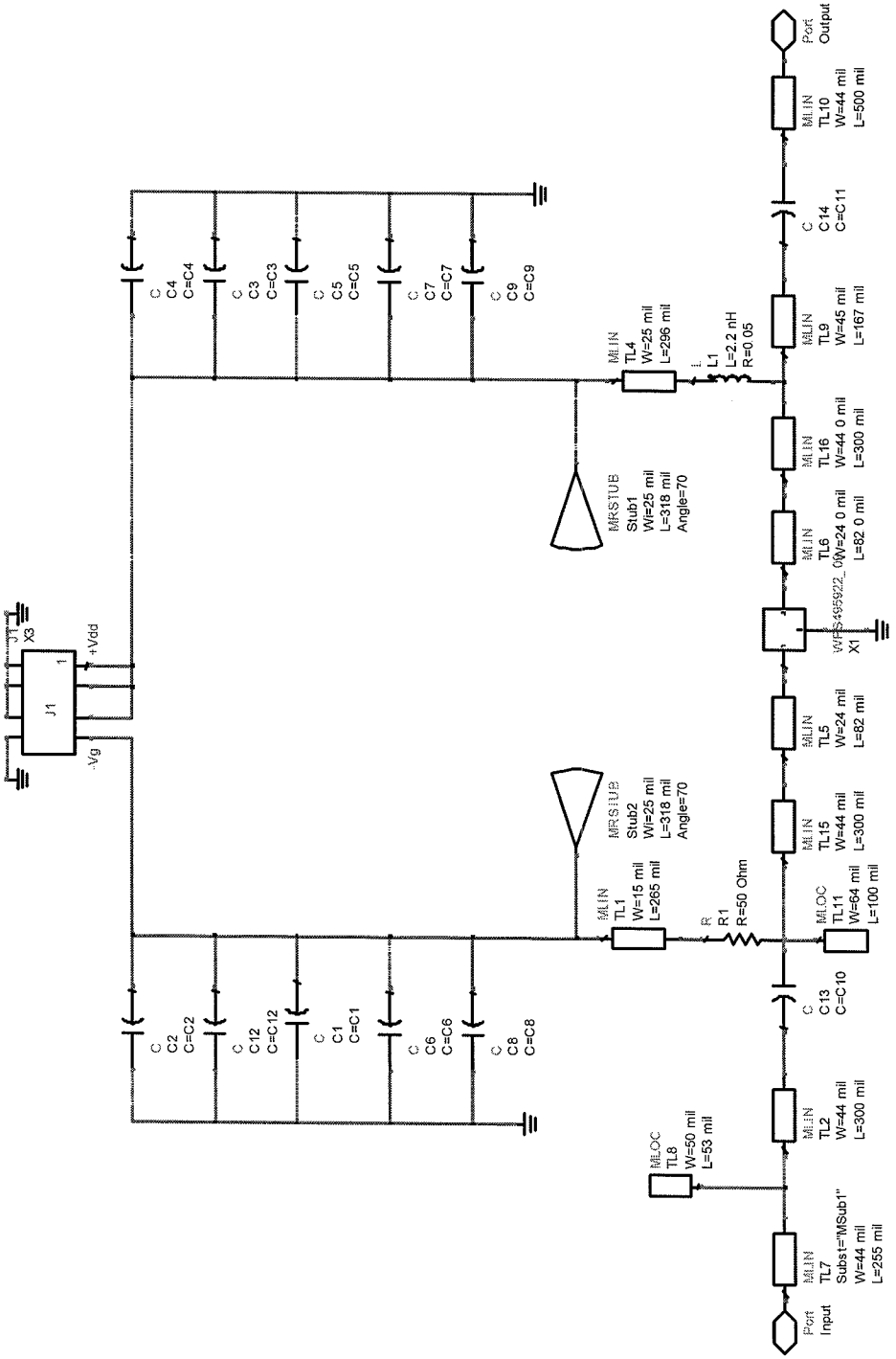
MwT WPS495922-02EV Test Fixture Setup Instructions

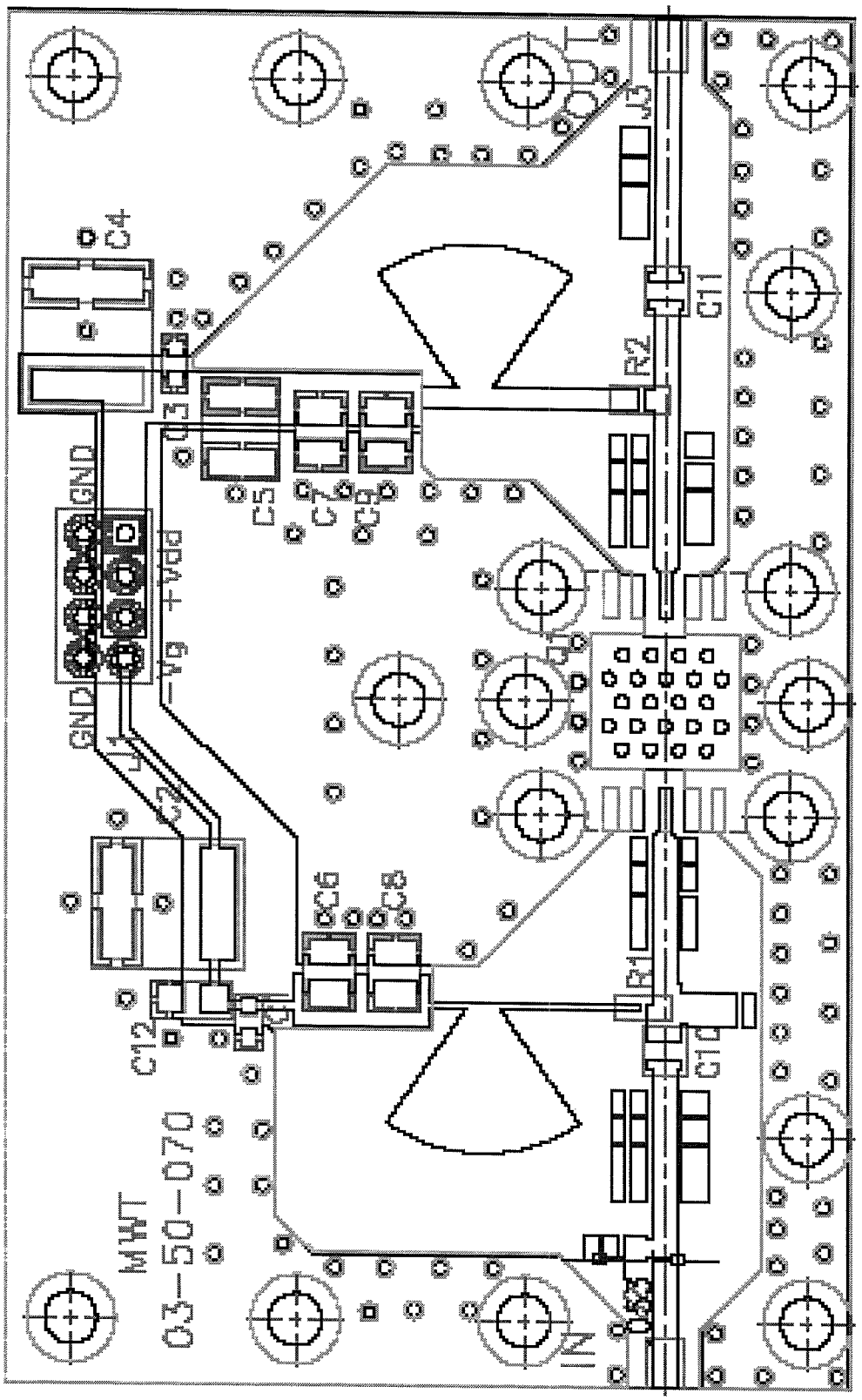
Note: Please ensure the test fixture is connected to a 50-ohm input and output impedance before beginning.

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 -0.9 volts. There should be no current flow on the gate.
7. Turn on the power supply to the Drain: set it to nominal 7.5 volts. There should be current flow on the drain.
8. You are now ready to provide RF power.



Notes:

1. This drawing is to be used in conjunction with assembly drawing of WPS495922-02EV.
2. Component values can be found on the bill of materials.



Assembly drawing for WPS495922-02EV.

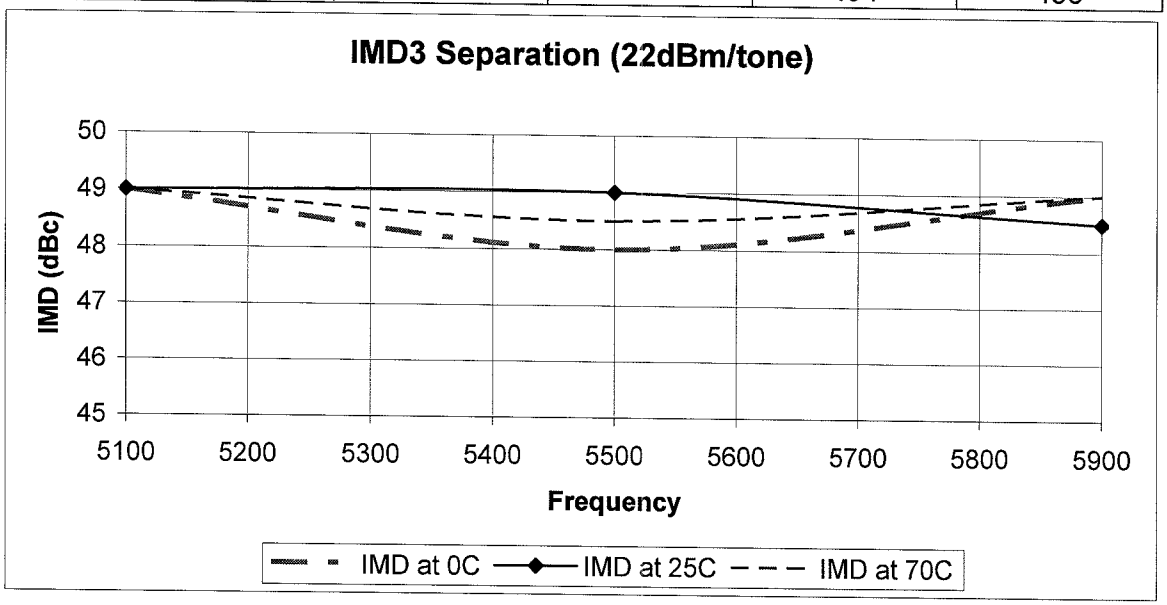
Bill of material for WPS495922-02EV

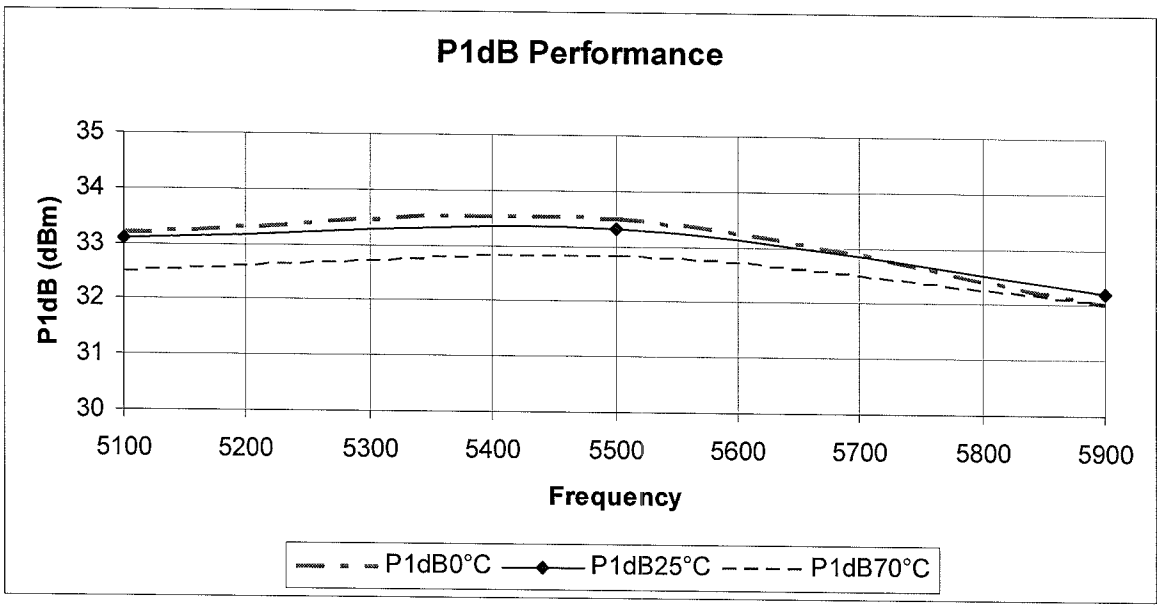
BOM for WPS-495922-02EV

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 0Z 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

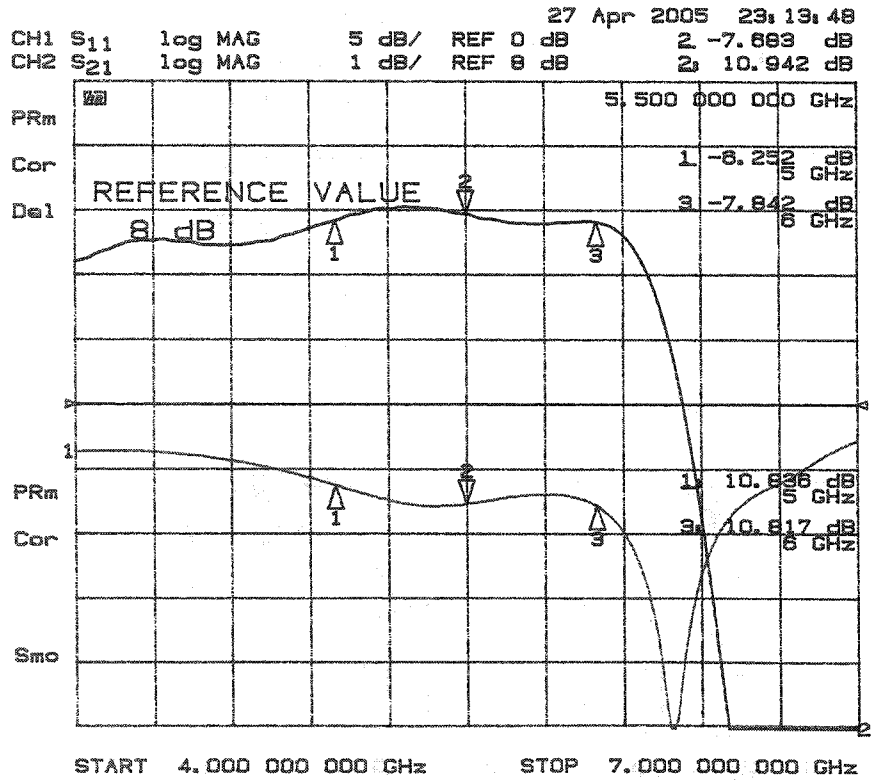
Performance Summary for WPS495922-02EV Vdd=7.5 volts, Vg=-0.9			
Parameter Description	Temperature (°C)		
Temperature (°C)	0	25	70
Small Signal Gain (dB)	10.8	10.8	10.4
Gain Flatness (dB)	0.5	0.5	0.5
VSWR (Input/ Output)	3.0:1/2.5:1	3.0:1/2.5:1	3.0:1/2.5:1
P1dB (measured at 5.5 GHz)	33.5	33.3	32.8
OIP3 (see note [1])	46 dBm	46 dBm	46 dBm
Ids (small signal condition)	508	494	456

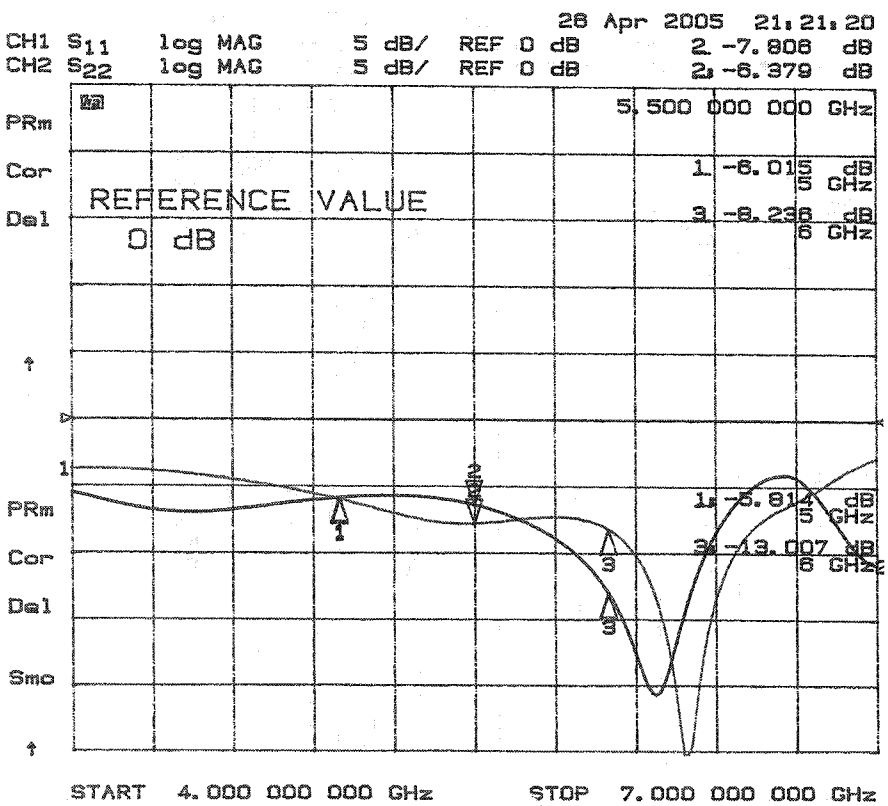




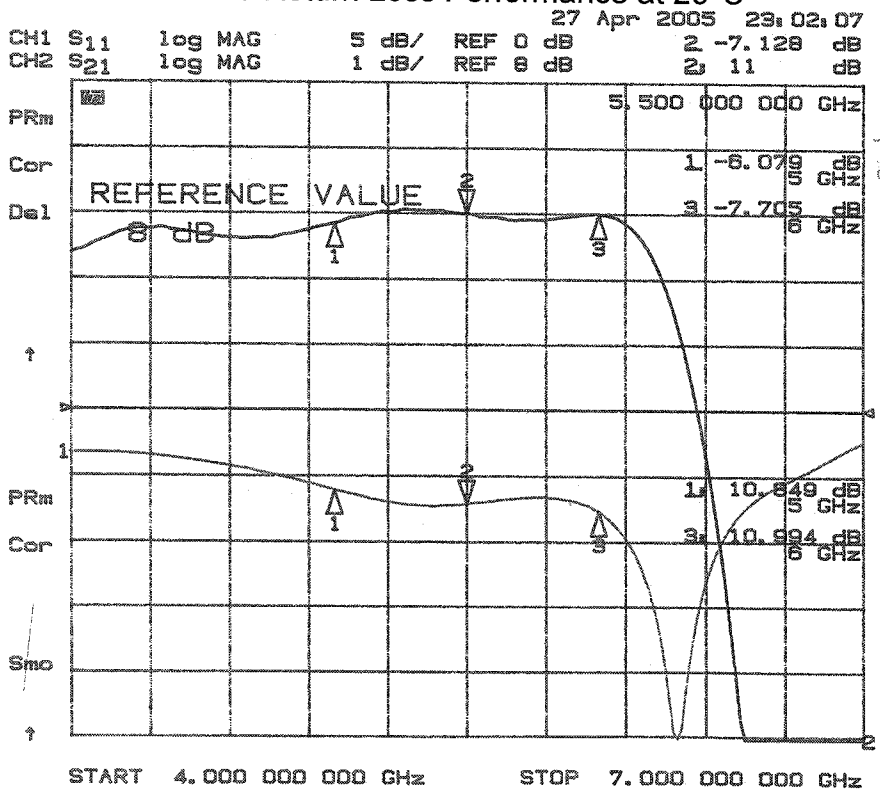
[1] 22 dBm per tone and 20 MHz separation

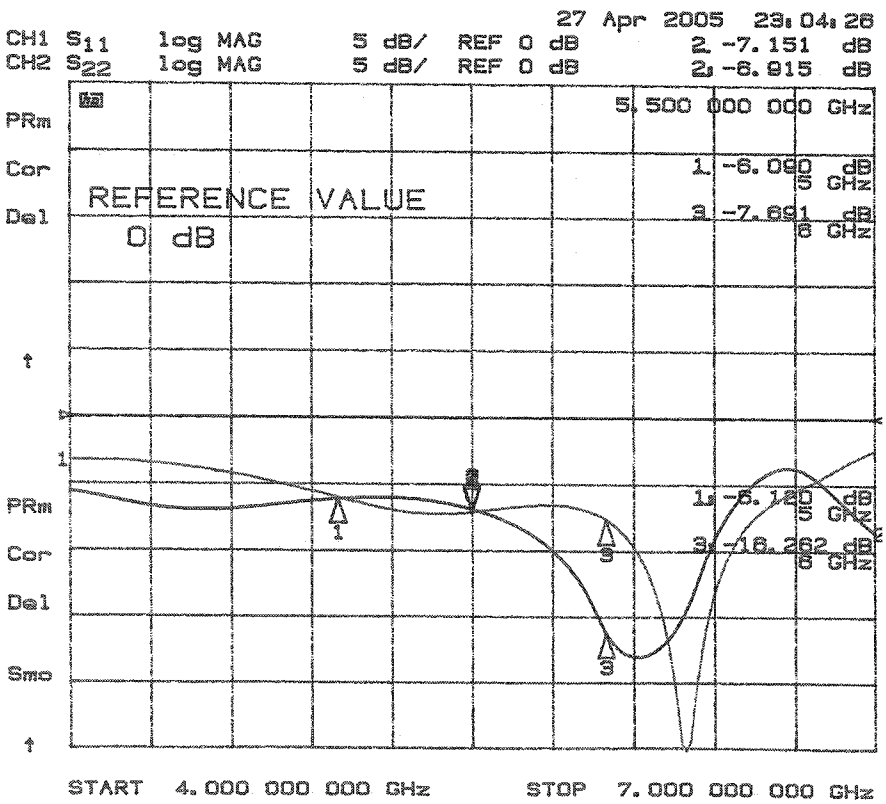
Gain and Return Loss Performance at 0°C.





Gain and Return Loss Performance at 25°C





Gain and Return Loss Performance at 70°C