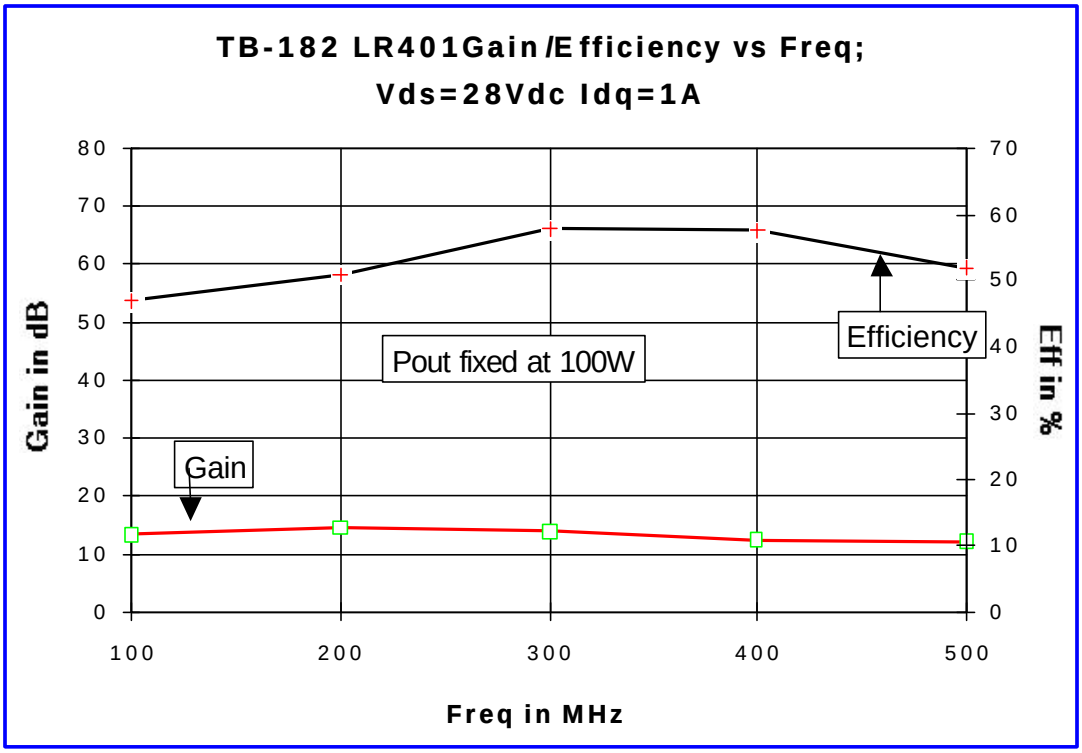
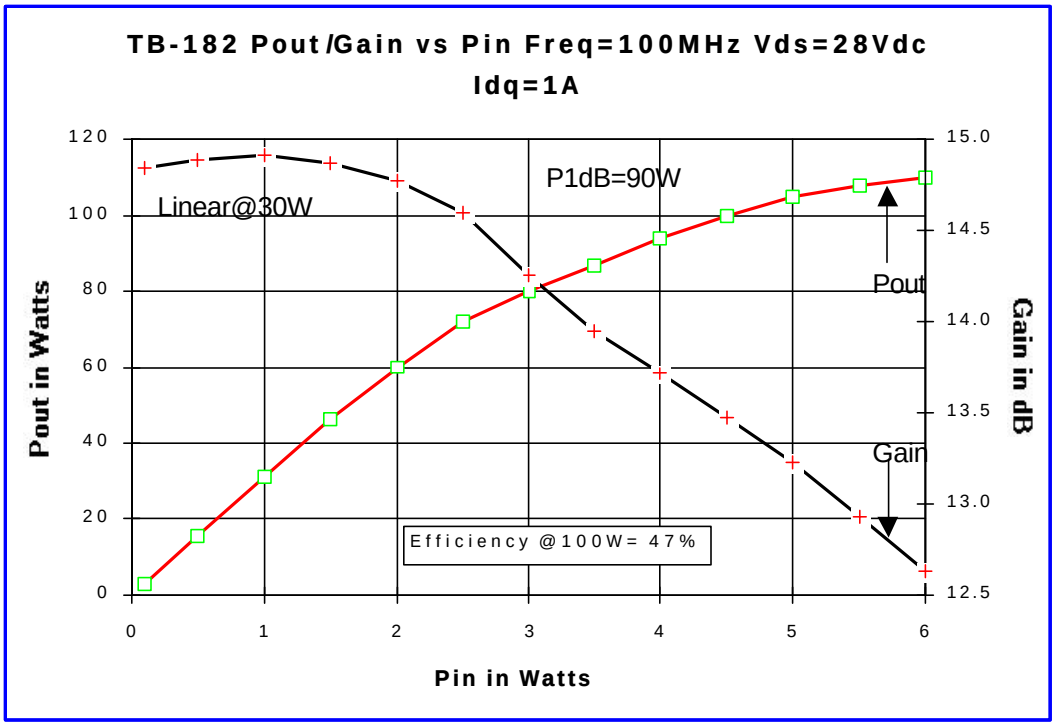
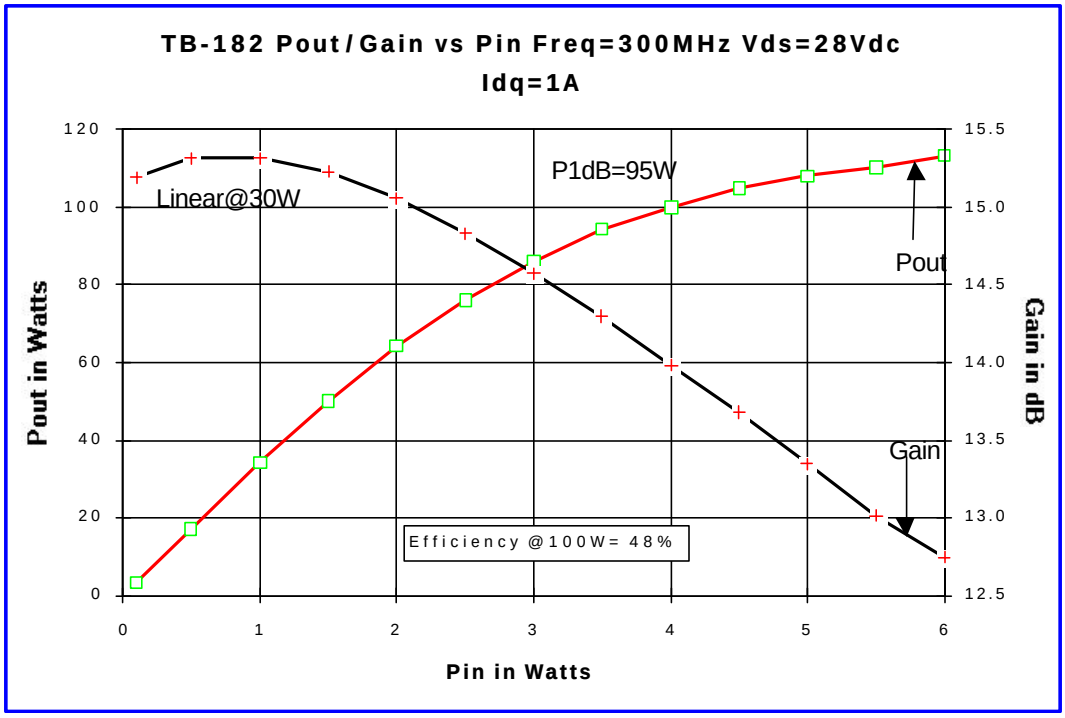
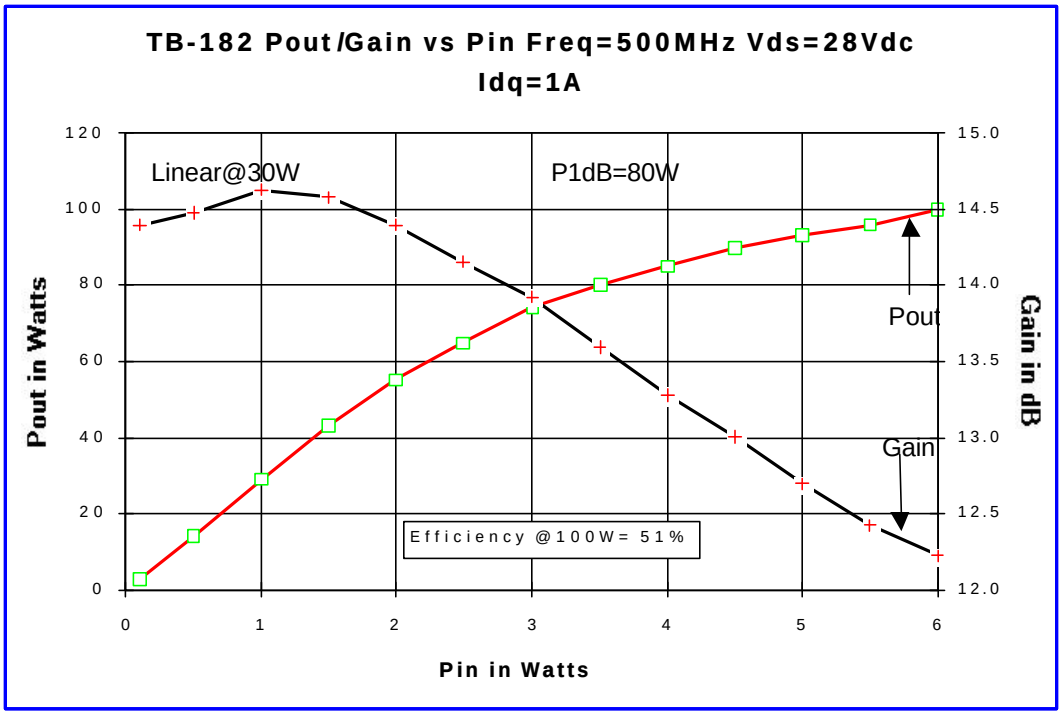
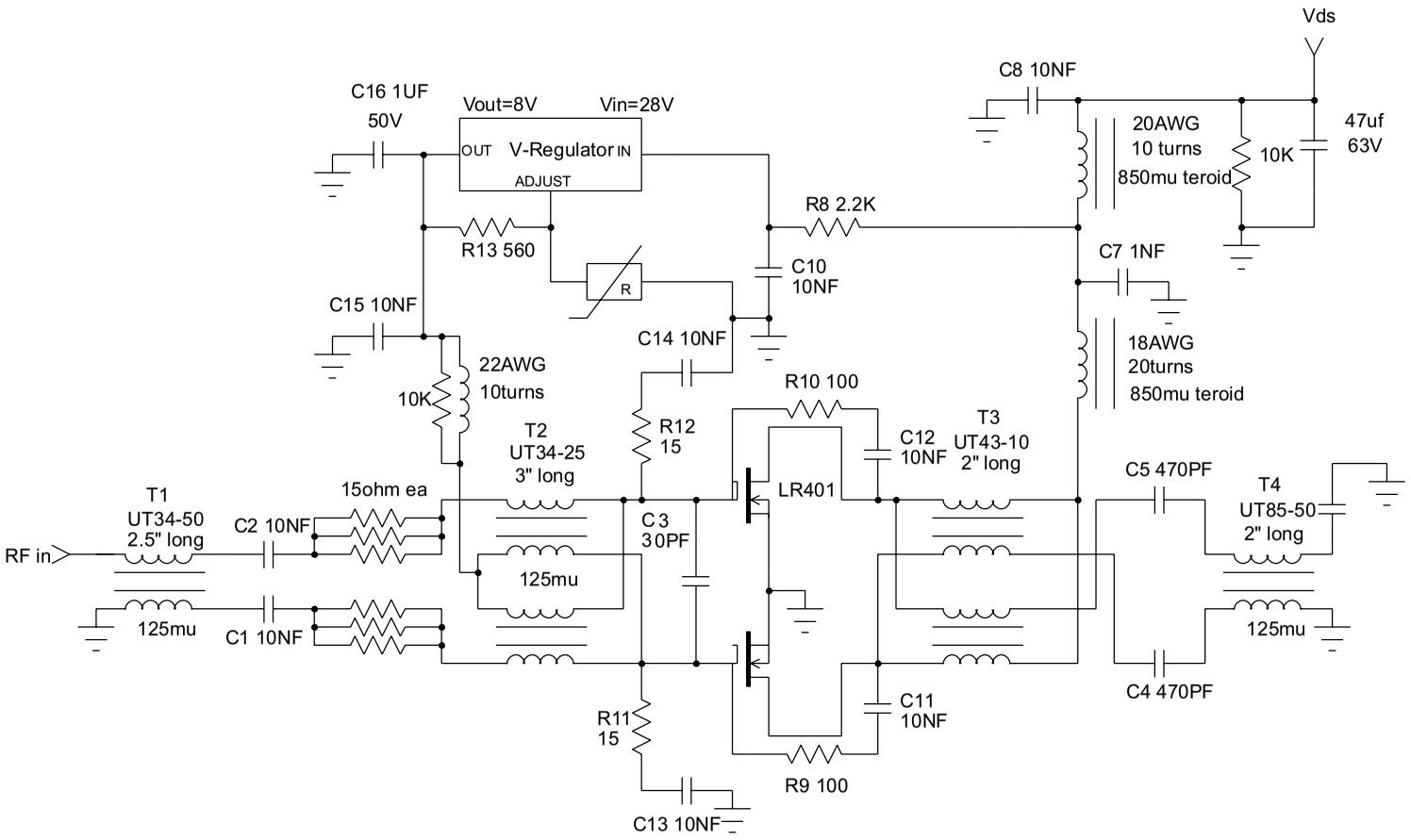

TB-182 LR401Gain/Efficiency vs Freq;
Vds=28Vdc Idq=1A
Gain in dB
Eff in %
Freq in MHz
Pout fixed at 100W
Efficiency
Gain
80
70
60
50
40
30
20
10
0
70
60
50
40
30
20
10
0
100
200
300
400
500


TB-182 Pout/Gain vs Pin Freq=100MHz Vds=28Vdc
Idq=1A
Pout in Watts
Gain in dB
Pin in Watts
Linear@30W
P1dB=90W
Pout
Gain
Efficiency @100W= 47%
120
100
80
60
40
20
0
15.0
14.5
14.0
13.5
13.0
12.5
0
1
2
3
4
5
6


TB-182 Pout/Gain vs Pin Freq=300MHz Vds=28Vdc
Idq=1A
Linear@30W
P1dB=95W
Pout
Gain
Efficiency @100W= 48%
Pout in Watts
Gain in dB
Pin in Watts
120
100
80
60
40
20
0
15.5
15.0
14.5
14.0
13.5
13.0
12.5
0
1
2
3
4
5
6


TB-182 Pout/Gain vs Pin Freq=500MHz Vds=28Vdc
Idq=1A
Linear@30W
P1dB=80W
Pout
Gain
Efficiency @100W= 51%
Pout in Watts
Gain in dB
Pin in Watts
120
100
80
60
40
20
0
15.0
14.5
14.0
13.5
13.0
12.5
12.0
0
1
2
3
4
5
6

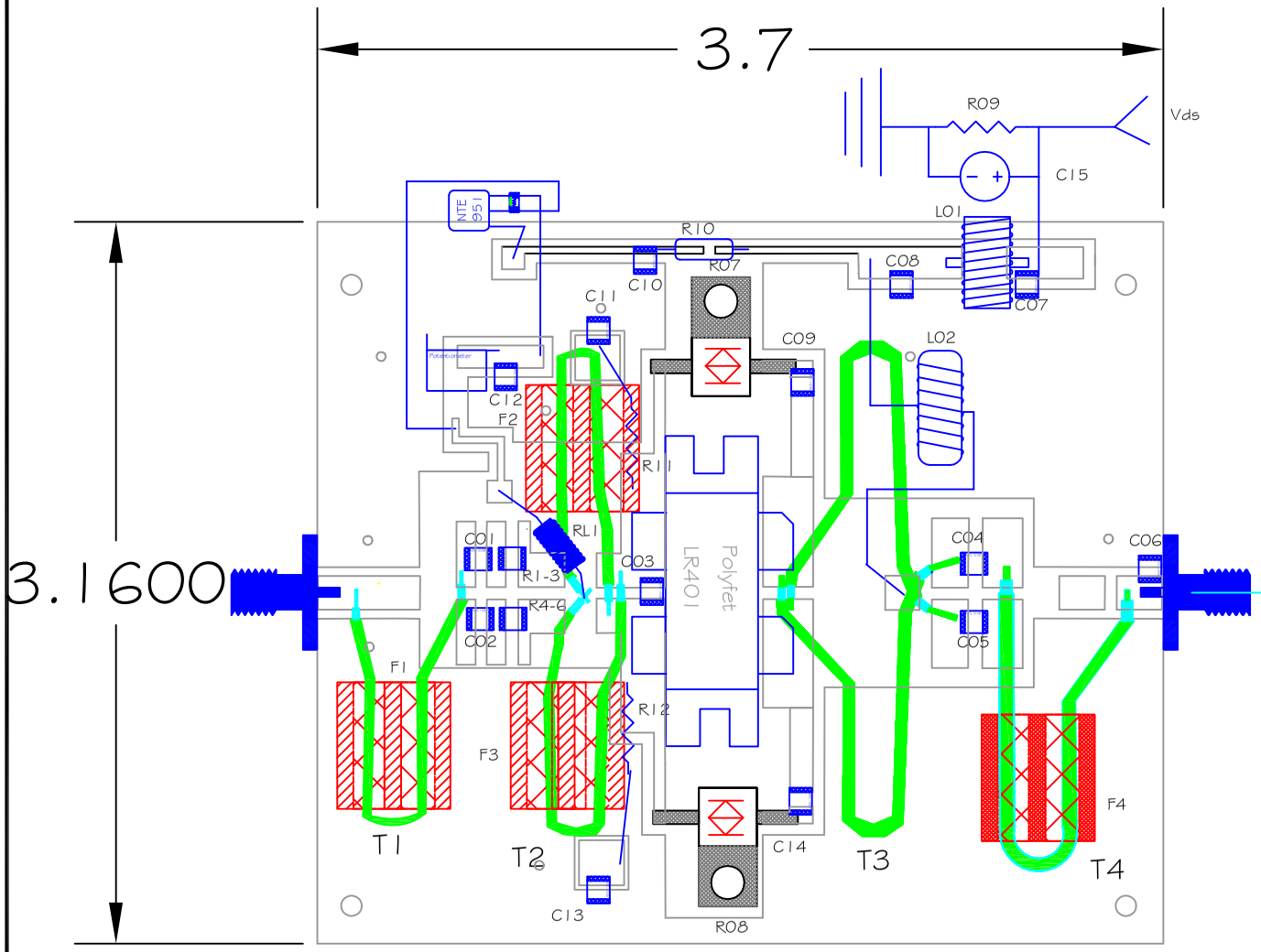


DRN BY	J.Citrolo	5/7/03
CHKD		
ELECT	J.Citrolo	5/7/03
MECH	J.Citrolo	5/7/03
PROC		
QUAL		
PGMS		

Polyfet RF Devices

TB182, 100W, 100-500MHz

SIZE	FSCM NO.	LR401 Vds=28Vdc Idq=1A	REV



C1,2,7,9,10	ATC-200B 10nf
C11,12,13,14	ATC-200B 10nf
C03	ATC-100B 30pf
C04,5	ATC-700B 470pf
C06	ATC-100B 30pf
C08	ATC-700B 1nf
C15	47uf, 63V electrolytic
R01-6	1210 150hm each chip
R07,8	20W KDI 100 ohm
R09	1/4W axial 10K ohm
R10	1/4W axial 2.2K ohm
R11,12	1/4W axial 15 ohm
LO1	20AWG 10urns 850mu teroid
LO2	18AWG 20turns 850mu teroid
RLO1	10K 1/4W axial, 22AWG 10 turns
Q01	LR401
Vds	28Vdc
Idq	1A

T1: UT34-50 2.5in..
T2: UT34-25 3in.
T3: UT43-10 2in.
T4: UT85-50 3in.
F4 is epoxied to copper thru pcb.

PCB is Teflon, H=0.032", double-sided 1 oz. copper, Er=2.5
F1-F4= AMIDON BN-61-2102 125mu BINOCULAR FERRITE

DRN BY J.Citrolo	5/06/03	POLYFET RF DEVICES
CHKD		TB182, 100-500MHz, LR401
ELECT		
MECH		
PROC		SIZE / FSCM NO. / 100W, Vds=28Vdc, Idq=1A / REV
QUAL		
PGMS		SCALE: pcb 1:1 / SHEET 1 OF 1

This is a small signal plot of the TB182 with a LR401 running at 28Vdc and 1A