

TB277C

Frequency = 1200-1400MHz

Pout = 850 Watts (Pulse width 300us, Duty Cycle 12%)

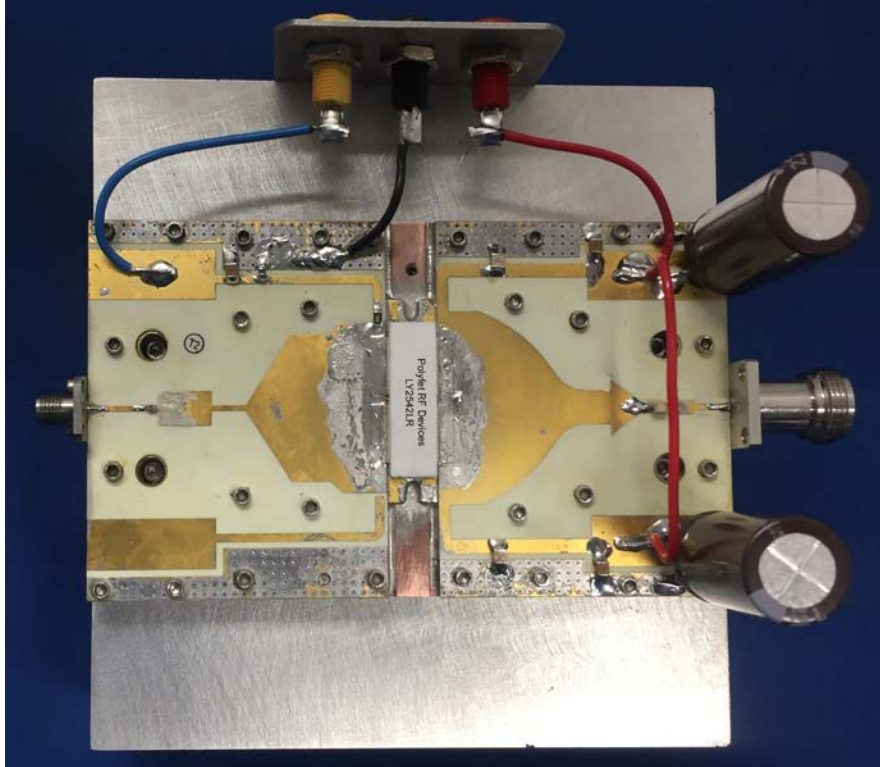
Gain = 14.8±0.56dB

Vds = 50VDC

Idq = 90mA

Efficiency = 49%(avg)

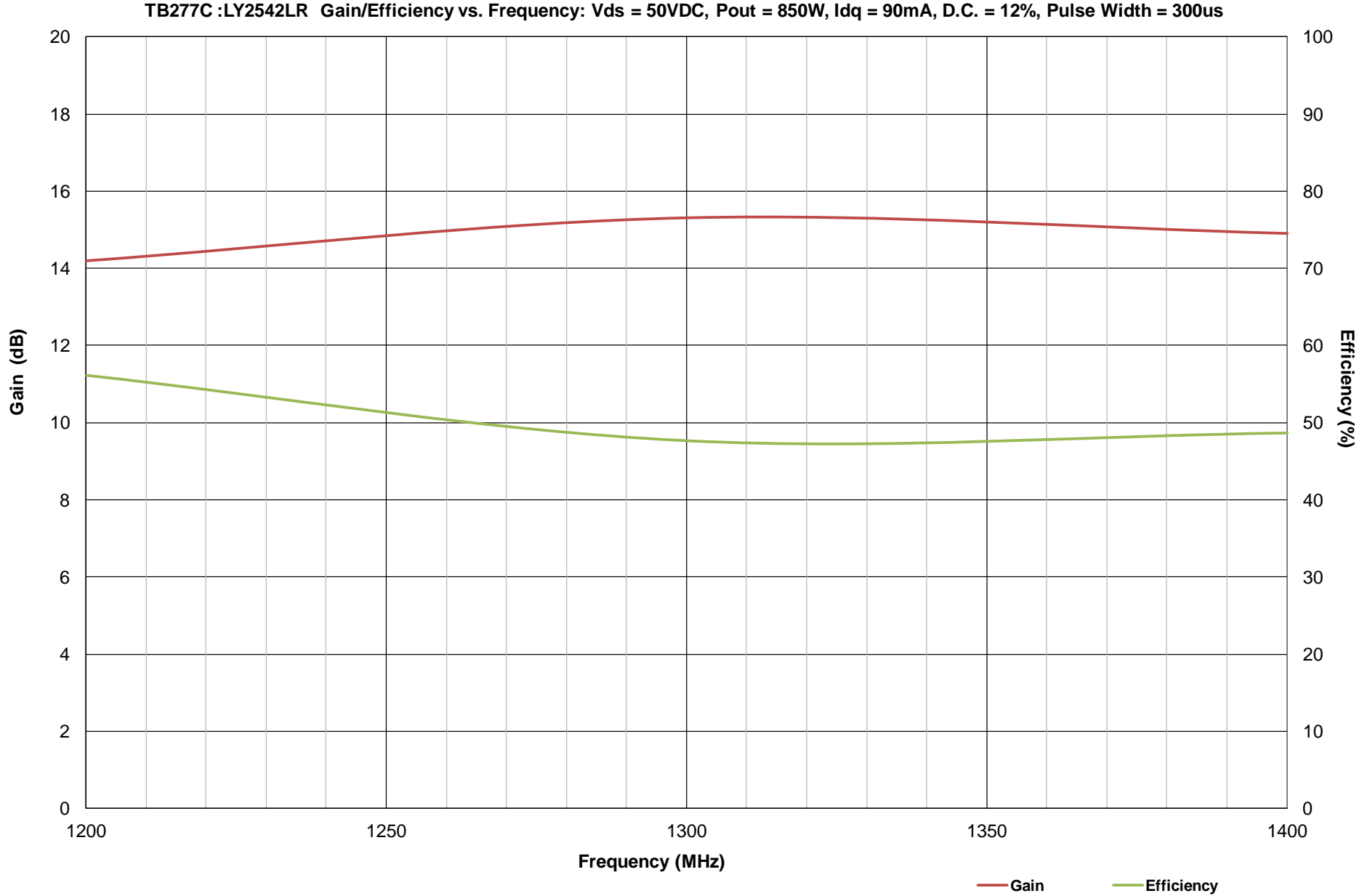
LY2542LR



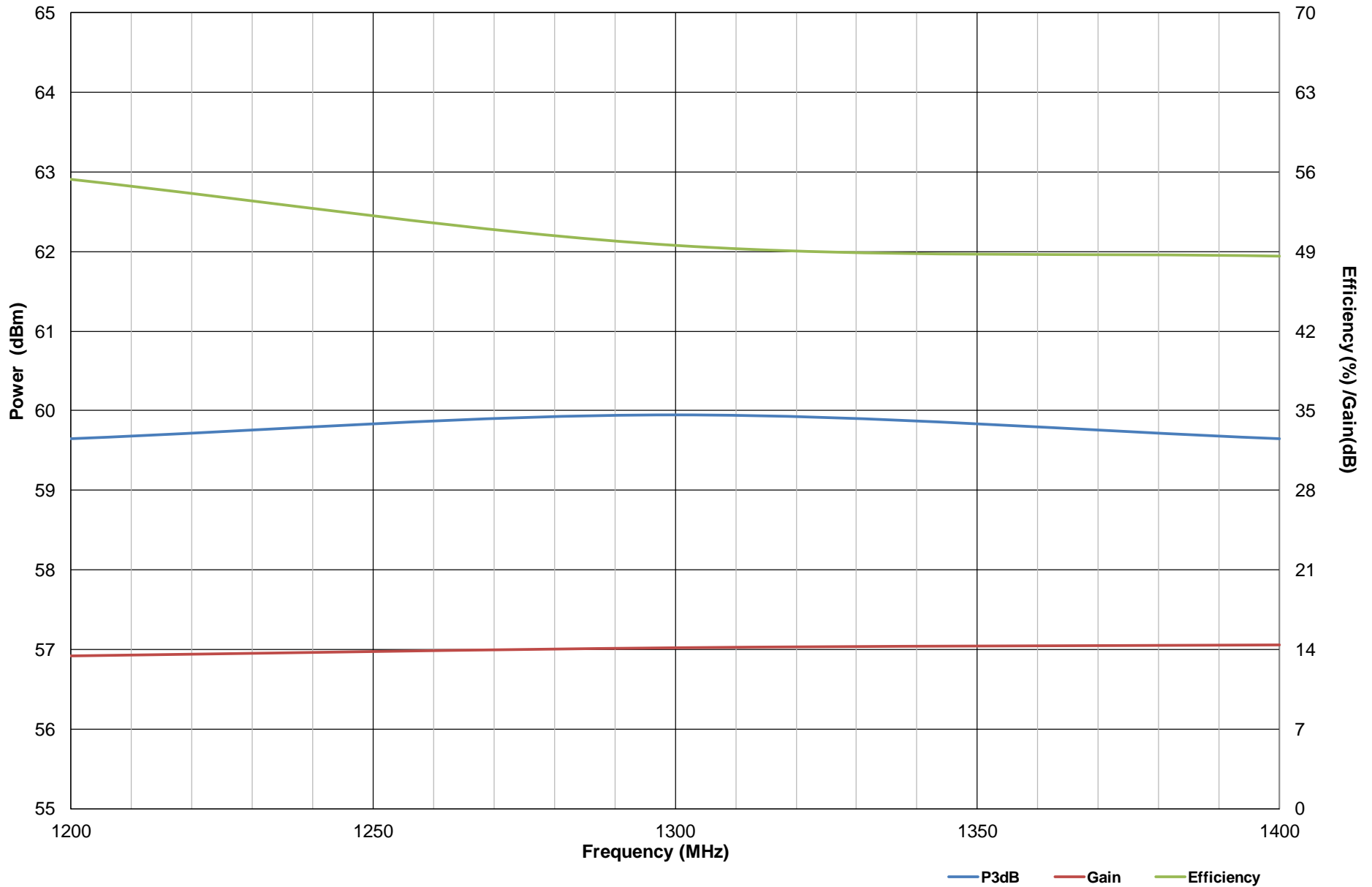
1. TB277C, LY2542LR

Order of Operations:

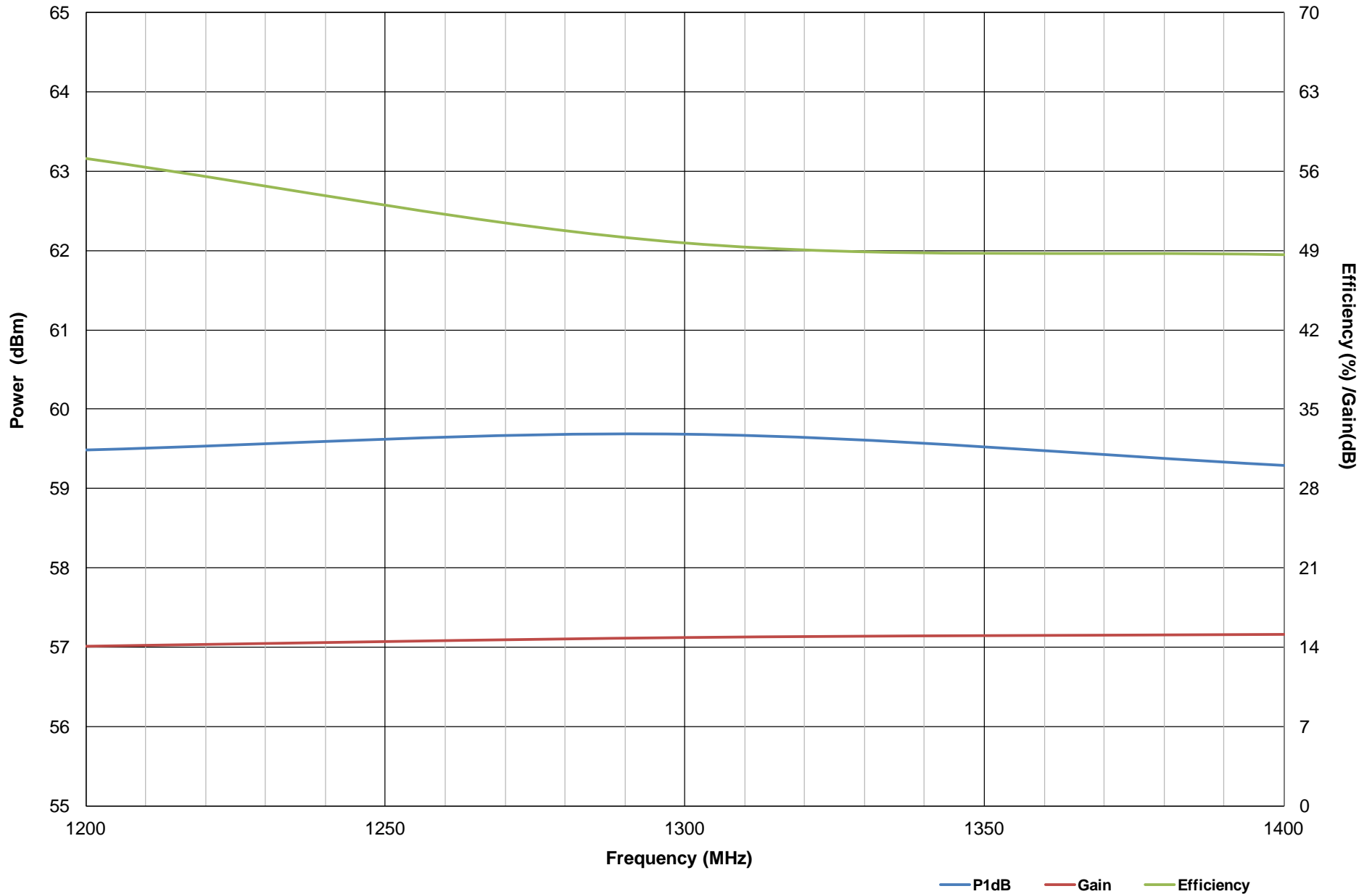
1. Review amplifier's performance curves in the data package to learn its RF power limitations.
2. Terminate the RF In/Out connectors to 50 ohm source and load impedance.
3. Connect Ground, Vgs and Vds power supply to TB277C banana jacks.
4. Apply 50Vdc to Vds banana jack.
5. Apply 0 Vdc to Vgs banana jack and adjust voltage to reach a bias of 90mA.
6. Apply RF drive signal (refer to curves in data package to avoid overdrive).
7. Avoid allowing the base plate to reach 85 deg C by using proper cooling techniques (aluminum heat sink and min 22CFM fan).

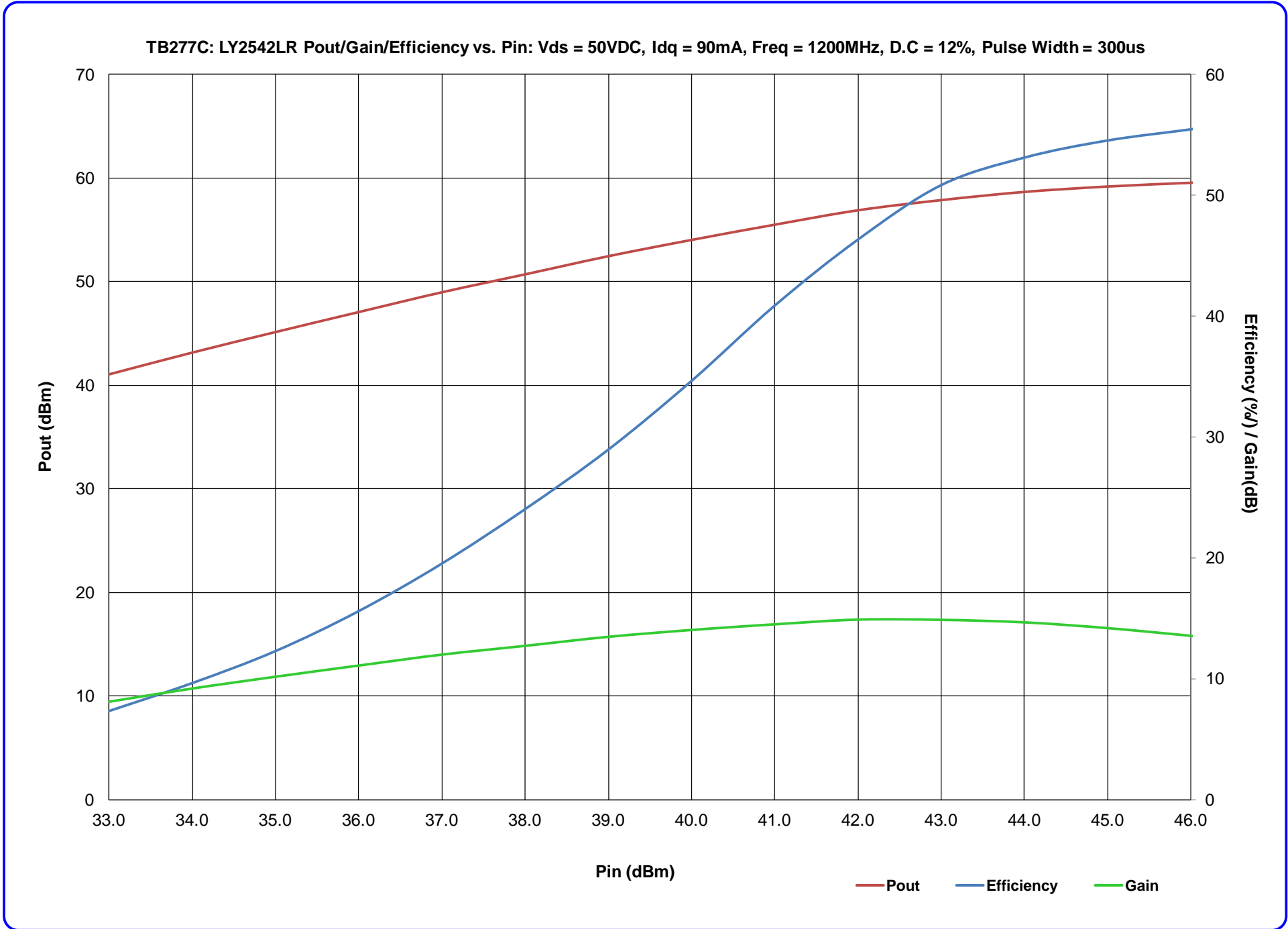


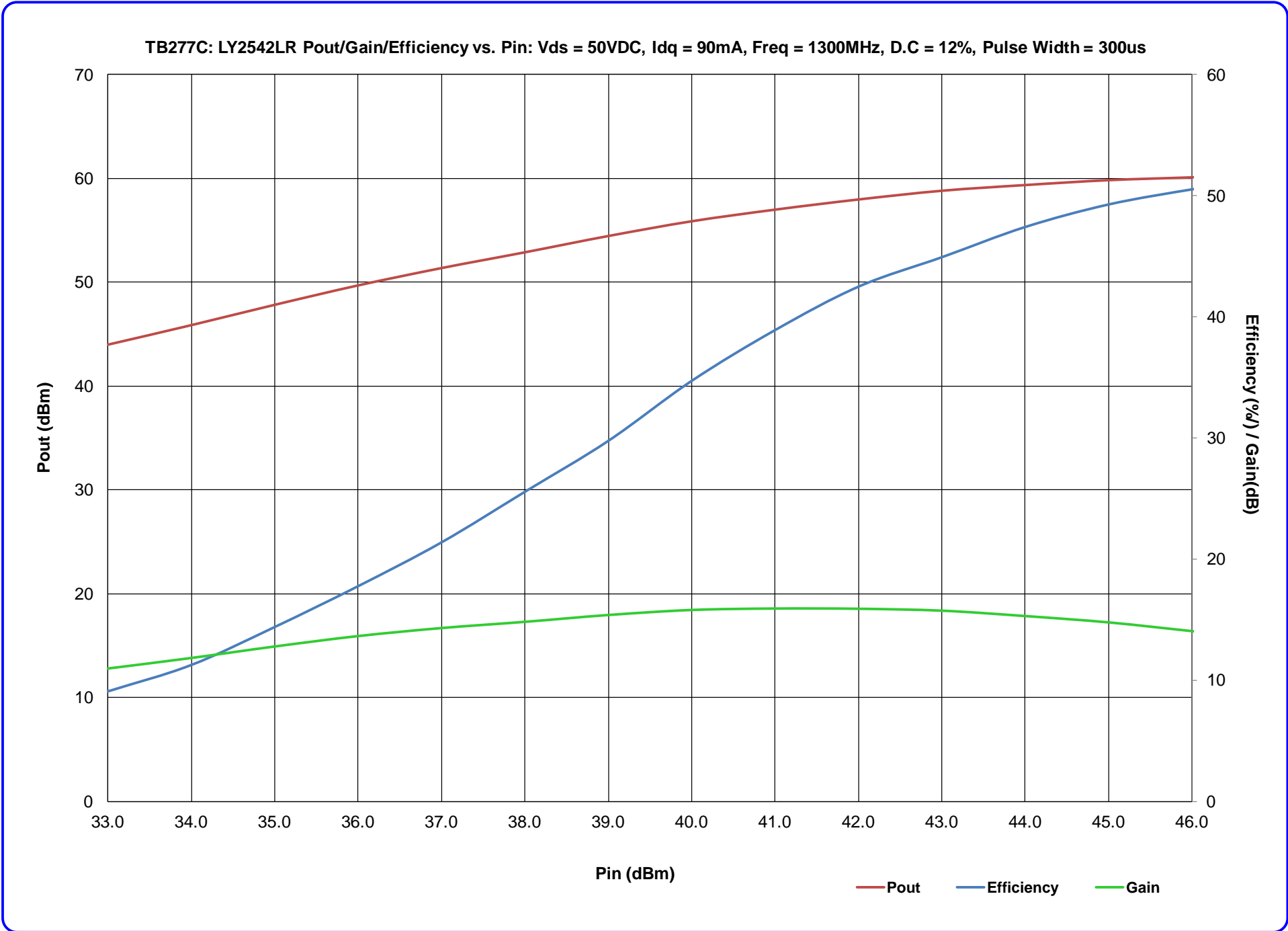
TB277C: LY2542LR P3dB /Gain/Efficiency vs. Frequency: Vds = 50Vdc, Idq = 90mA, , D.C. = 12%, Pulse Width = 300us

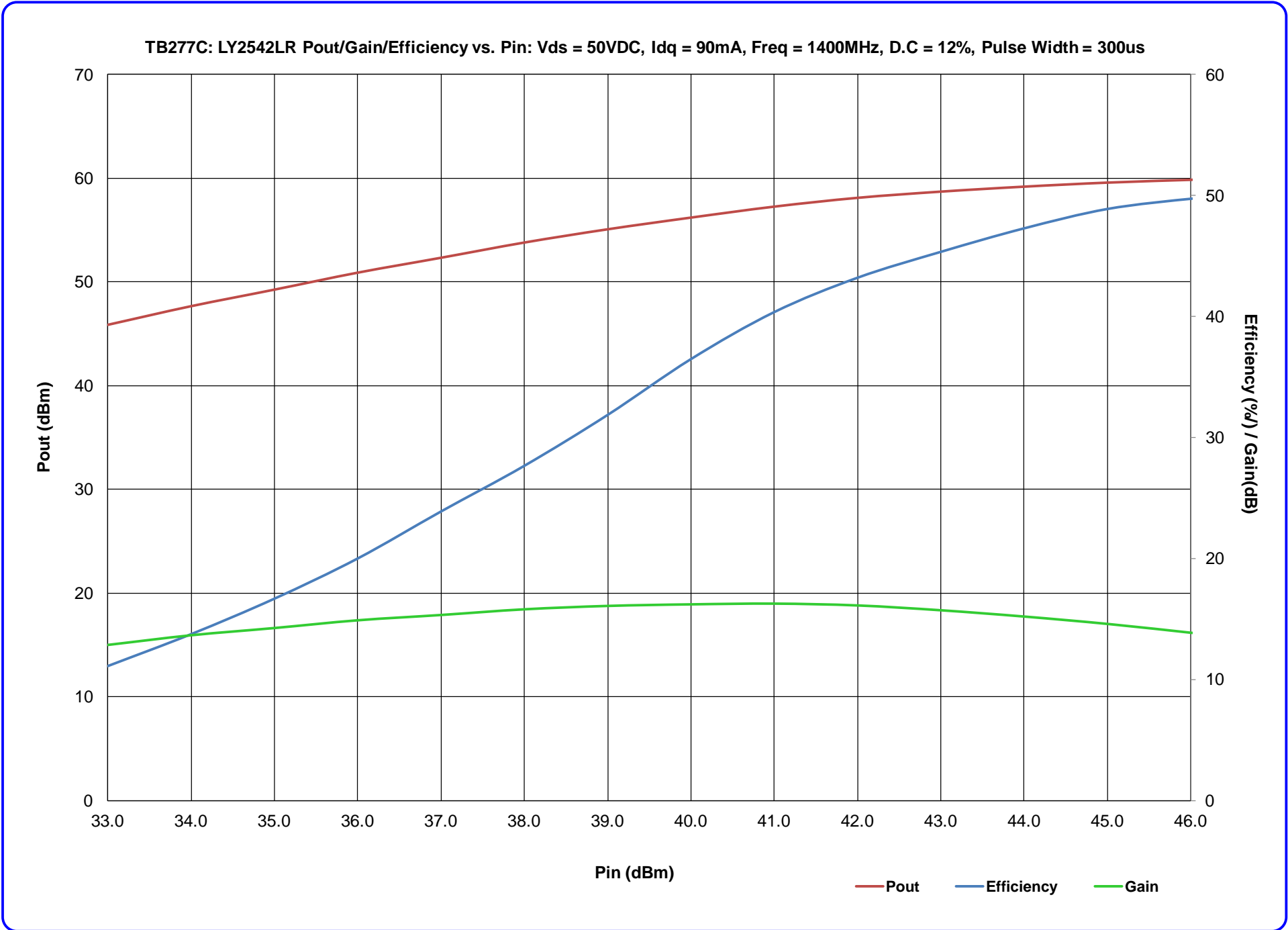


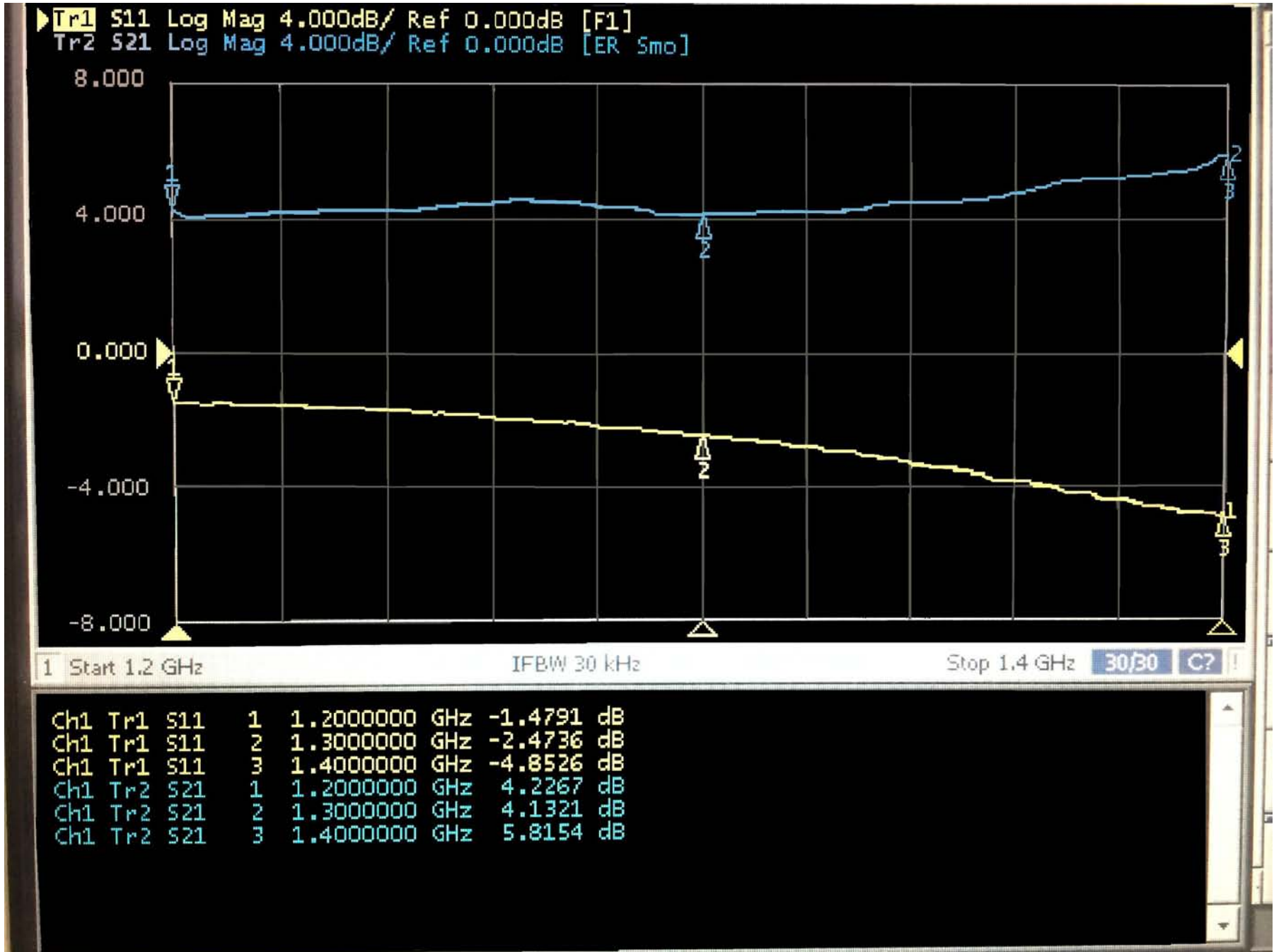
TB277C :LY2542LR P1dB /Gain/Efficiency vs. Frequency: Vds = 50VDC, Idq = 90mA, D.C. = 12%, Pulse Width = 300us



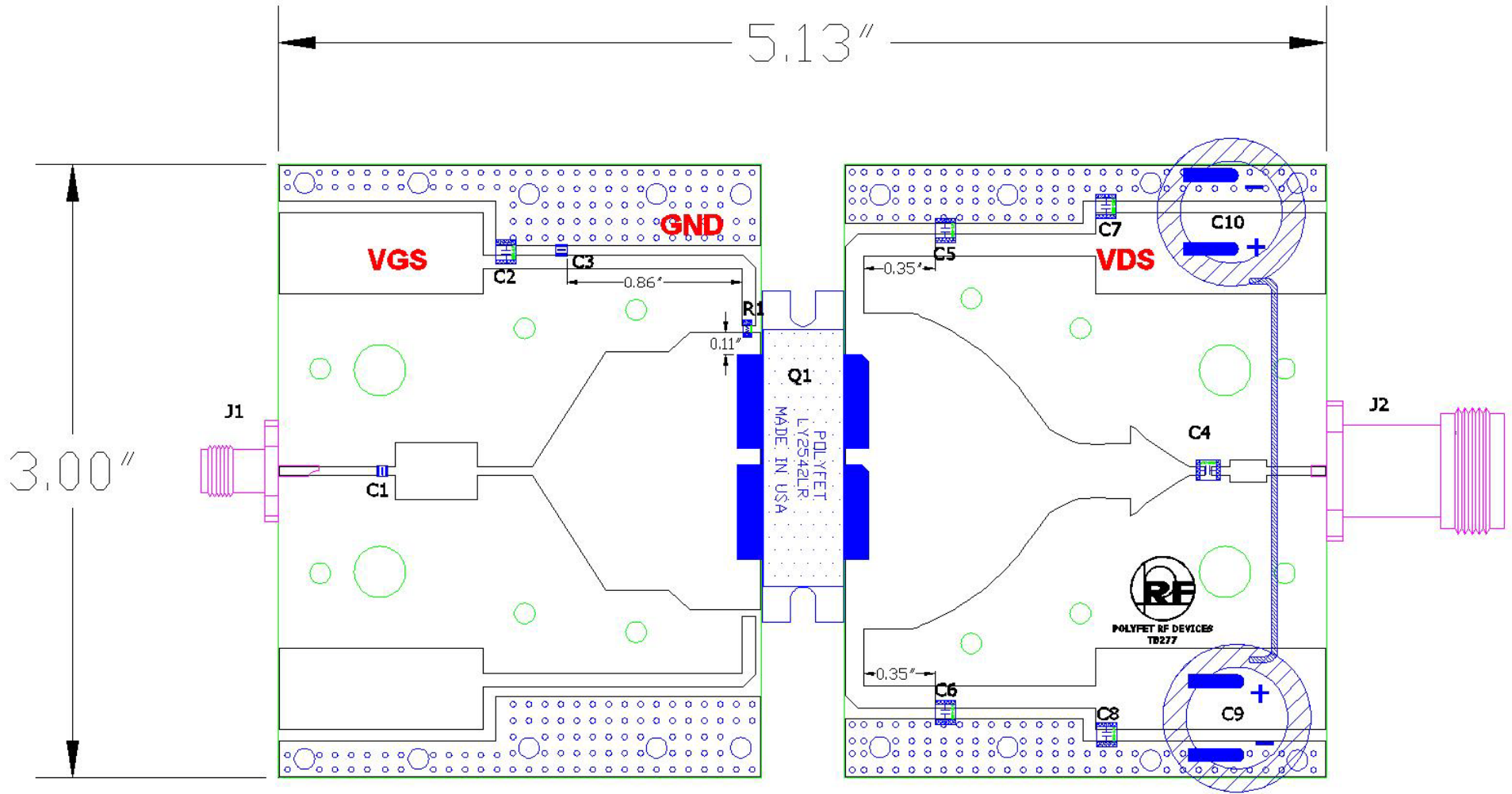








TB277C VDS=50VDC, Idq=400mA, Pin=0dBm



TB277C			
NOMENCLATURE	DESCRIPTION	VENDER	VENDER PART #
C1,C3	56pF Hi-Q Low ESR 0505C Series	Passive Plus, Inc	0505C560FW301
C2,C7,C8	10,000pF +/-10% RF By-Pass Capacitors,1111X	Passive Plus, Inc	1111X103KW500
C4,C5,C6	47pF +/-2% Ultra-low ESR, Microwave Cap., 1111N	Passive Plus, Inc	1111N470BW501
C9,C10	Aluminum Electrolytic Capacitors - Radial Leaded 63volts 2200uF AEC-Q200	Nichicon	UPW1J222MHD
R1	RES 15 OHM 1/4W 5% 1206 SMD	Rohm Semiconductor	MCR18EJPJ150
J1	SMA Female; 4 Hole Panel Mount	Pasternack	PE4000-SF
J2	N Female; 4 Hole Panel Mount	Amphenol RF	172190
Q1	LDMOS (Solder to Copper Spreader)	Polyfet RF Devices	LY2542LR
PCB	0.762mm [0.030"] Thick, er=3.48, 1oz, Cu (Solder to Copper Spreader)	Rogers Corp.	RO4350B