

TB252

Frequency=118-138MHz

Pout=25W

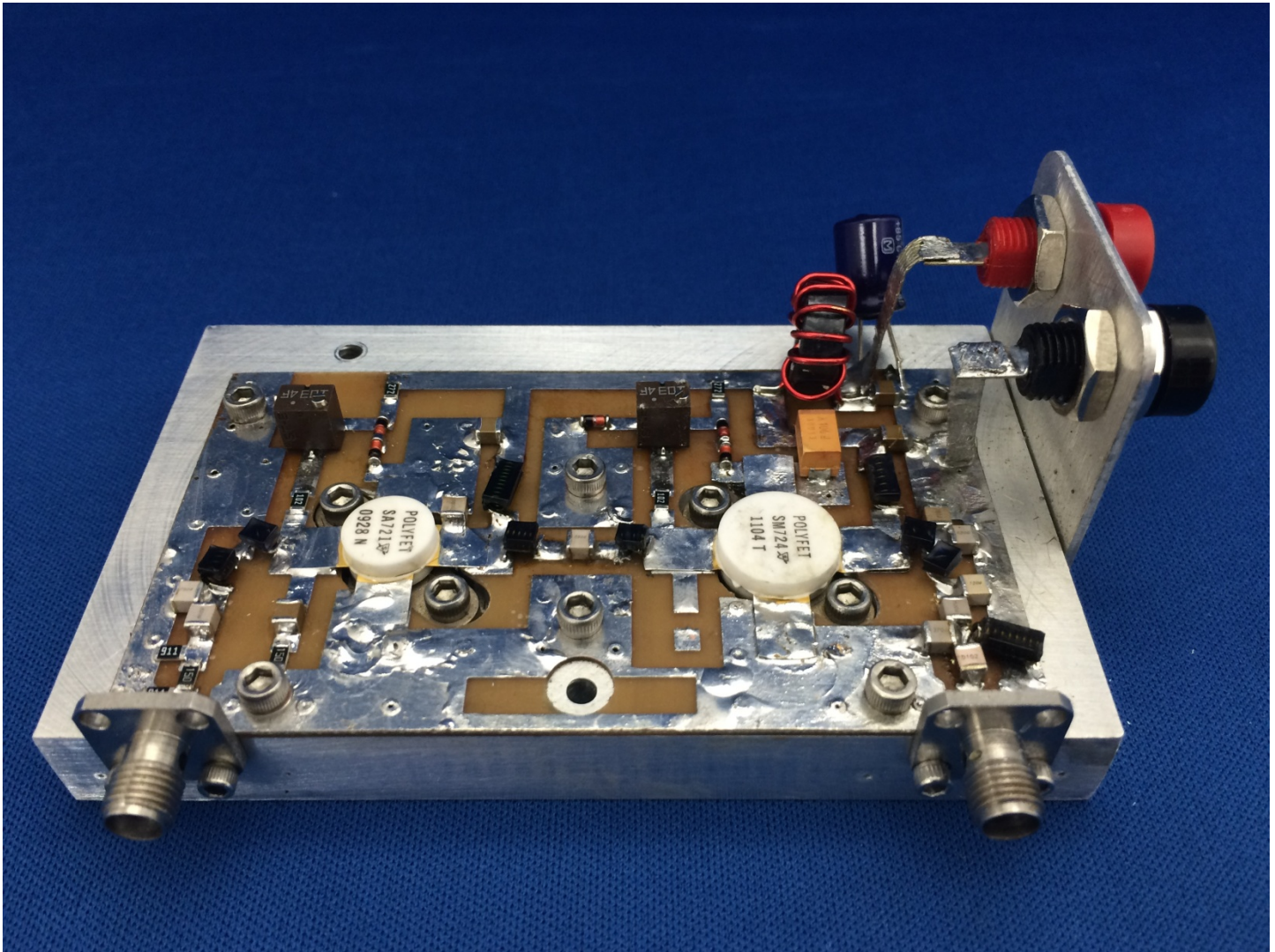
Gain=30dB

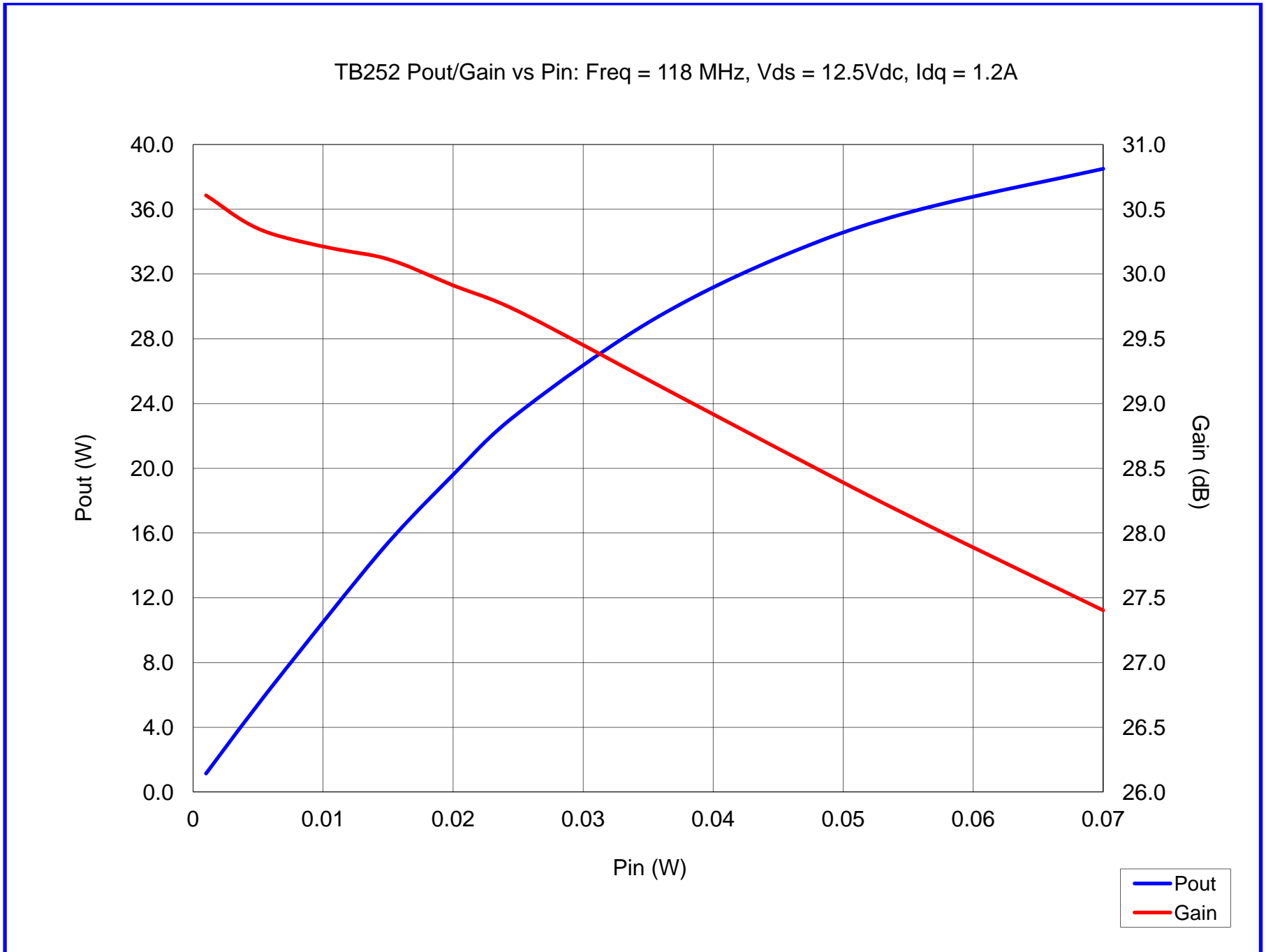
Vds=12.5Vdc

Idq= 0.4A + 0.8A = 1.2A

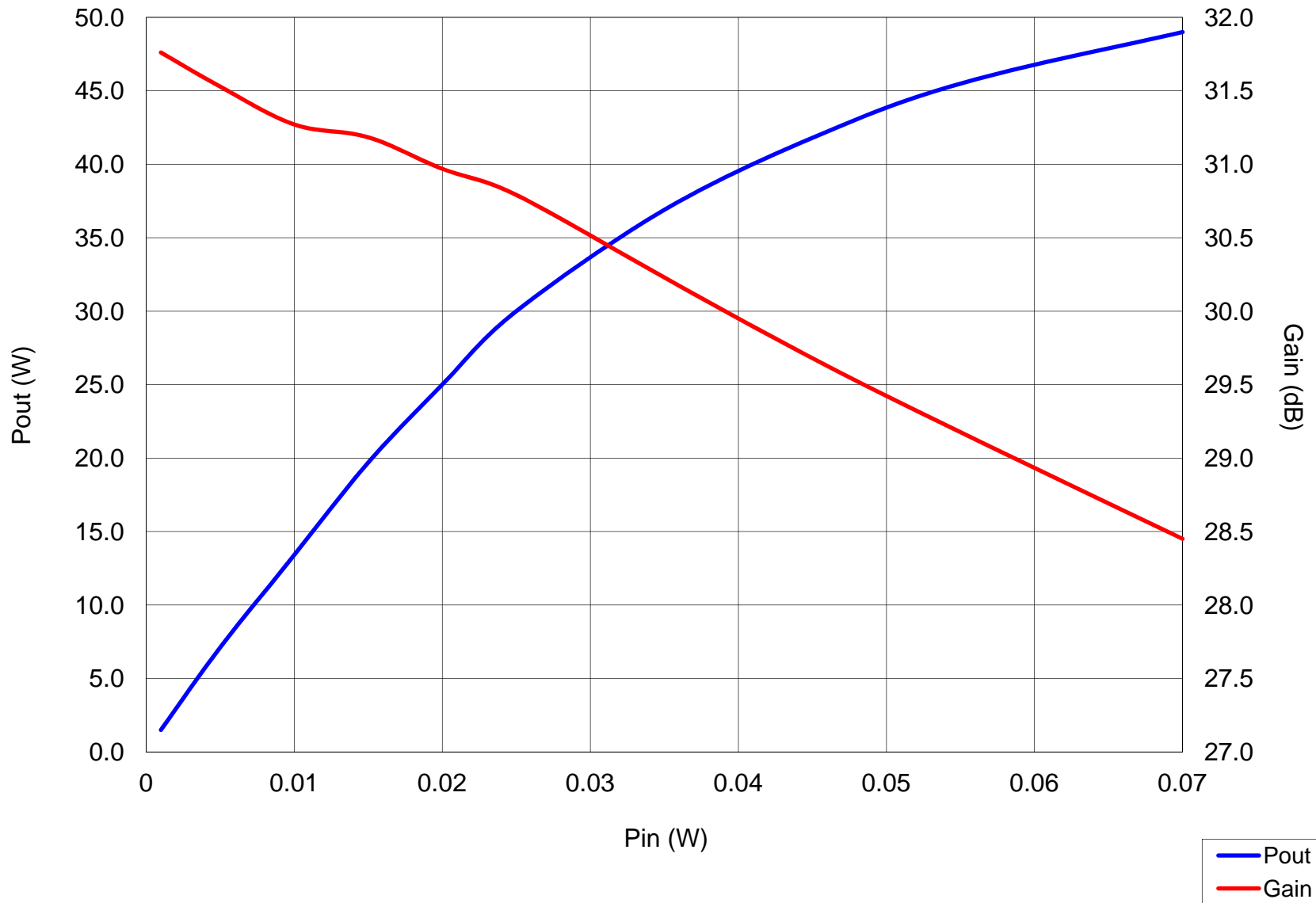
Efficiency=37-41%

SA721-->SM724

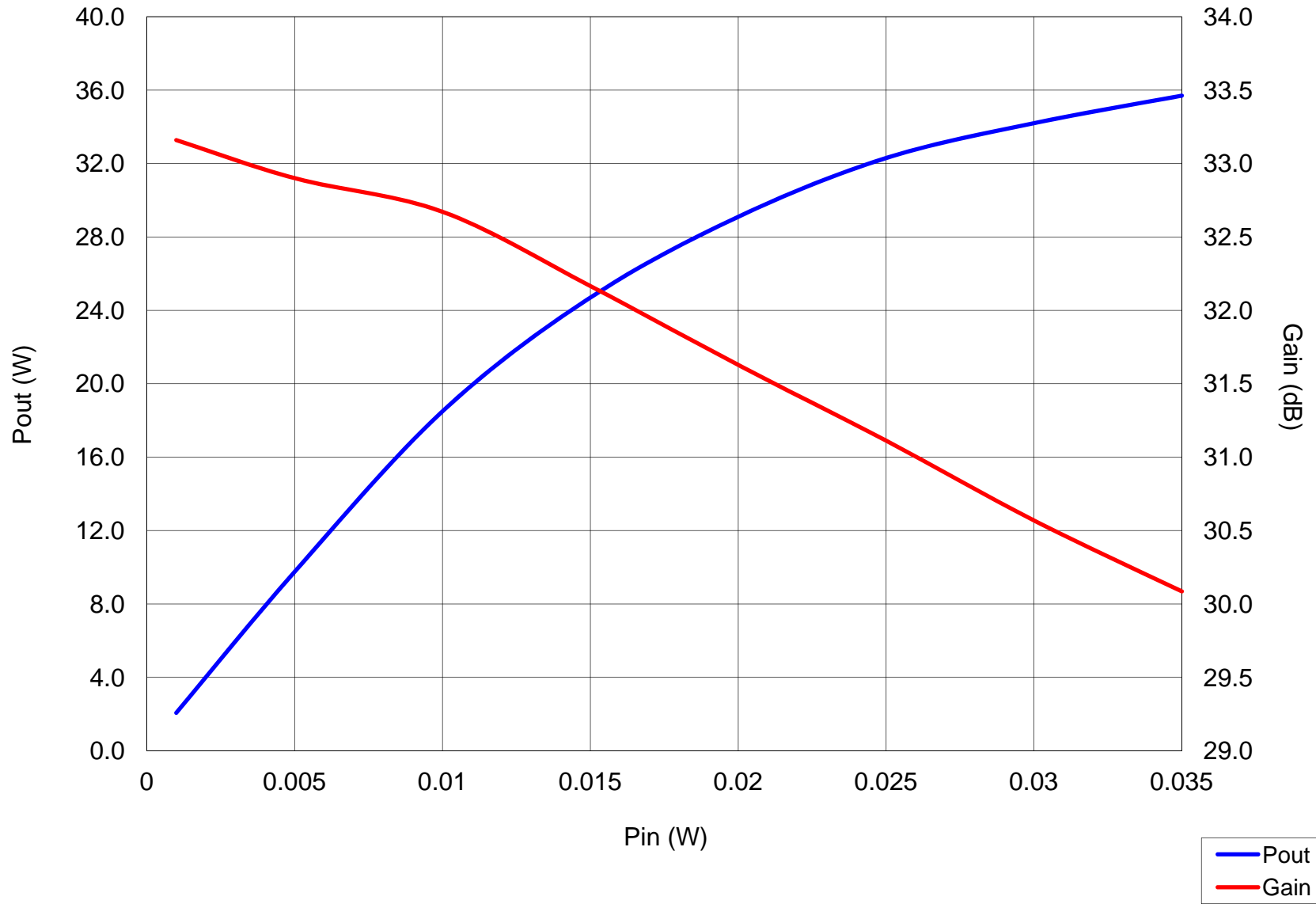


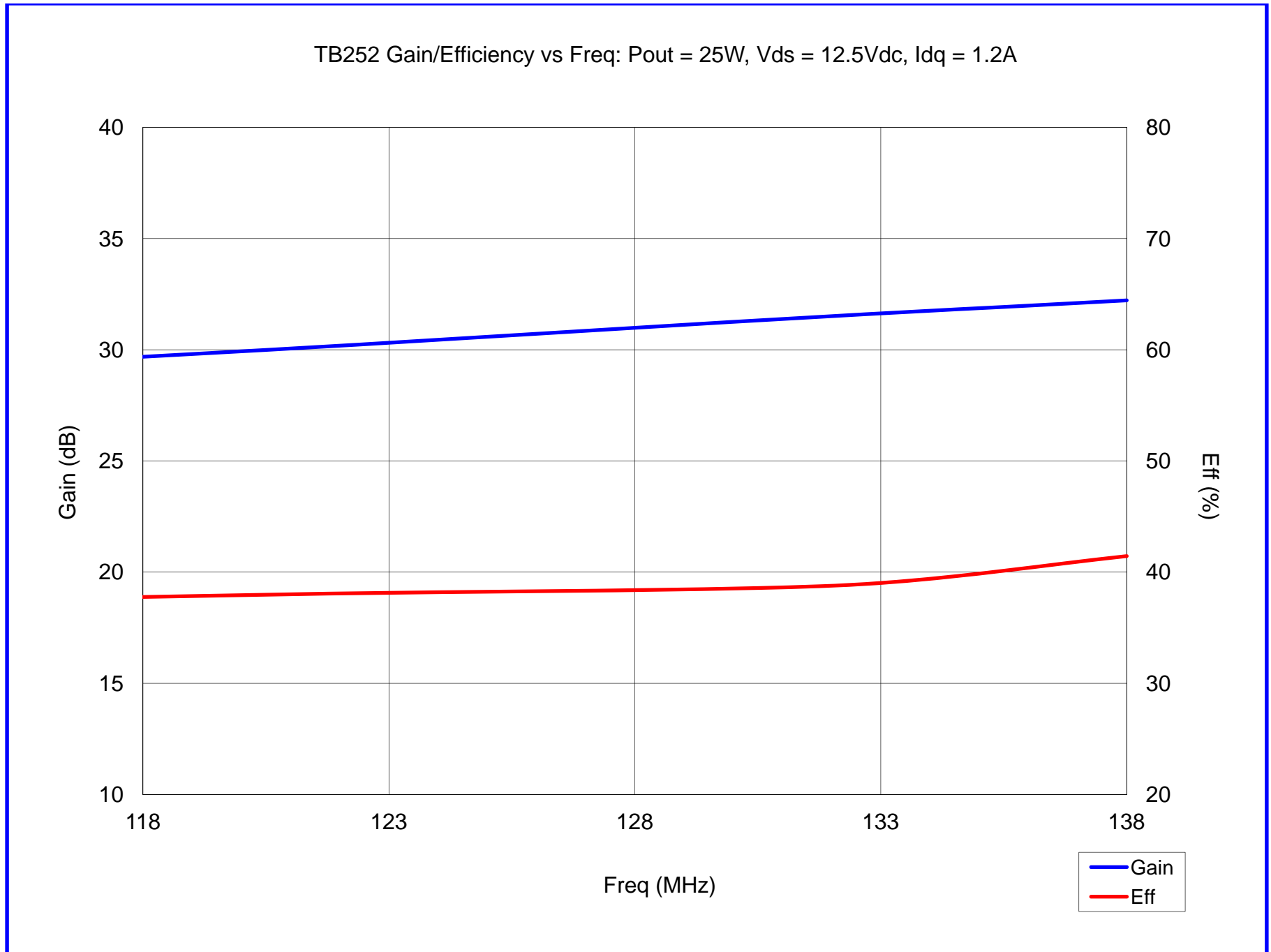


TB252 Pout/Gain vs Pin: Freq = 128 MHz, Vds = 12.5Vdc, Idq = 1.2A

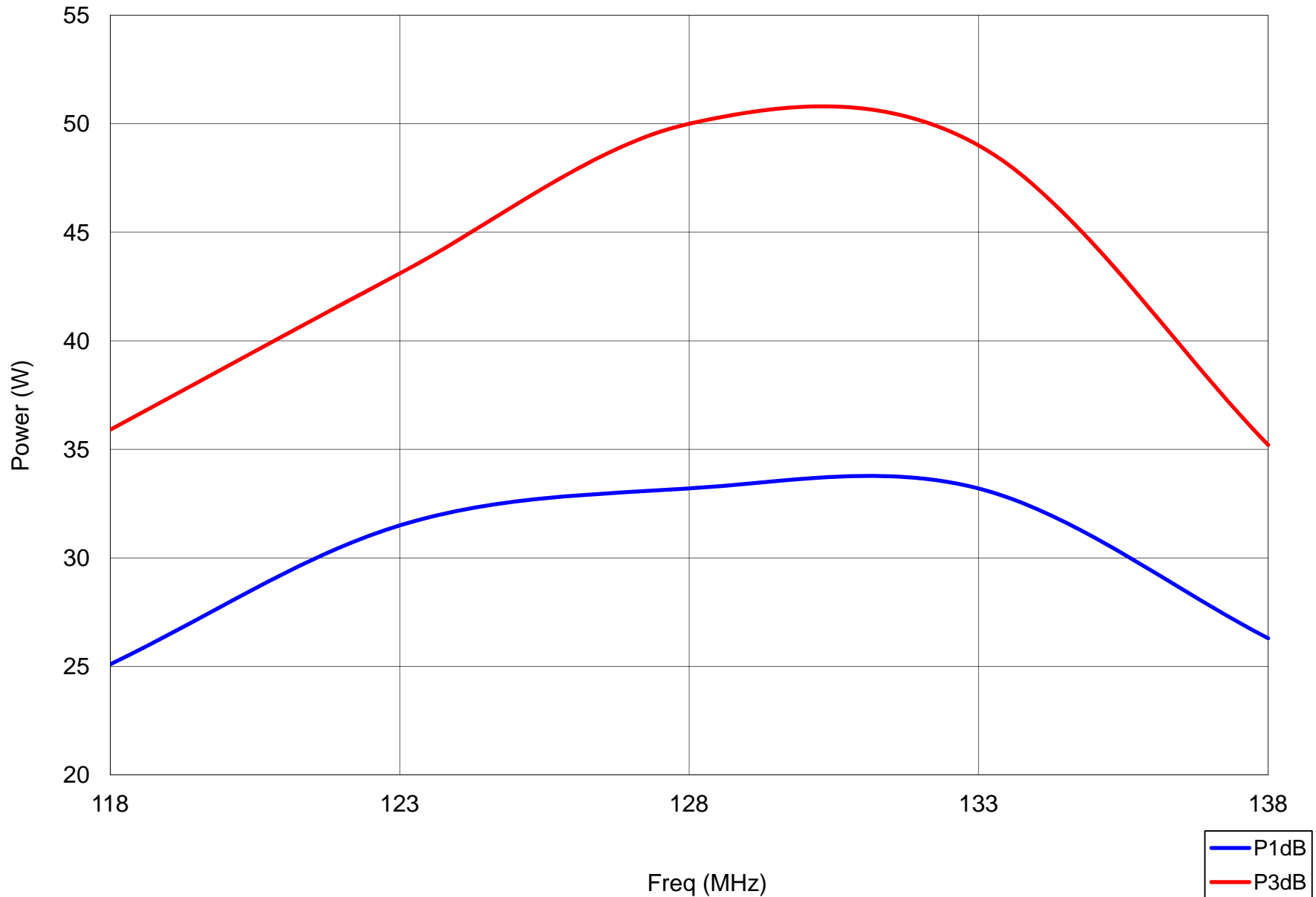


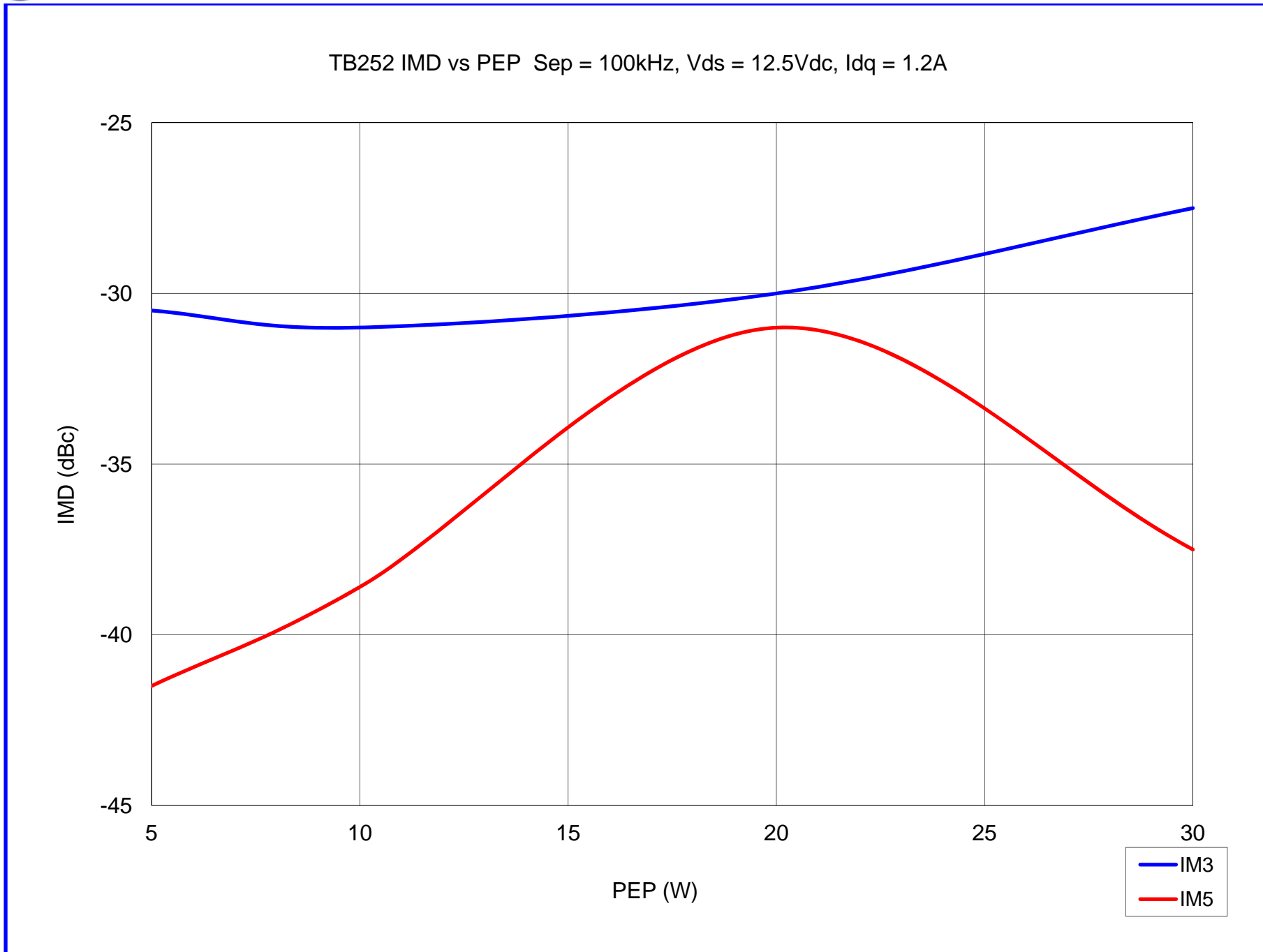
TB252 Pout/Gain vs Pin: Freq = 138 MHz, Vds = 12.5Vdc, Idq = 1.2A



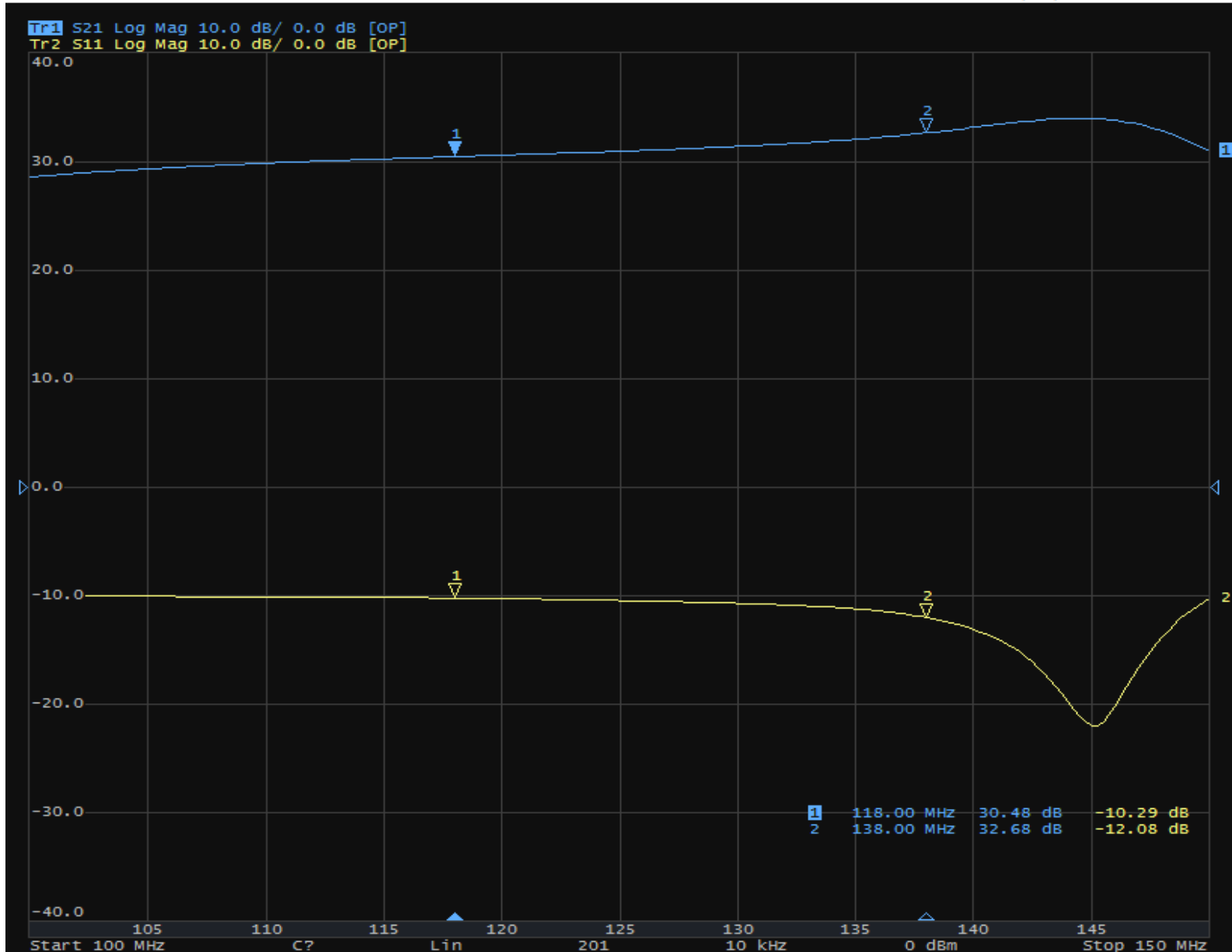


TB252 P1dB and P3dB vs Freq: Vds = 12.5Vdc, Idq = 1.2A

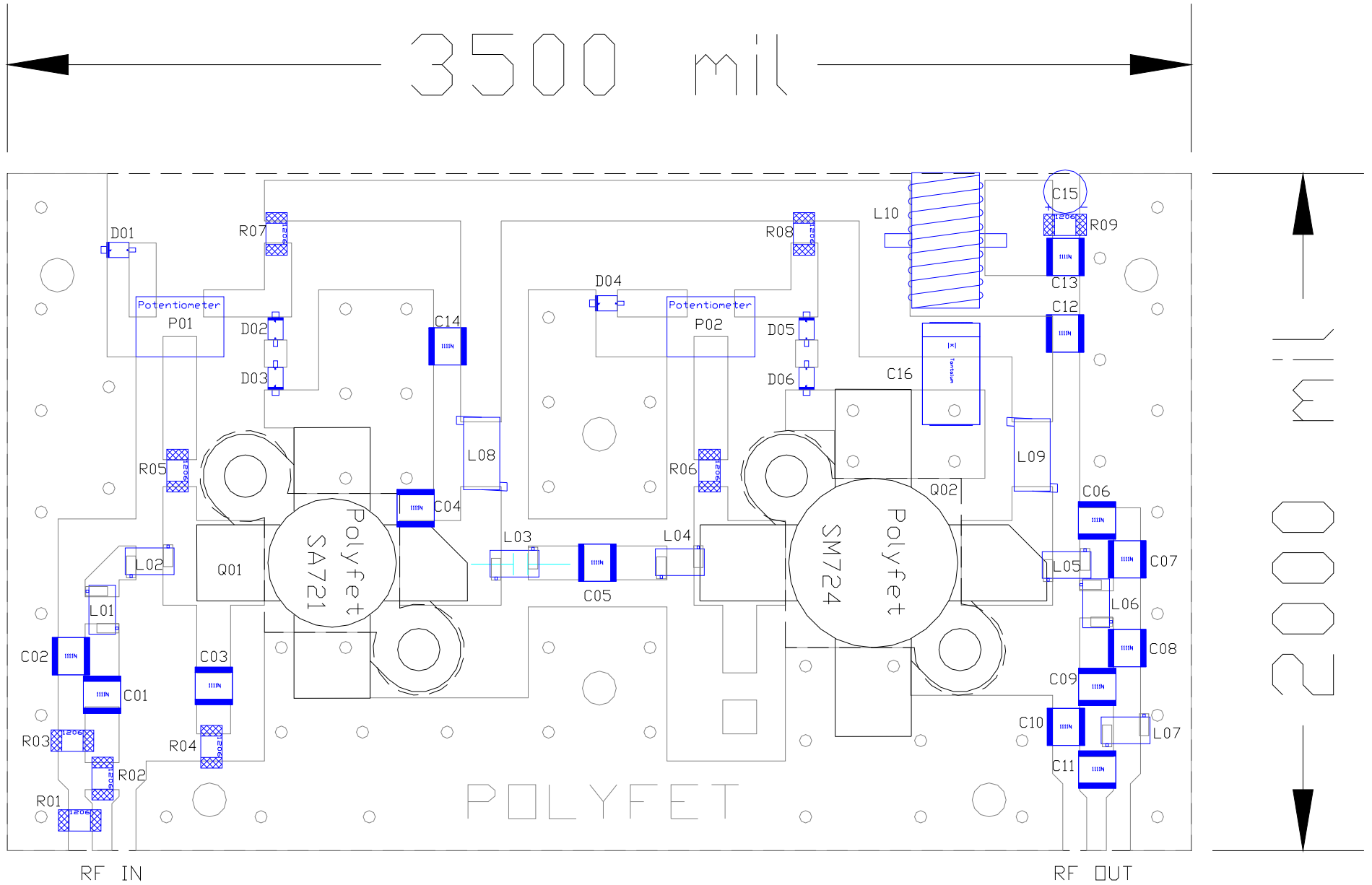


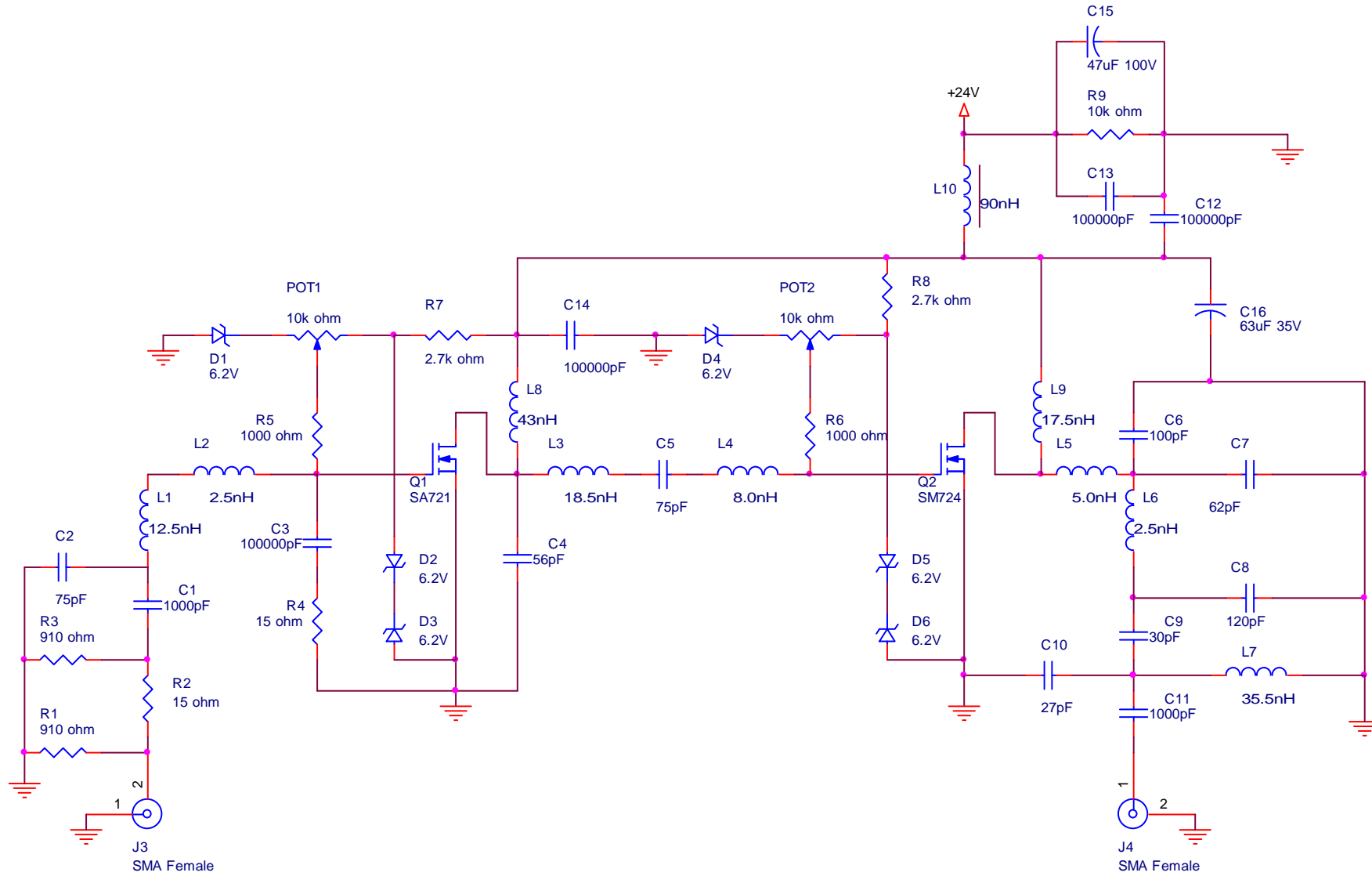


8/12/2015 11:49:24 AM



TB252Vds=12.5Vdc, Idq=1.2A, Pin=0dBm





Title		
TB252		
Size	Document Number	Rev
A	<Doc>	<Rev Code>
Date:	Thursday, August 13, 2015	Sheet 1 of 1

NOMENCLATURE	DESCRIPTION	VENDER	VENDER PART #
C1	82pF +/-2% Ultra-low ESR, Microwave Cap., 1111N	Passive Plus, Inc	1111N820BW501
C2,C5	75pF+/-2% Ultra-low ESR, Microwave Cap., 1111N	Passive Plus, Inc	1111N750BW501
C3, C12, C13, C14	100,000pF +/-10% RF By-Pass Capacitors,1111X	Passive Plus, Inc	1111X104KW500
C4	56pF+/-2% Ultra-low ESR, Microwave Cap., 1111N	Passive Plus, Inc	1111N560BW501
C6	100pF +/-2% Ultra-low ESR, Microwave Cap., 1111N	Passive Plus, Inc	1111N101BW501
C7	62pF +/-2% Ultra-low ESR, Microwave Cap., 1111N	Passive Plus, Inc	1111N620BW501
C8	120pF+/-2% Ultra-low ESR, Microwave Cap., 1111N	Passive Plus, Inc	1111N120BW501
C9	30pF+/-2% Ultra-low ESR, Microwave Cap., 1111N	Passive Plus, Inc	1111N300BW502
C10	27pF+/-2% Ultra-low ESR, Microwave Cap., 1111N	Passive Plus, Inc	1111N270BW503
C11	1000pF+/-2% Ultra-low ESR, Microwave Cap., 1111N	Passive Plus, Inc	1111N102GW500
C15	47uF Aluminum Electrolytic Cap, 63V	Digi-Key	PCE3763CT-ND
C16	63V 10uF 20% Tantalum Capacitor Polymer SMD	Mouser Electronics	581-TCJE106M063R0100
R1, R3	RES 910 ohm 1/4W 5% Carbon Film	Kyocera	CR32-911J
R2, R4	RES 15ohm 1/4W 5% Carbon Film	Mouser Electronics	660-RK73B2BTDD150J
R5, R6	RES 1000ohm 1/4W 5% Carbon Film	Kyocera	CR32-102J
R7, R8	RES 2.7k ohm 1/4W 5% Carbon Film	Kyocera	CR32-272J
R9	RES 10k ohm 1/4W 5% Carbon Film	Digi-Key	PPC10kW-1CT-ND
P1, P2	Trimmer 10kohm 1/4W SMD	Copal Electronics Inc.	ST5ETW103
L1	4 Turn Mini Spring Air Core Inductor	Coilcraft	A04TGL
L2, L6	1 Turn Mini Spring Air Core Inductor	Coilcraft	A01TGL
L3	5 Turn Mini Spring Air Core Inductor	Coilcraft	A05TGL
L4	3 Turn Mini Spring Air Core Inductor	Coilcraft	A03TGL
L5	2 Turn Mini Spring Air Core Inductor	Coilcraft	A04TGL
L7	9 Turn Mini Spring Air Core Inductor	Coilcraft	B09TGL
L8	10 Turn Mini Spring Air Core Inductor	Coilcraft	B10TGL
L9	6 Turn Mini Spring Air Core Inductor	Coilcraft	B06TGL
L10	20AWG Mag Wire, 10-turns around	www.electromechaniconline.com	MW200SPNRD
	850ui toroid ferrite	Amidon	FT-50-43
D1-D6	6.2V 500mW Zener Diode	Digi-Key	1N829UR-1-ND
J1,J2	PE4000-SF SMA Female; 4 Hole Panel Mount	Pasternack	PE4000-SF
PCB	Double-Sided FR4, 32mil, 1 oz.	Rogers	RT/d 5880
Q1	VDMOS	Polyfet RF Devices	SA721
Q2	VDMOS	Polyfet RF Devices	SM724