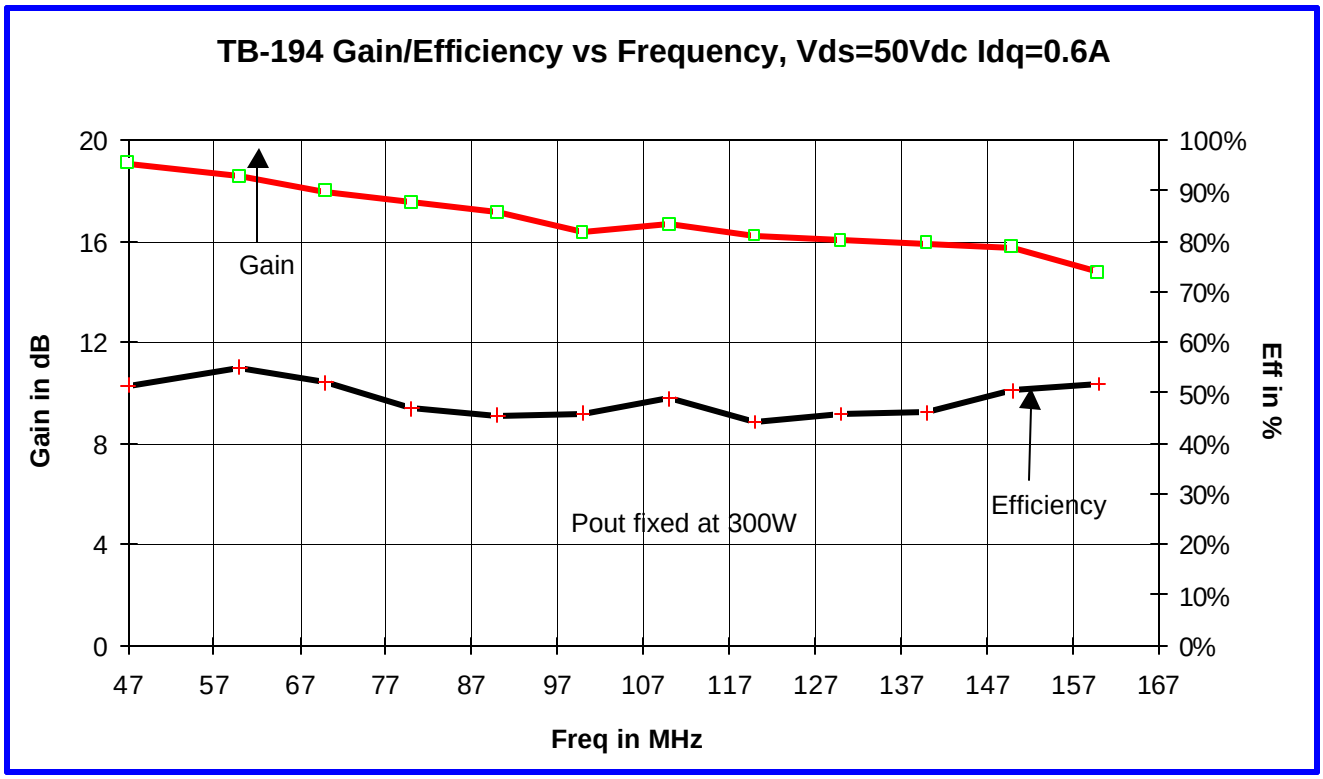
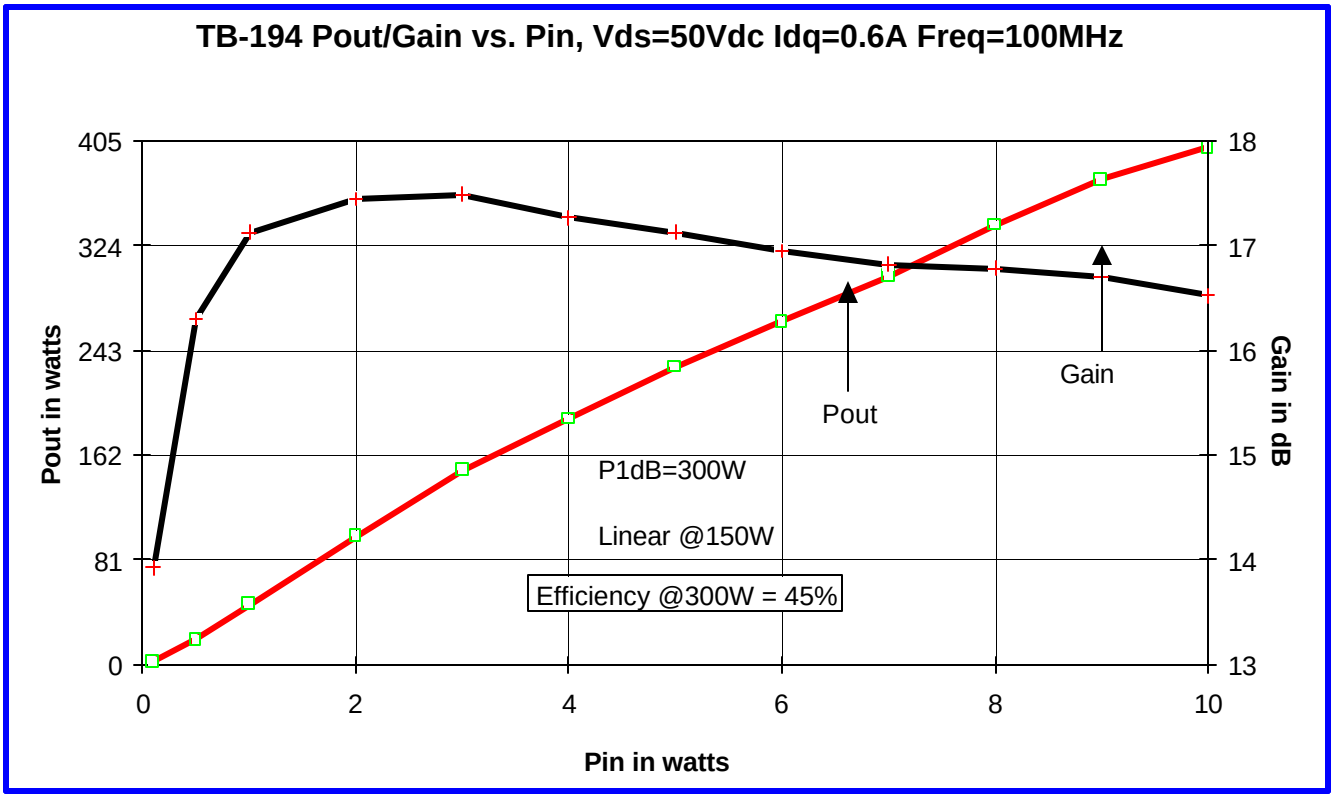
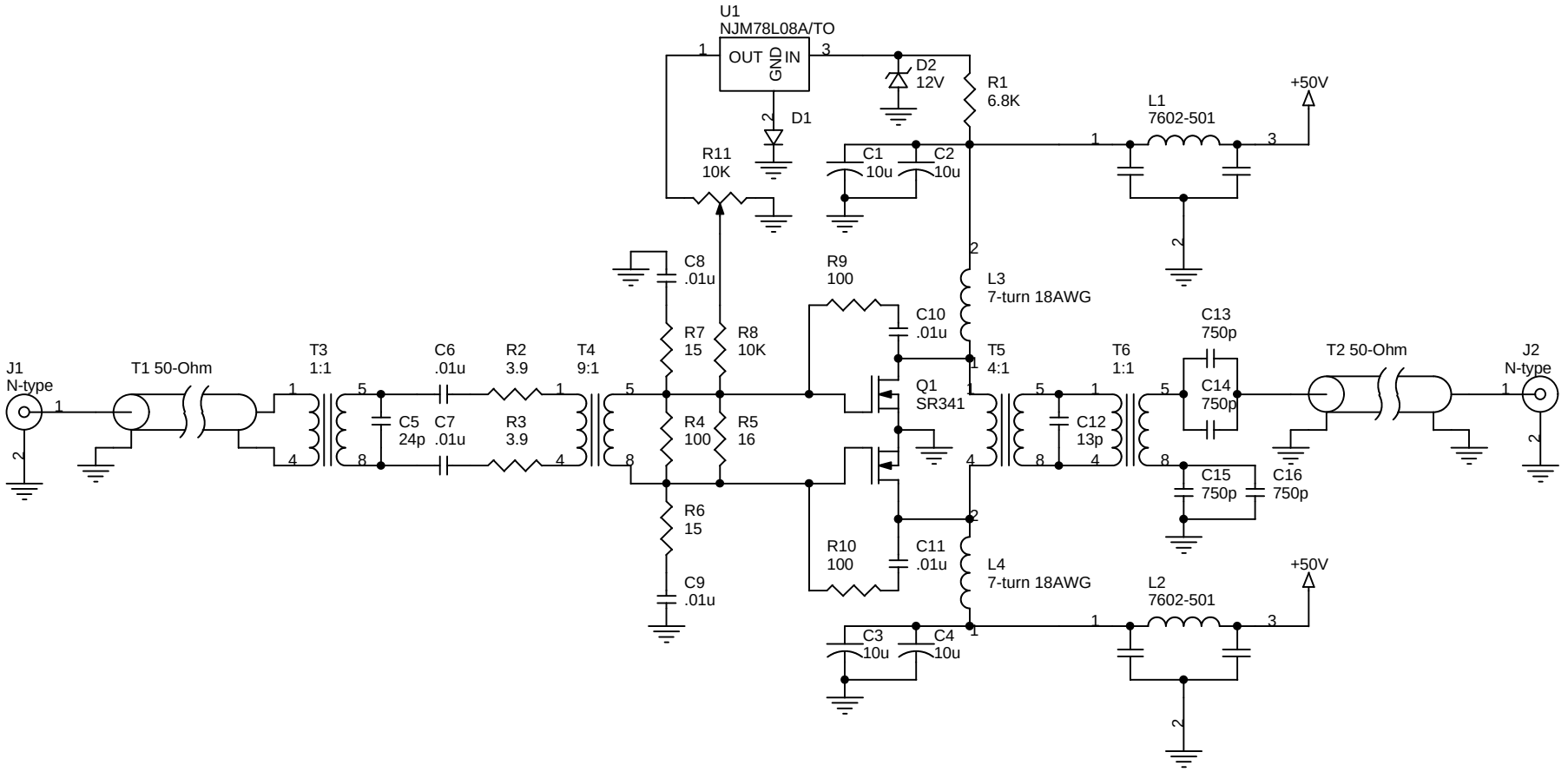
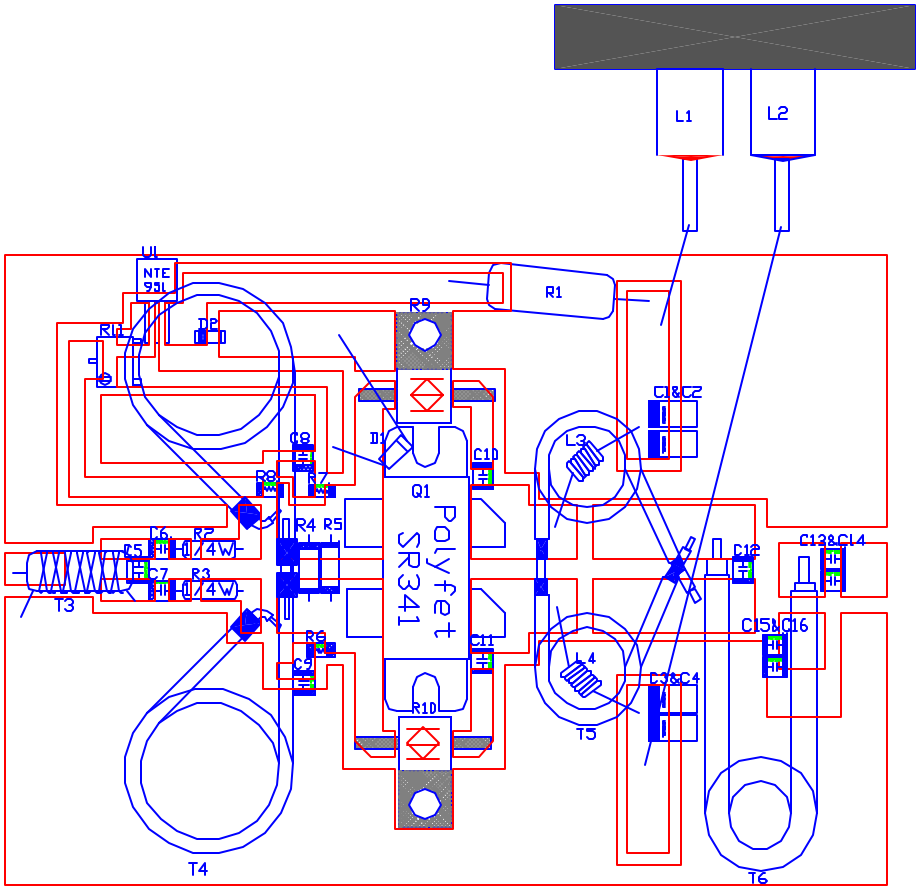

TB-194 Gain/Efficiency vs Frequency, Vds=50Vdc Idq=0.6A
Gain in dB
Eff in %
Freq in MHz
Gain
Efficiency
Pout fixed at 300W
20
16
12
8
4
0
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
47
57
67
77
87
97
107
117
127
137
147
157
167


TB-194 Pout/Gain vs. Pin, Vds=50Vdc Idq=0.6A Freq=100MHz
Pout in watts
Gain in dB
Pin in watts
Pout
Gain
P1dB=300W
Linear @150W
Efficiency @300W = 45%
405
324
243
162
81
0
18
17
16
15
14
13
0
2
4
6
8
10



Title	TB194, 47-160MHz, 300W, 15dB	
Size A	Document Number Vds=50V, Idq=0.6A	Rev 0
Date: Wednesday, November 24, 2004	Sheet 1 of 1	



SYMBOL	VALUE	DESCRIPTION
C1 - C4	10uF	Vishay/Sprague Solid Tantalum SMD Capacitor
C5	24pF	ATC100B Capacitor
C6 - C11	0.01uF	ATC200B Capacitor
C12	13pF	ATC100B Capacitor
C13 - C16	750pF	ATC700B Capacitor
D1	0.7V	General Purpose Diode
D2	12V	12V@5mA Axial Zener Diode
J1*, J2*	N-type	Pasternack p/n 4492
L1, L2	2000pF	Tusonix Filter p/n 7602-501
L3, L4	18AWG	7-turn, ID 0.130"
R1	6.8K-Ohm	1-Watt Axial Resistor
R2, R3	3.9-Ohm	1/4-Watt Axial Resistor
R4	100-Ohm	2-Watt Axial Resistor
R5	16-Ohm	2-Watt Axial Resistor
R6, R7	15-Ohm	1/4-Watt 1206 SMD Resistor
R8	10K-Ohm	1/4-Watt 1206 SMD Resistor
R9, R10	100-Ohm	CDI 250-Watt Flanged Resistor
R11	10K	POT, Digikey p/n ST5V103CT-ND
T1*, T2*, T6	50-Ohm	12", Micro-Coax UT141C-FORM-F
T3	125mu	Magnet Wire, 28 AWG, Twisted Pair, 9-turn
T4, T5	21-Ohm	Belden, 8" per side
U1	8V	Linear voltage regulator, negative pins numbered
Q1	SR341	Polyfet 50V VDMOS
Vds	50V	Drain Voltage
Idq	600mA	Quiescent Drain Current

Double sided 2oz Cu .064in
Er=3.5 FR-4

*J1, J2, T1, and T2 not shown

DRN BY: TChang	11/29/2004	POLYFET RF DEVICES
CHKD : TChang	11/29/2014	TB194 47-160MHz 300W 15dB
ELECT :		SIZE / FSCM NO / SR341 50V, 0.6A / REV A
MECH :		
PROC :		SCALE : 1 : 1 / SHEET 1 OF 1
QUAL :		
PGMS :