

TB240

Frequency=1.5-120MHz

Pout=100W

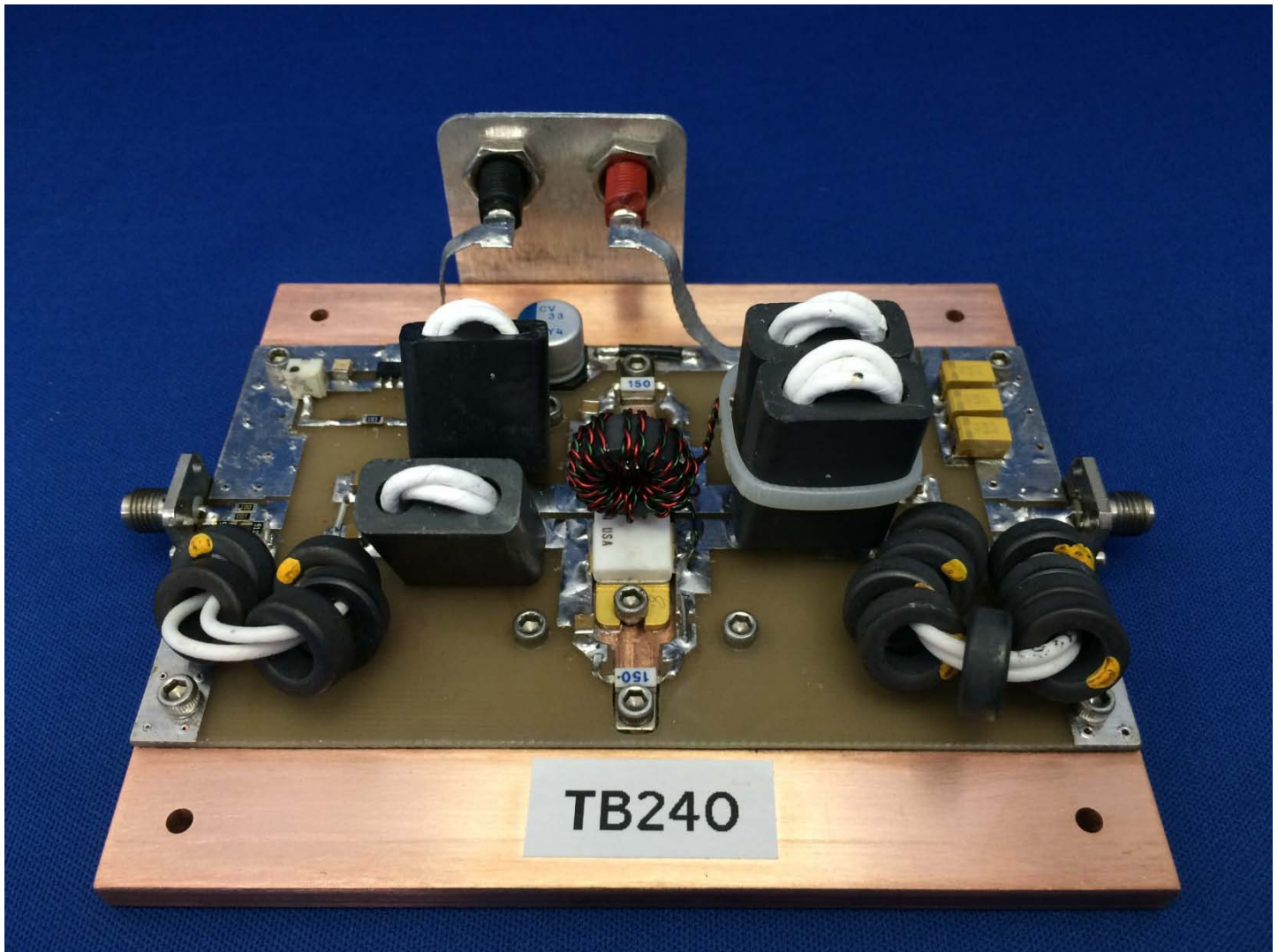
Gain=20dB

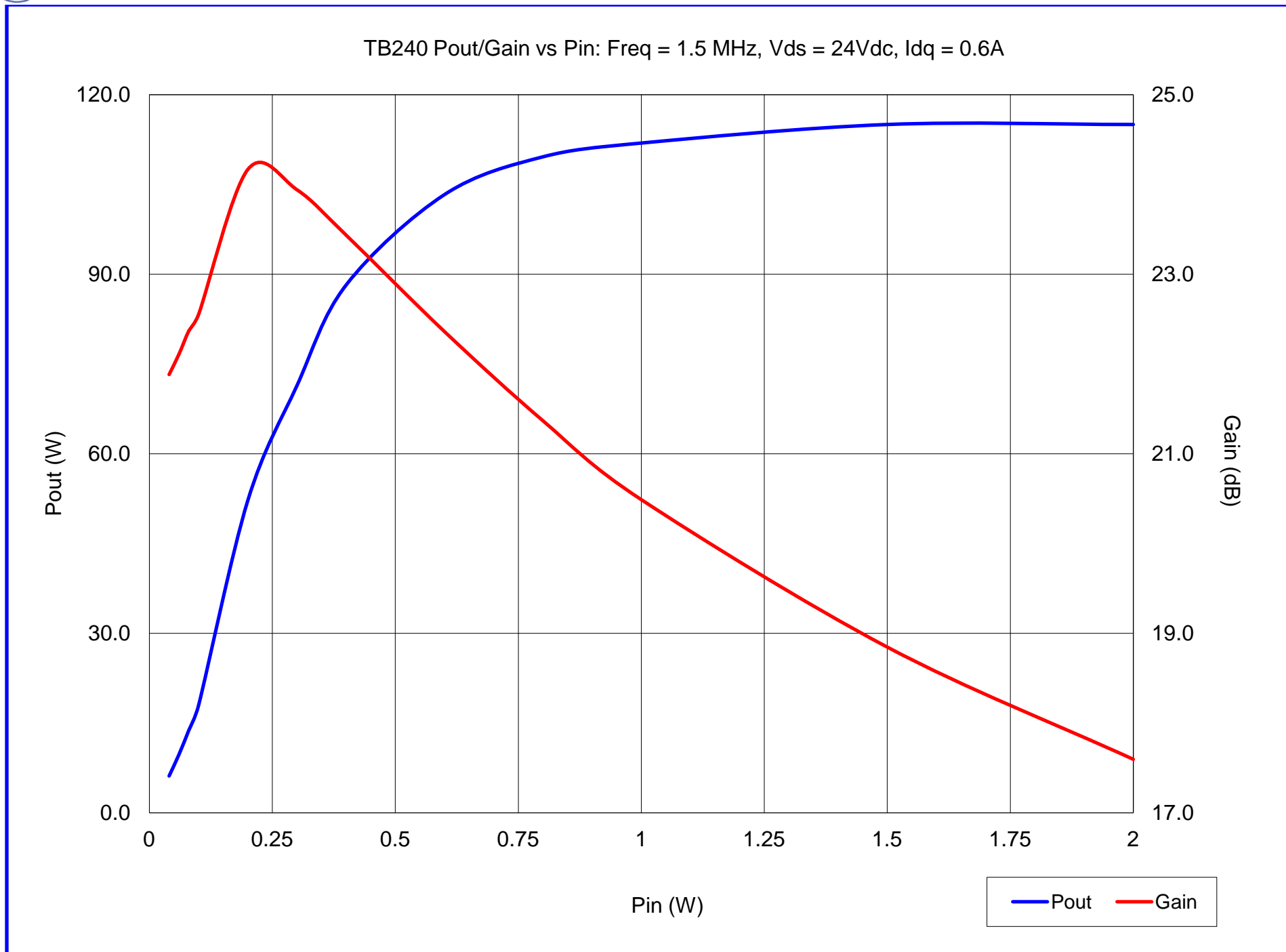
Vds=24Vdc

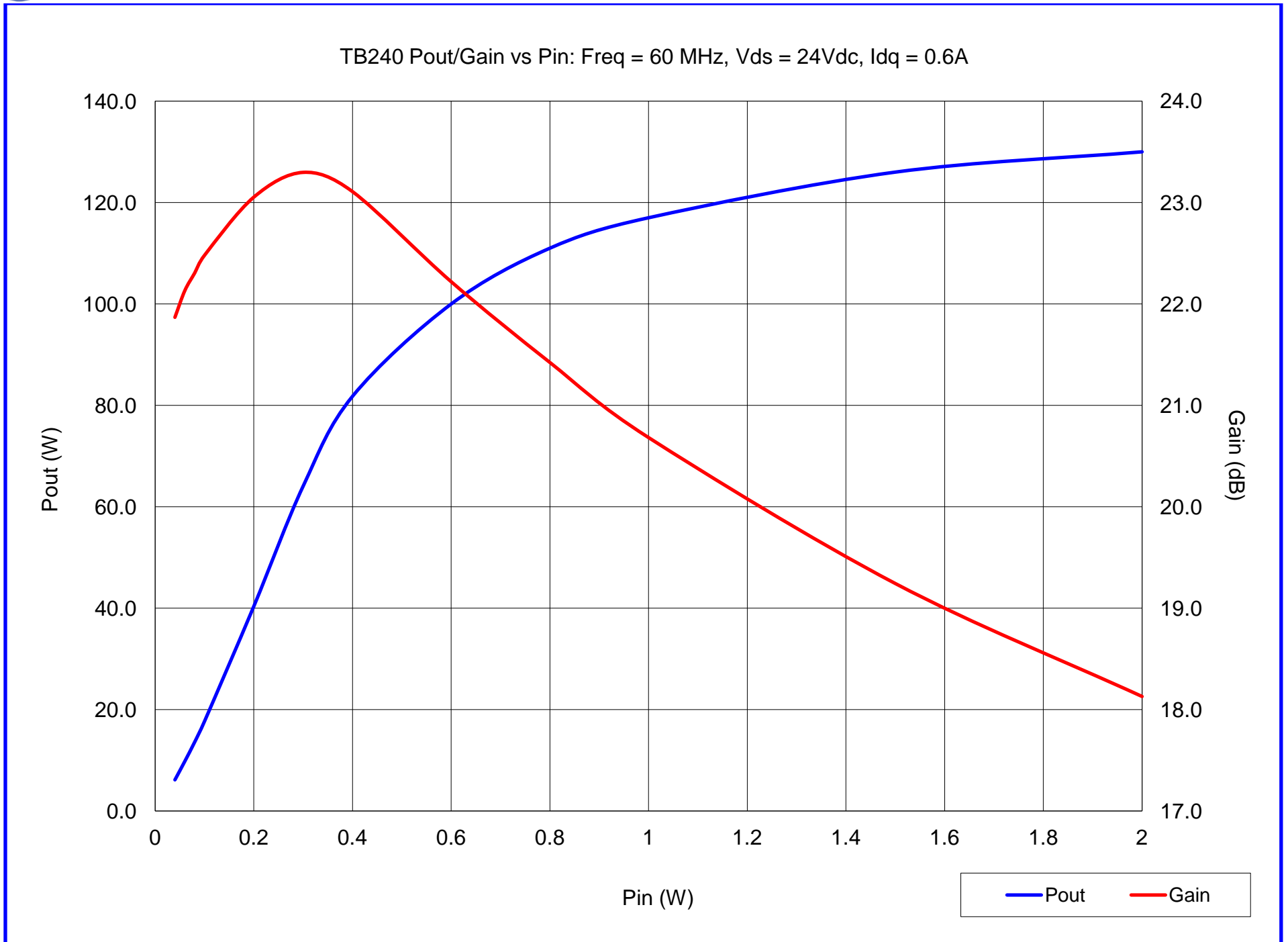
Idq=0.6A

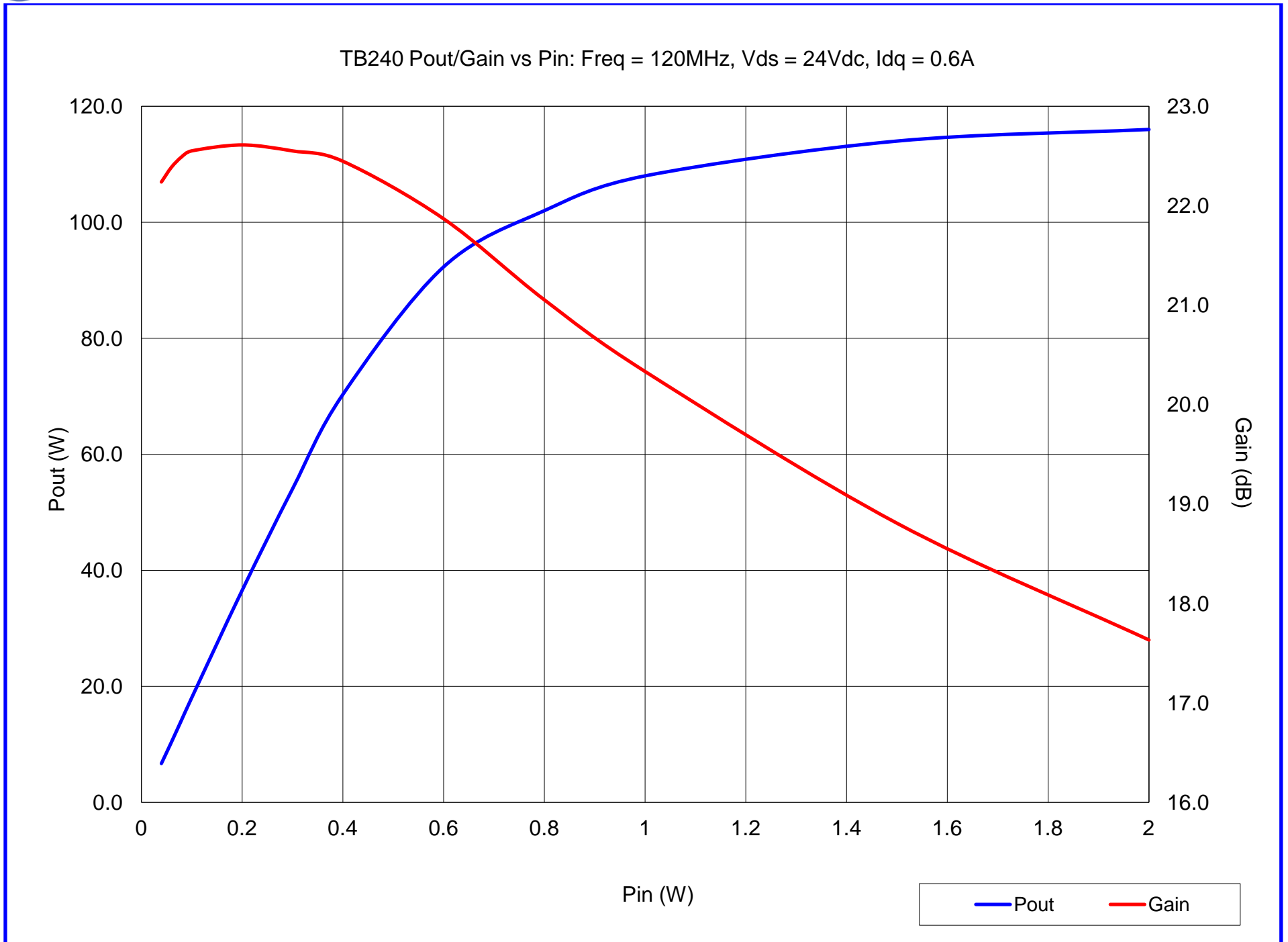
Efficiency=57-70%

LR2501

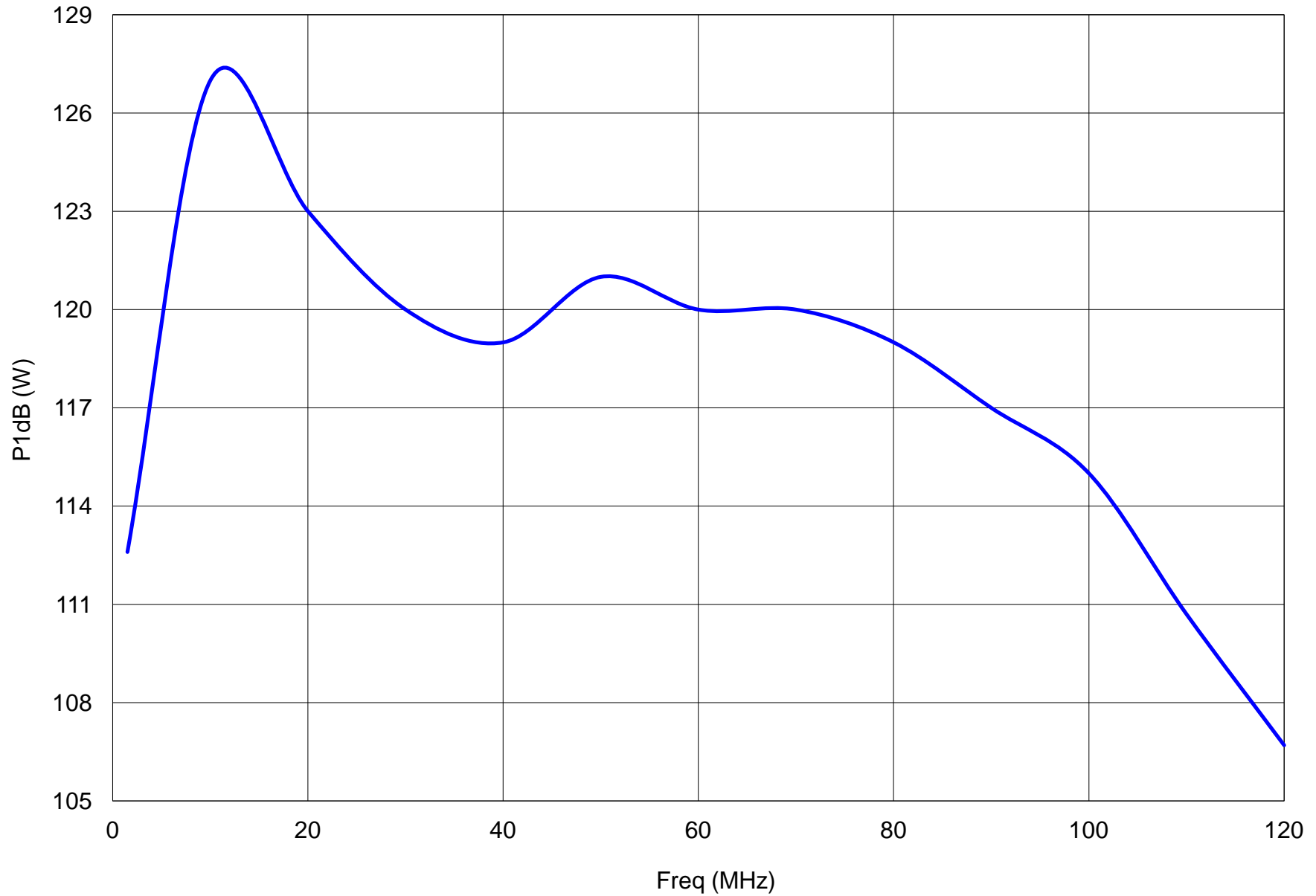




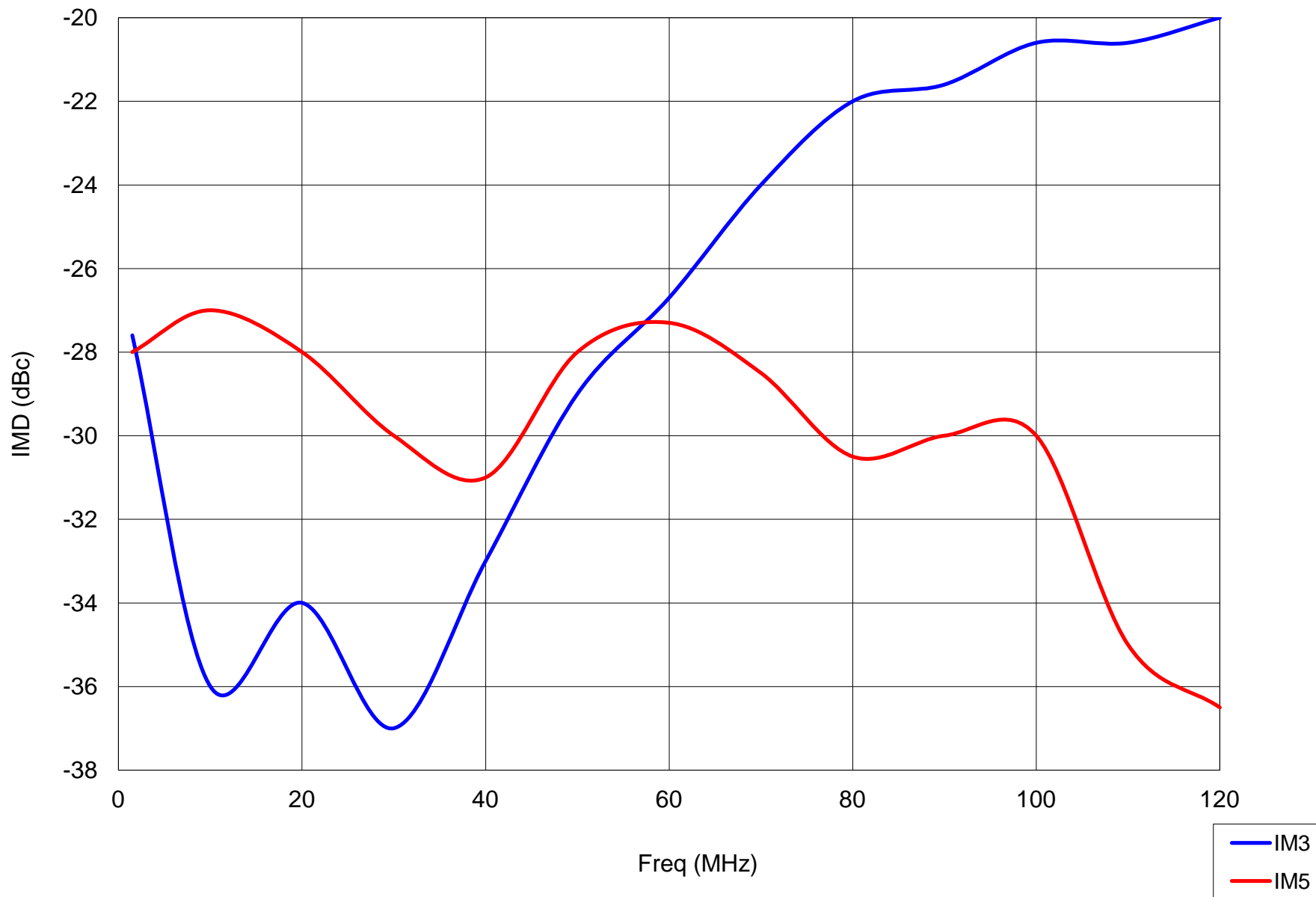


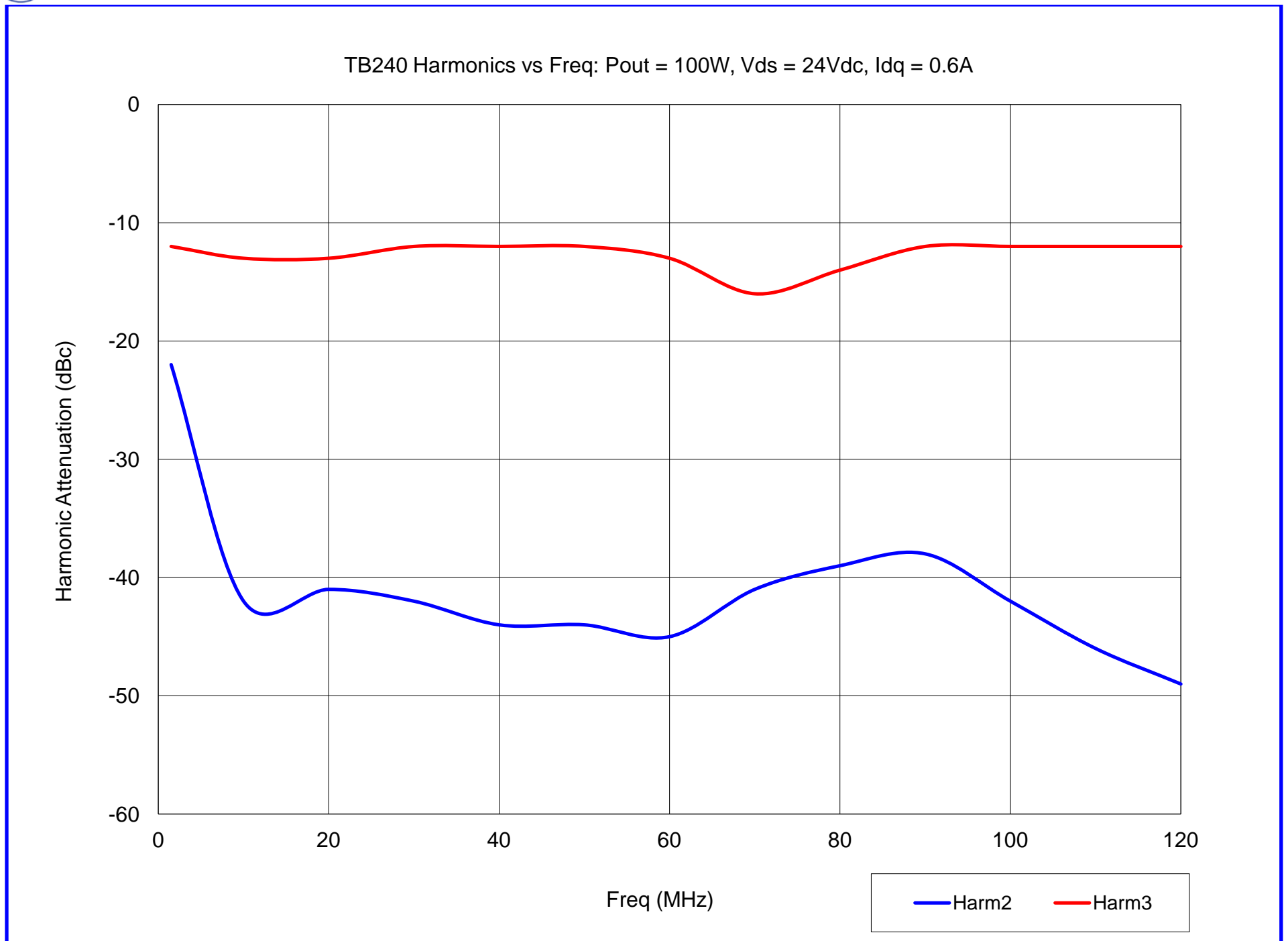


TB240 P1dB vs Freq: Vds = 24Vdc, Idq = 0.6A

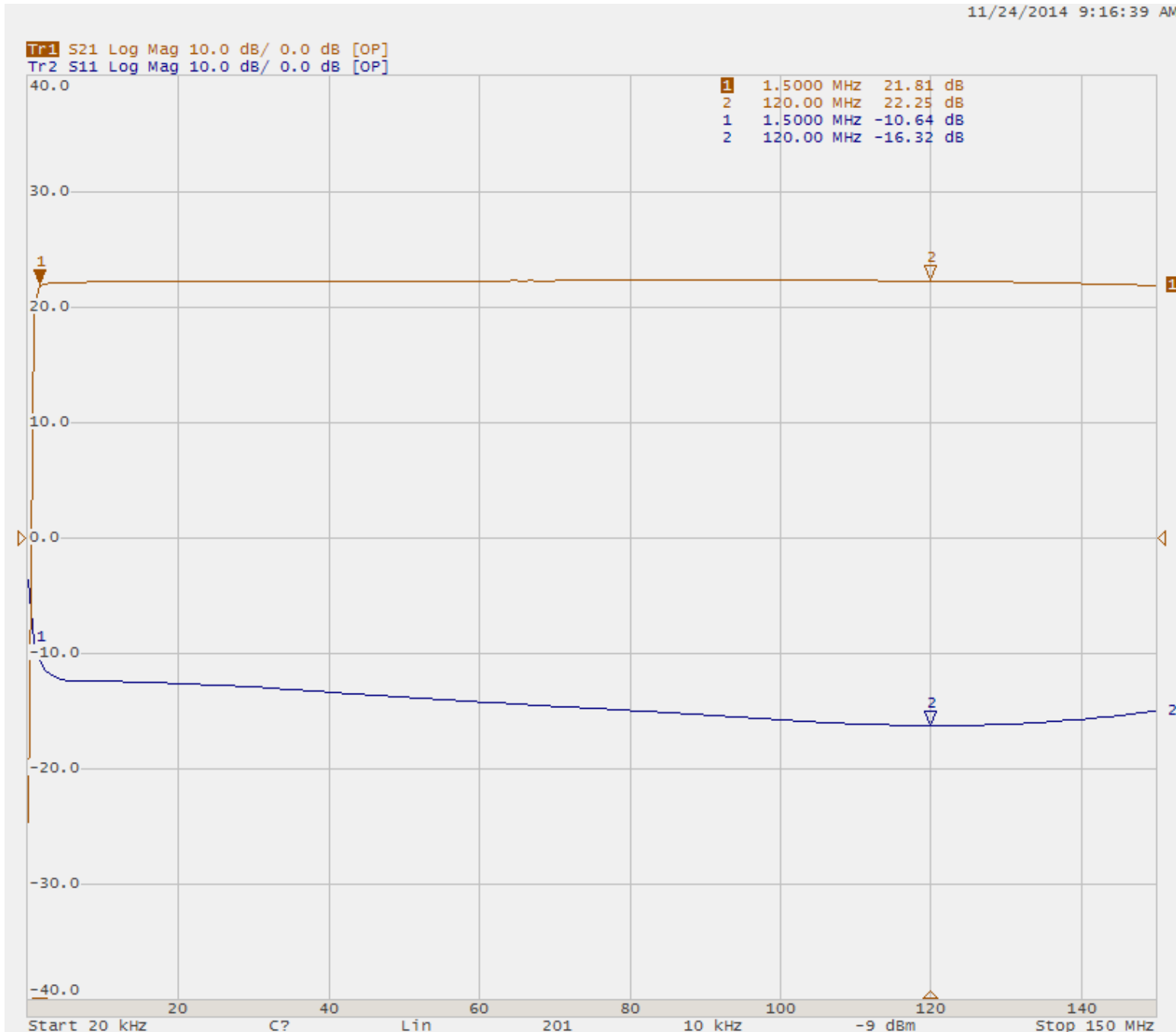


TB240 IMD vs Freq: PEP = 100W, Sep = 100kHz, Vds = 24Vdc, Idq = 0.6A

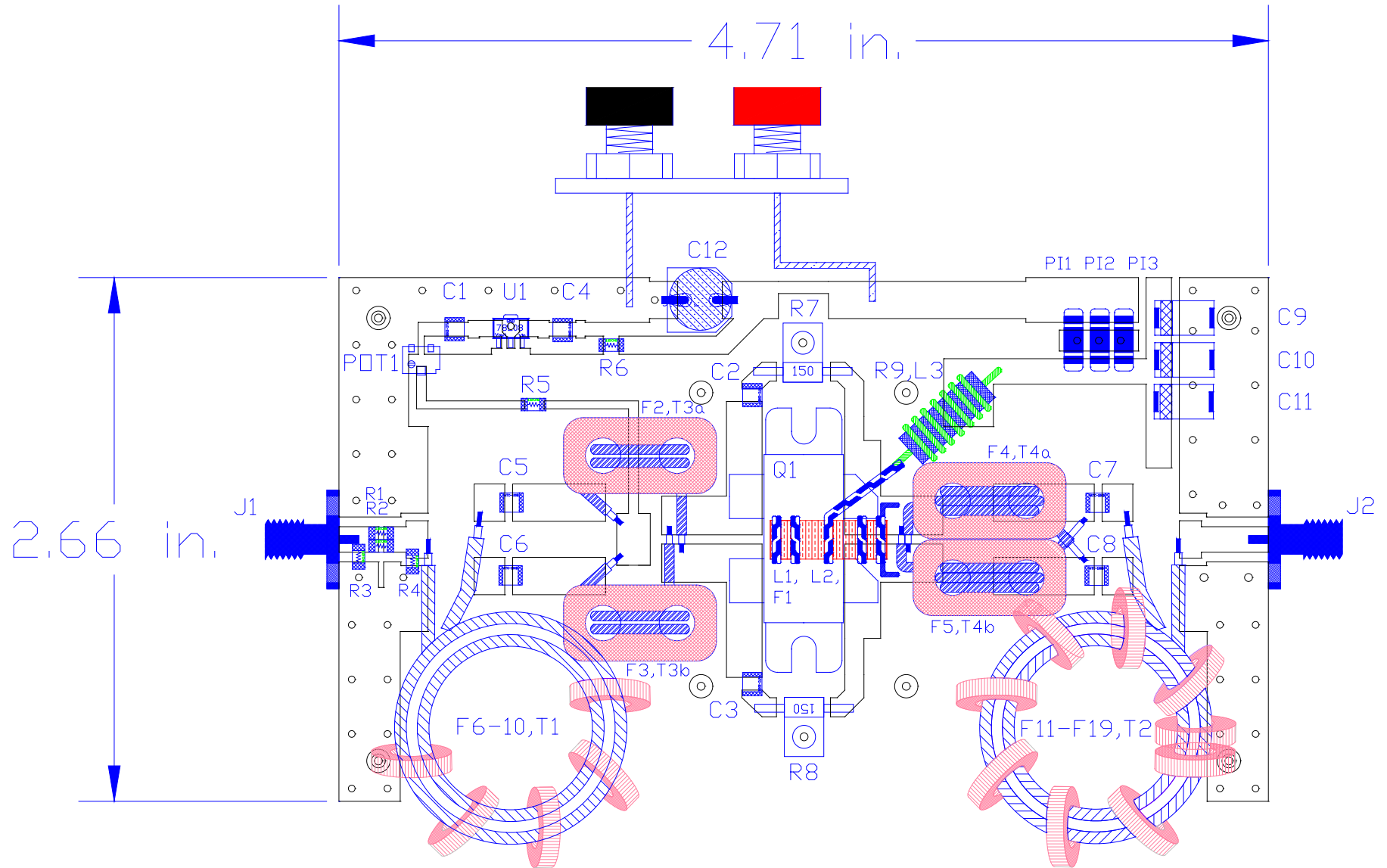


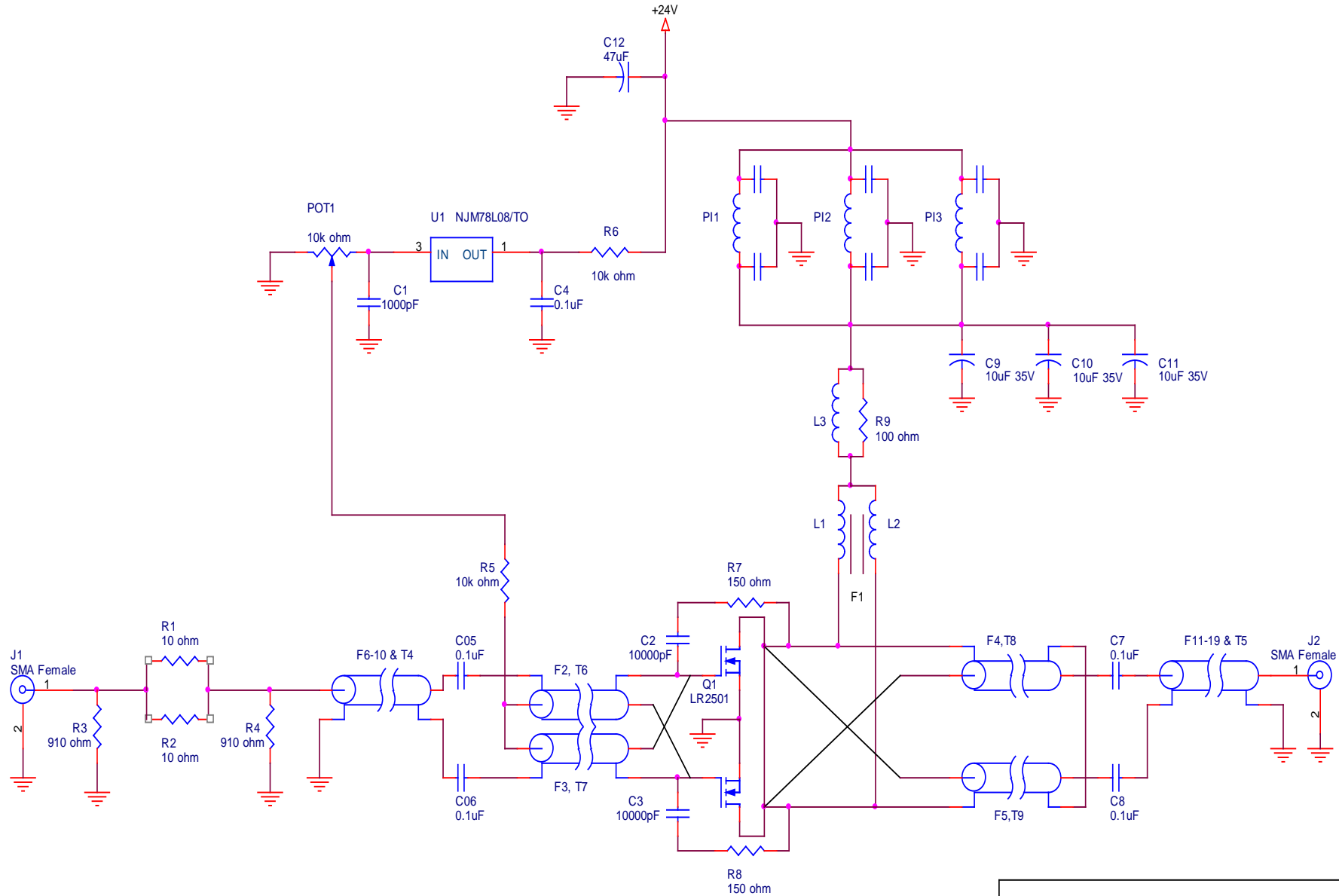


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TB240: Vds=24Vdc, Idq=0.6A, Pin=0dBm





Title		
TB240		
Size	Document Number	Rev
	LR2501 1.5-120MHz 24Vdc	A
Date:	Wednesday, November 26, 2014	Sheet 1 of 1

26-Nov-14			
	(Polyfet PCHA118)		
NOMENCLATURE	DESCRIPTION	VENDER/MANUFACTURER	VENDER/MANUFACTURER PART #
C1	1000pF +/-2% Ultra-low ESR, Microwave Cap., 1111N	Passive Plus, Inc	1111N102GW500
C2, C3	10,000pF +/-10% RF By-Pass Capacitors,1111X	Passive Plus, Inc	111X103KW500
C4, C5, C6, C7, C8	0.1uF +/-10% RF By-Pass Capacitors,1111X	Passive Plus, Inc	1111X104KW500
C9, C10, C11	10UF 35V 10% 2312 Kemet SMD Tantalum Chip Cap.	Digi-Key	478-1701-2-ND
C12	47uF Aluminum Electrolytic, 35V	Digi-Key	PCE3735CT-ND
R1, R2	RES 10 OHM 1/4W 5% 1206 SMD	Digi-Key	1056-MCR18J100-CHP
R3, R4	Thick Film Resistors 1206 5% 910ohm Anti-Sulfur	Panasonic	ERJ-U08J911V
R5, R6	RES 10K OHM 1/4W 5% 1206 SMD	Digi-Key	RHM10KERCT-ND
R7, R8	150 OHM 30W Flange Mount	Innovative Power Products, Inc.	IPP-RB201-150
R9	100 OHM 1W 5% Small Body Metal Oxide Resistor	Xicon Passive Components	281-100-RC
POT1	Trimmer Resistors - 10K OHM 0.25W SMD	Mouser Electronics	490-2661-1-ND
U1	IC 8V POSITIVE REGULATOR SOT89	Digi-Key	78L08UA-ND
PI1, PI2, PI3	EMI/RFI Suppressors & Ferrites 1000pF 100Volts@125C	Mouser Electronics	800-4700-005LF
T1	Magnet Wire, Twisted w/ T2, 24AWG, 17-turns around F1	www.electromechanicsonline.com	MW240SPNRD
T2	Magnet Wire, Twisted w/ T1, 22AWG, 17-turns around F1	www.electromechanicsonline.com	MW220SPNRD
T3	Magnet Wire, Twisted, 20AWG, 12-turns around R9	www.electromechanicsonline.com	MW220SPNRD
T4	50 ohm 30AWG 1C Shield Belden Coaxial Cable 5.25 in., 2 turns around F6-10	Belden Wire & Cable	83265 009100
T5	50 ohm 30AWG 1C Shield Belden Coaxial Cable 6 in., 2 turns around F11-19	Belden Wire & Cable	83265 009100
T6, T7	26 ohm Impedance Coaxial Cable 5.1 in., 2 turns around F2/F3	RF Power Systems	TC24
T8, T9	26 ohm Impedance Coaxial Cable 8 in., 3 turns around F4/F5	RF Power Systems	TC24
F1	Toroid Ferrite Q300P	Ceramic Magnetic	CMI#081823-02
F2, F3	Binocular Ferrite Material CN20	Ceramic Magnetic	CMI#003035-02
F4, F5	Binocular Ferrite Material C2050	Ceramic Magnetic	CMI#003022-01
F6-F19	Toroid Ferrite Material 61	Fair-Rite	5961000301
J1, J2	SMA Female; 4 Hole Panel Mount	Pasternack	PE4000-SF
Q1	LDMOS	Polyfet RF Devices	LR2501
PCB	FR4, 0.062", 1oz/1oz, er ~ 4.6	KingBoard (http://www.kblaminates.com)	KB-6160