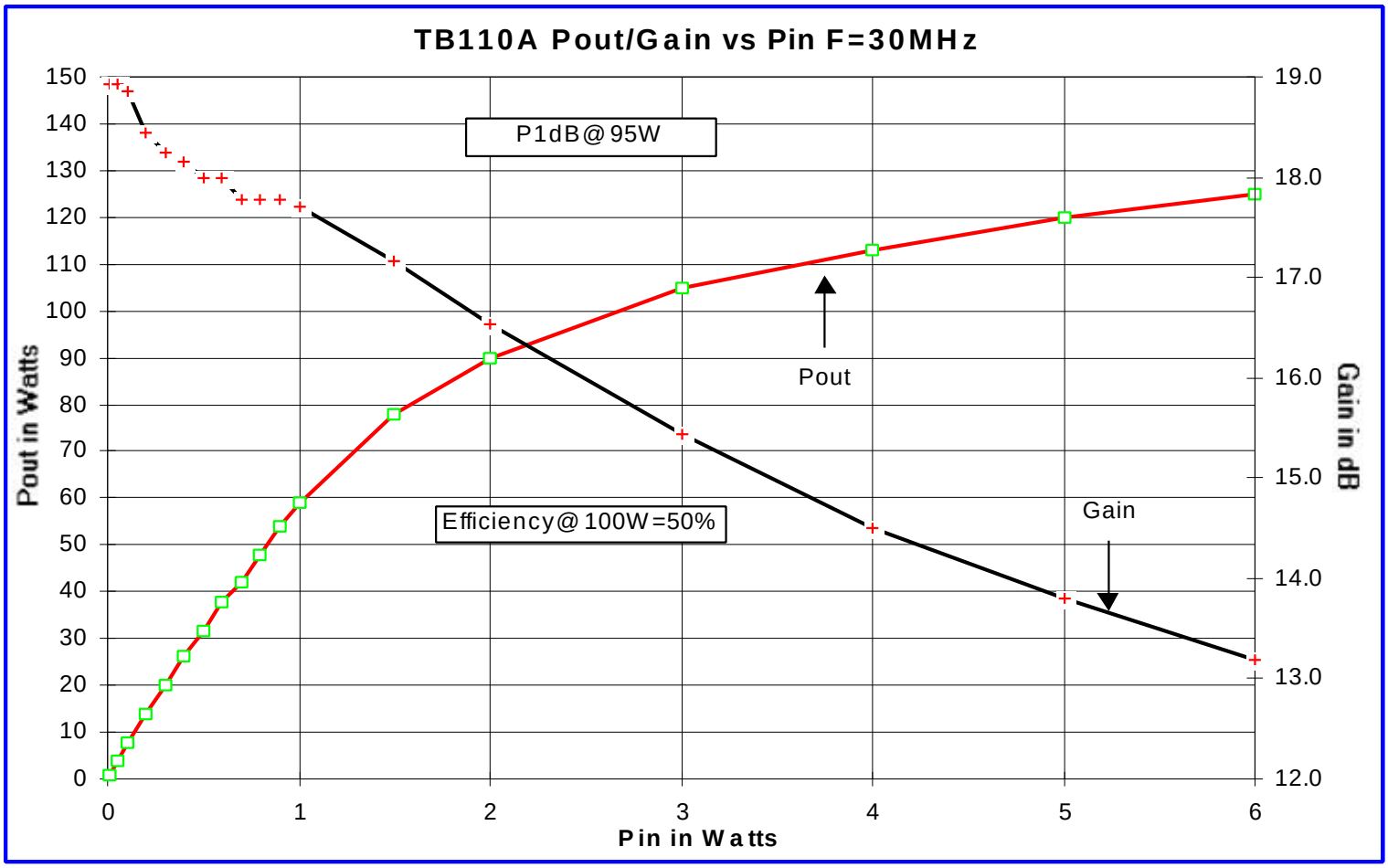
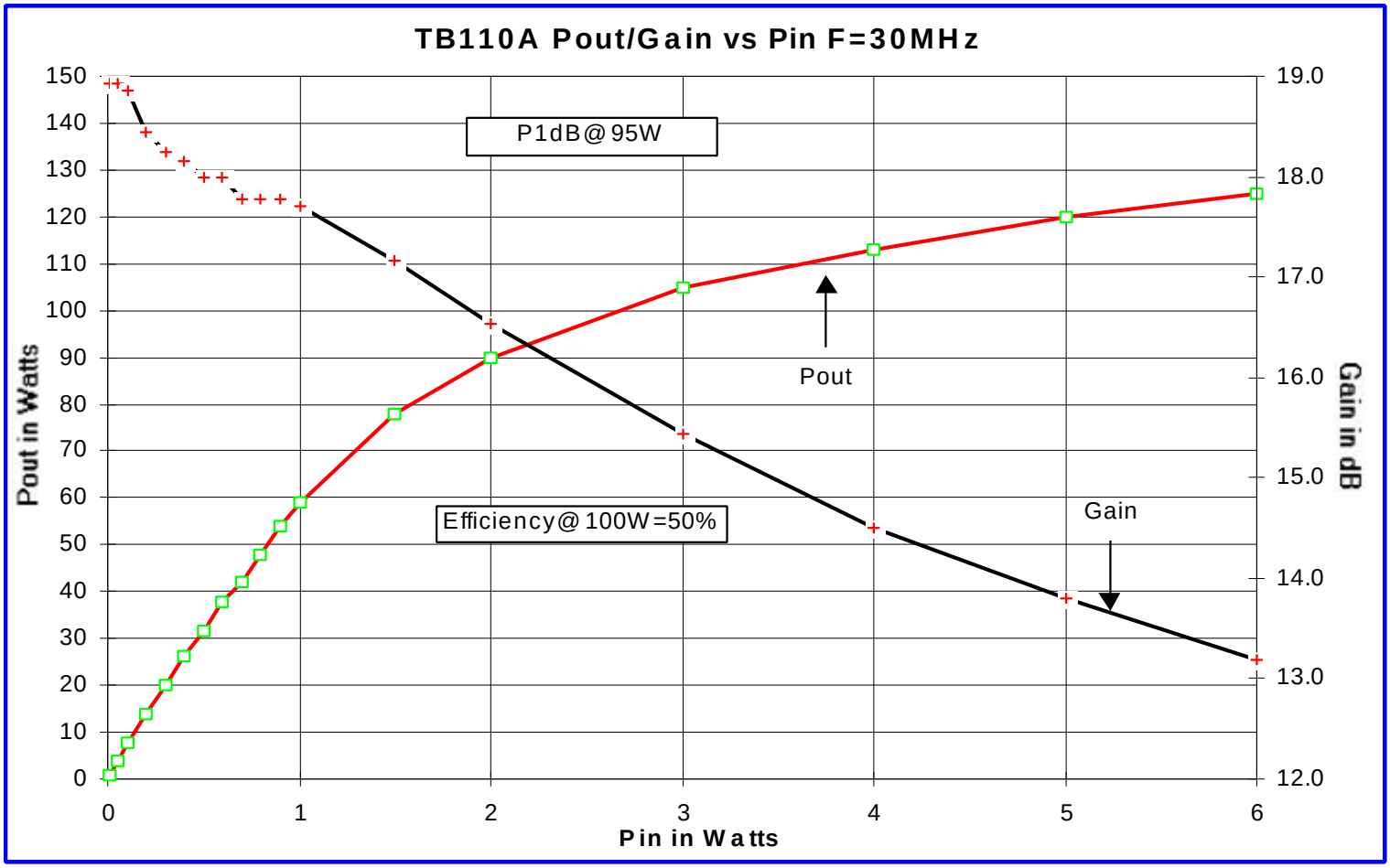
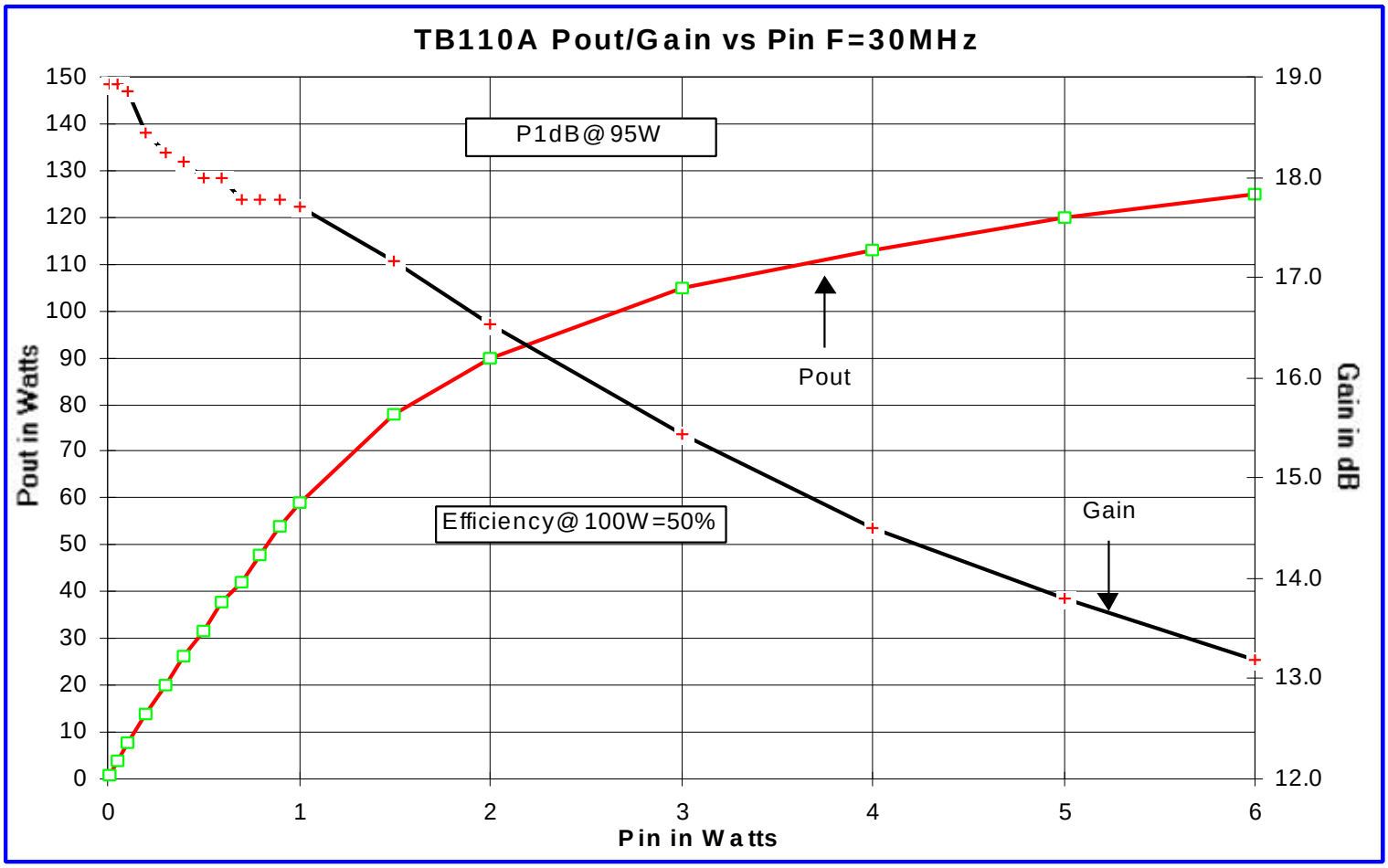
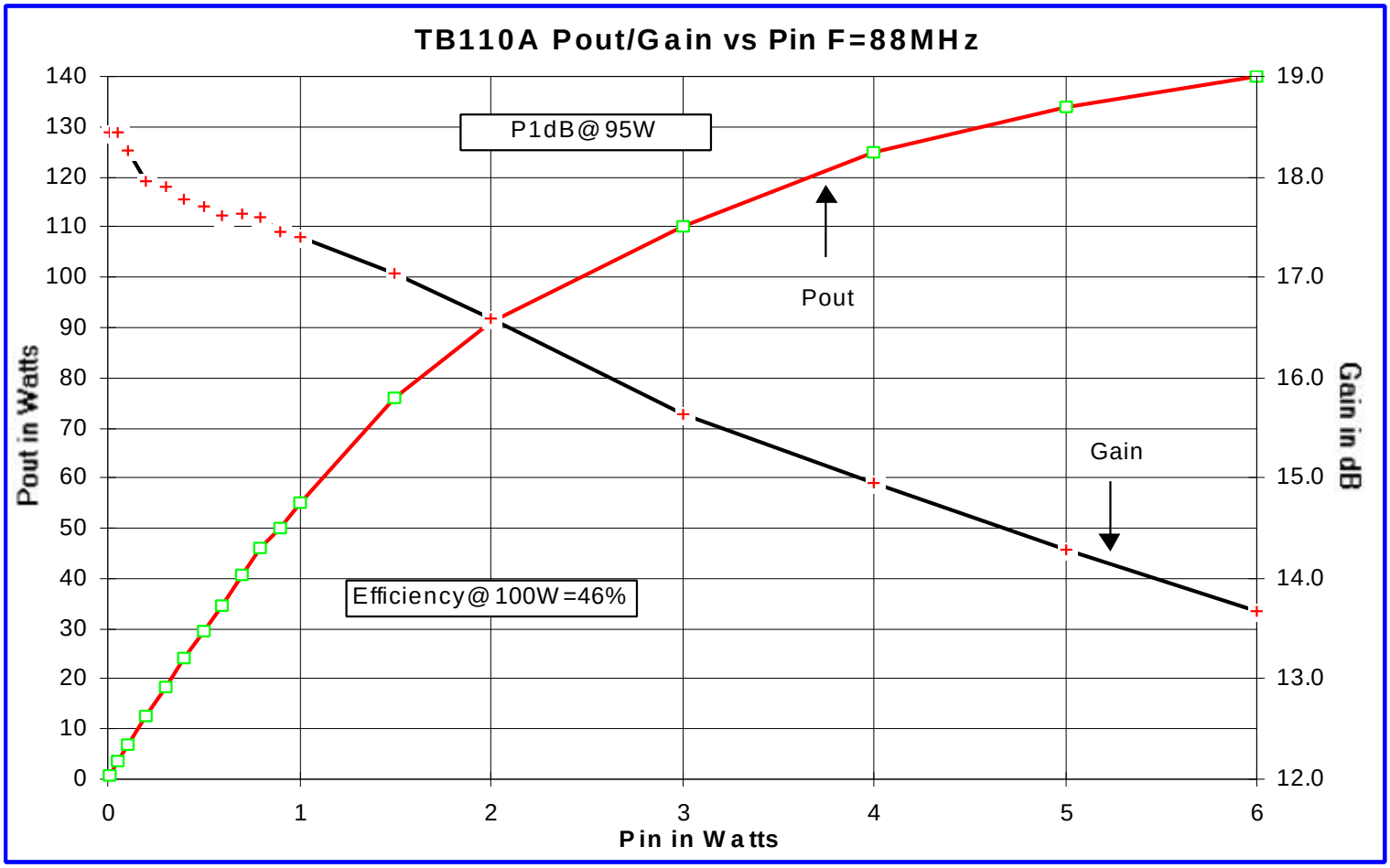
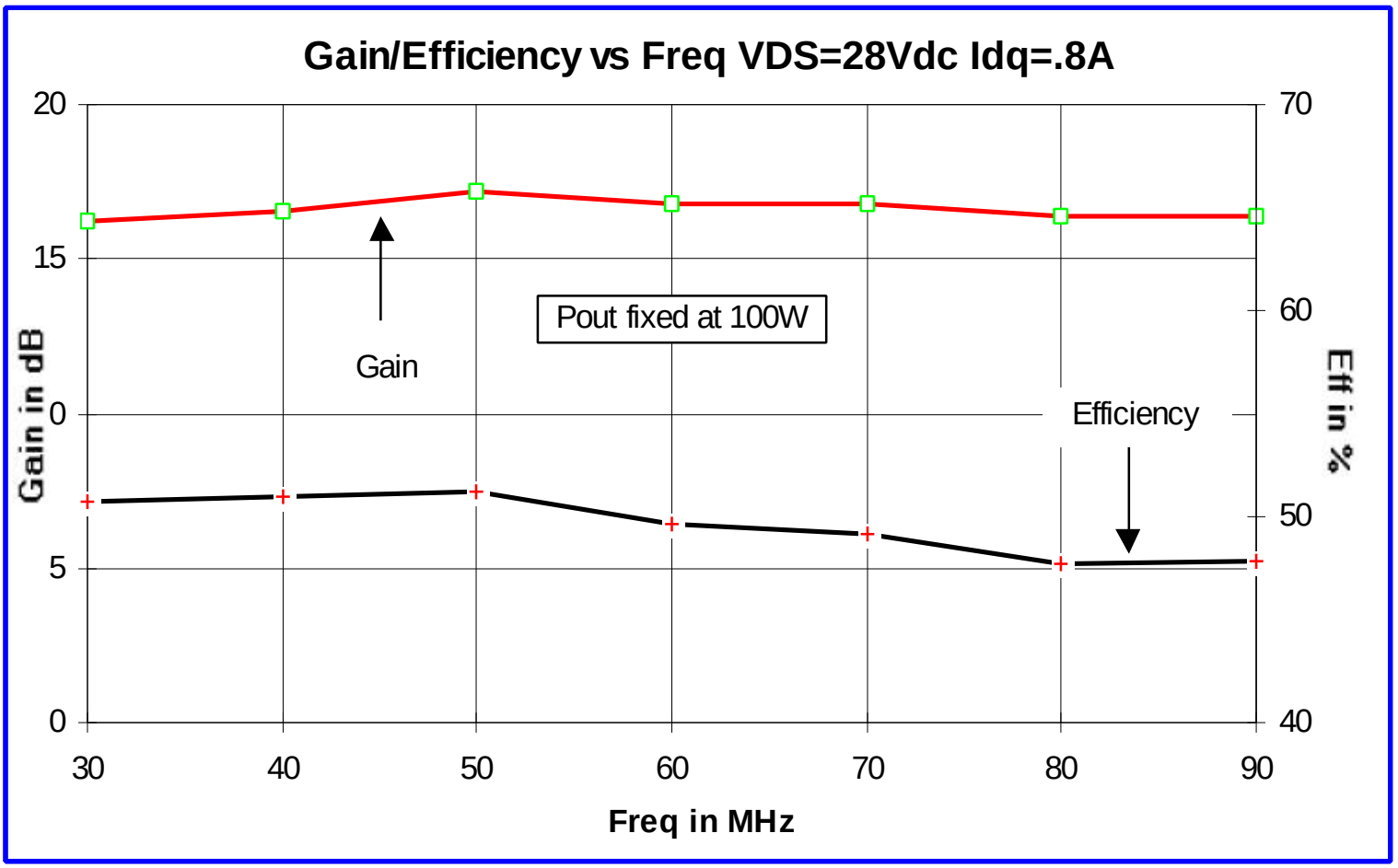
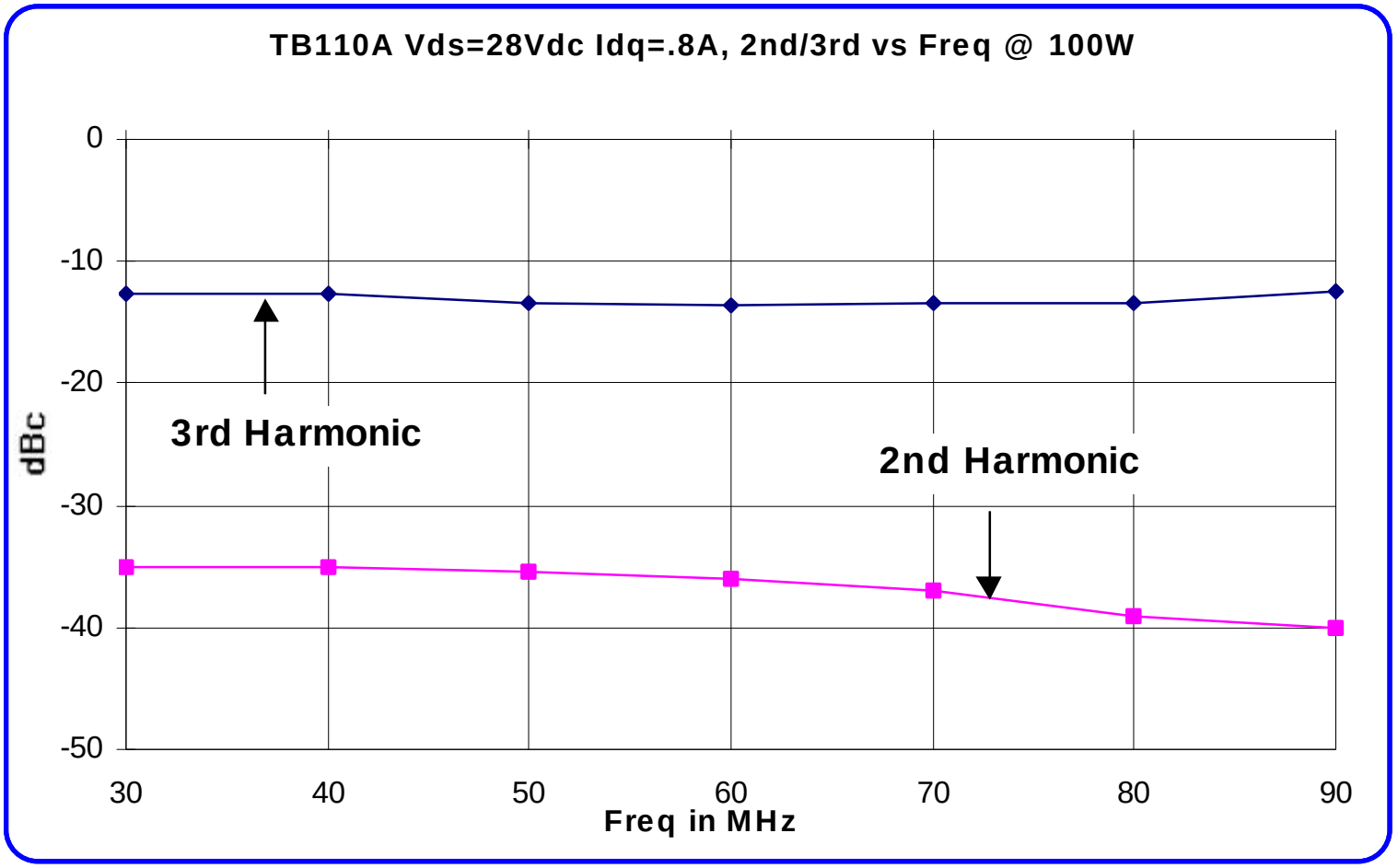

TB110A Pout/Gain vs Pin F=30MHz
P1dB@95W
Pout
Gain
Efficiency@100W=50%
Pout in Watts
Gain in dB
Pin in Watts
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
12.0
13.0
14.0
15.0
16.0
17.0
18.0
19.0
0
1
2
3
4
5
6

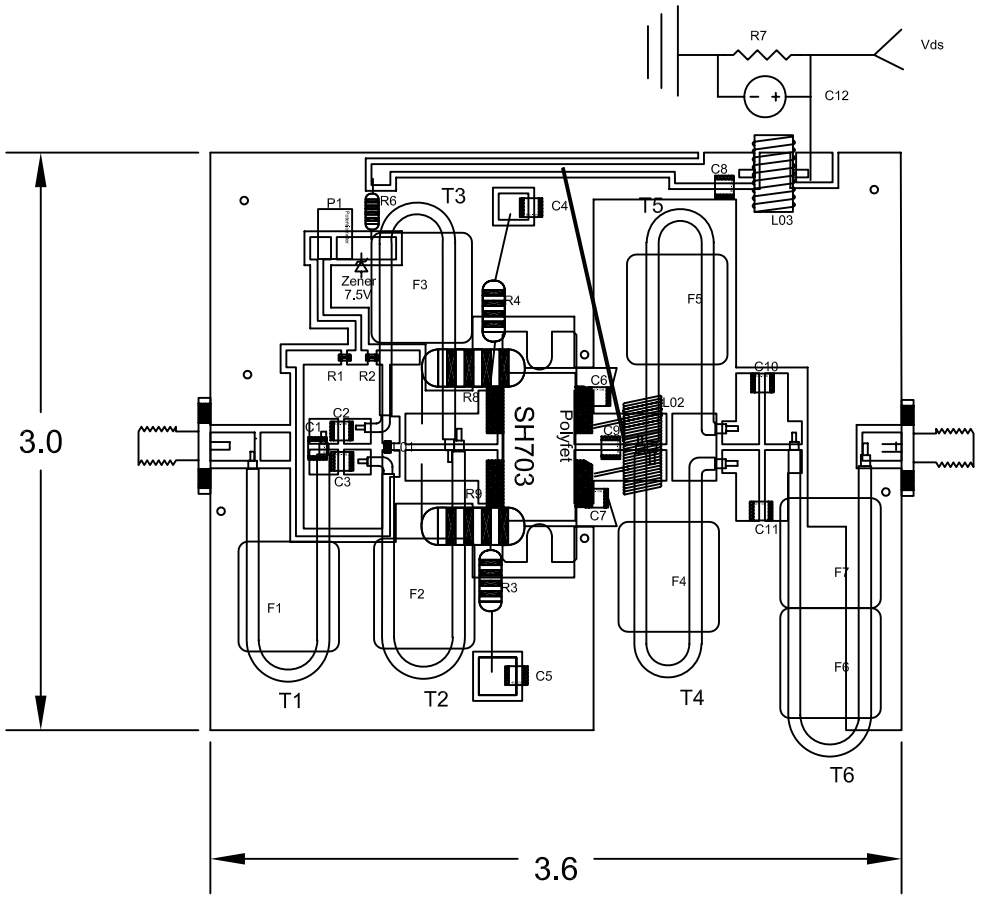

TB110A Pout/Gain vs Pin F=30MHz
P1dB@95W
Pout
Gain
Efficiency@100W=50%
Pout in Watts
Gain in dB
Pin in Watts
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
12.0
13.0
14.0
15.0
16.0
17.0
18.0
19.0
0
1
2
3
4
5
6


TB110A Pout/Gain vs Pin F=30MHz
P1dB@95W
Pout
Gain
Efficiency@100W=50%
Pout in Watts
Gain in dB
Pin in Watts
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0
19.0
18.0
17.0
16.0
15.0
14.0
13.0
12.0
0
1
2
3
4
5
6


TB110A Pout/Gain vs Pin F=88MHz
P1dB@95W
Pout
Gain
Efficiency@100W=46%
Pout in Watts
Gain in dB
Pin in Watts
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0
19.0
18.0
17.0
16.0
15.0
14.0
13.0
12.0
0
1
2
3
4
5
6


Gain/Efficiency vs Freq VDS=28Vdc Idq=.8A
20
15
0
5
0
70
60
50
40
30
40
50
60
70
80
90
Gain in dB
Eff in %
Freq in MHz
Pout fixed at 100W
Gain
Efficiency


TB110A Vds=28Vdc Idq=.8A, 2nd/3rd vs Freq @ 100W
0
-10
-20
-30
-40
-50
30
40
50
60
70
80
90
dBc
Freq in MHz
3rd Harmonic
2nd Harmonic



F1-F7= AMIDON BN-61-202 125mu BINOCULAR FERRITE
T1: UT85-50, 3.5 in.
T2-T3: UT75-10 3.5 in.
T4-T5: UT85-15 3.5 in.
T6: UT85-50 4in.

*Cut hole through pcb and
epoxied F04-07 to copper
using resinlab, ellsworth adhesives

C1	ATC-100B 11pf
C2, C3, C4 C5, C6, C7 C8	ATC-700B 100000pf
C9	ATC-200B 33pf
C10, C11	ATC-700B 1000pf
C12	63uf,47V elec.
R01-02	0805 CHIP RES. 10K
R03-04	1/4W 15 ohms
R08-09	2W 100ohms
R06	1/4W 2.2K ohms
R07	1/4W 10K ohms
L01	82nH surface Mount CoilCraft 0805HT-82NTJL
L02	9 turns, 18awg
L03	22AWG 850mu,10 turns
P1	10K pot
F01-07	125mu Binocular
T01	UT85-50
T02-03	UT75-10
T04-05	UT85-15
T06	UT85-50
PCB	FR4, Er=3.55 0.064in. thick

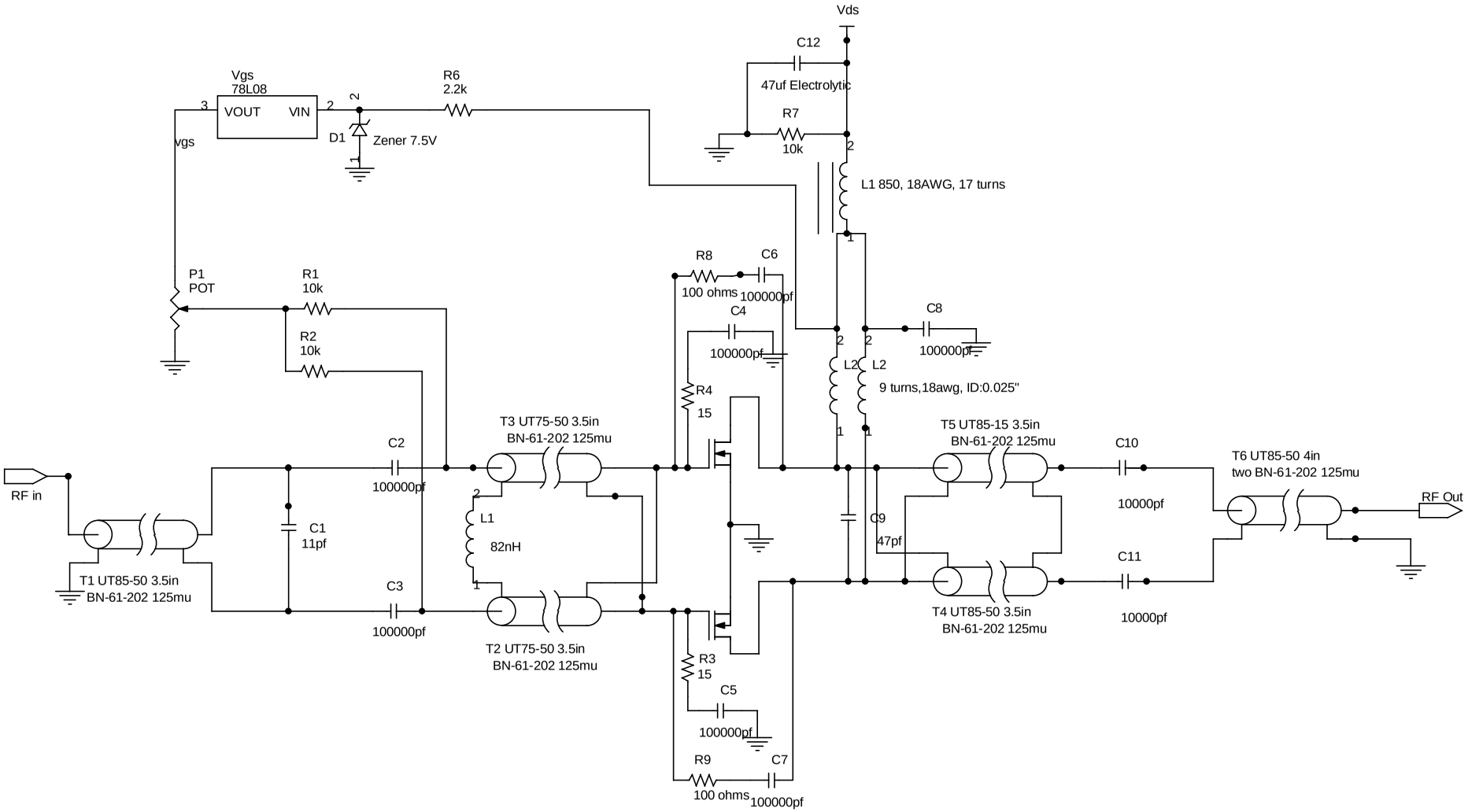
DRN BY	Noah Xiong	11/20/02
MOD BY:		
ELECT	M. Cervantes	3/12/07
MECH	M. Cervantes	3/12/07
PROC		
QUAL		
MOD BY:		

POLYFET RF DEVICES

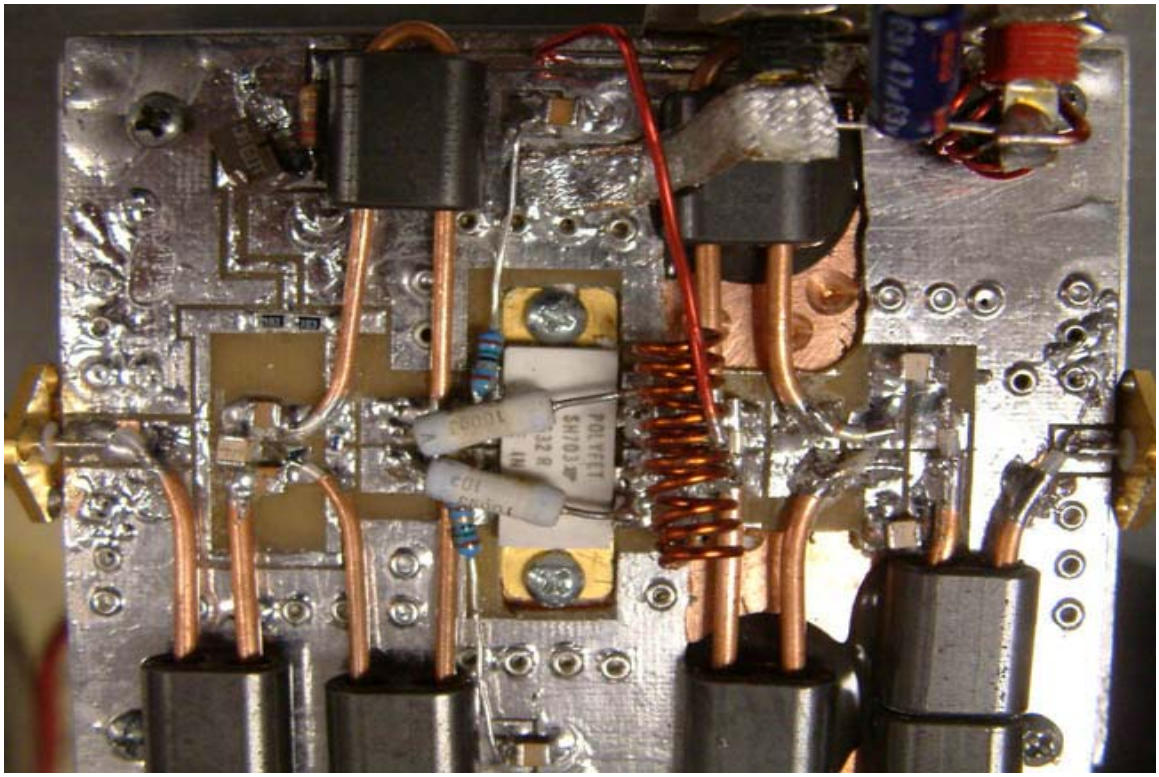
TB110A 30-88MHz,100w P1dB

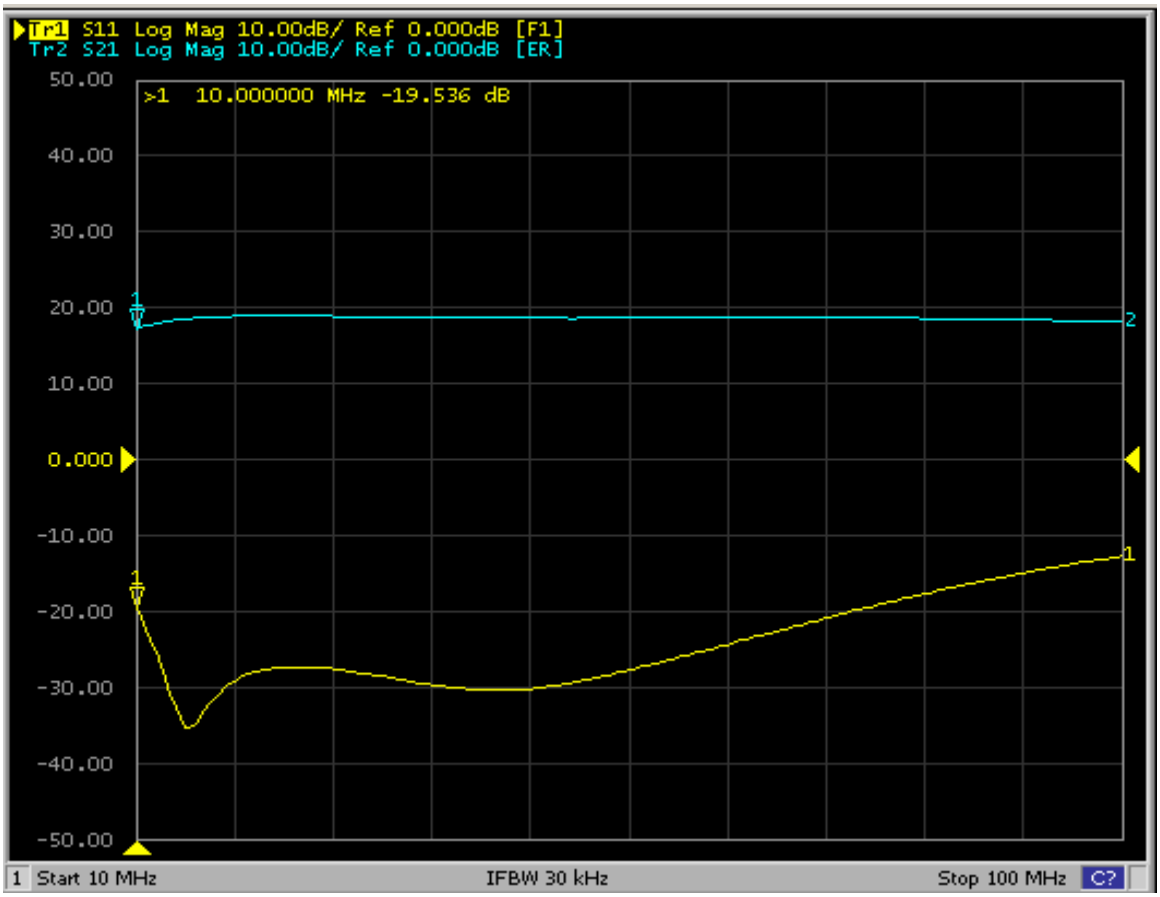
SIZE	FSCM NO.		REV
		SH703 VDS=28VDC IDQ=0.8A	

SCALE: pcb 1:1 | SHEET 1 OF 1



Title	TB110A 30-88MHz,100W P1dB	
Size	Document Number	Rev
Date: Wednesday, March 14, 2007	Sheet 1 of 1	




Tr1 S11 Log Mag 10.00dB/ Ref 0.000dB [F1]
Tr2 S21 Log Mag 10.00dB/ Ref 0.000dB [ER]
>1 10.000000 MHz -19.536 dB
50.00
40.00
30.00
20.00
10.00
0.000
-10.00
-20.00
-30.00
-40.00
-50.00
1 Start 10 MHz
IFBW 30 kHz
Stop 100 MHz

TB110A