

# TB222A

Frequency=1-1000MHz

Pout=25W

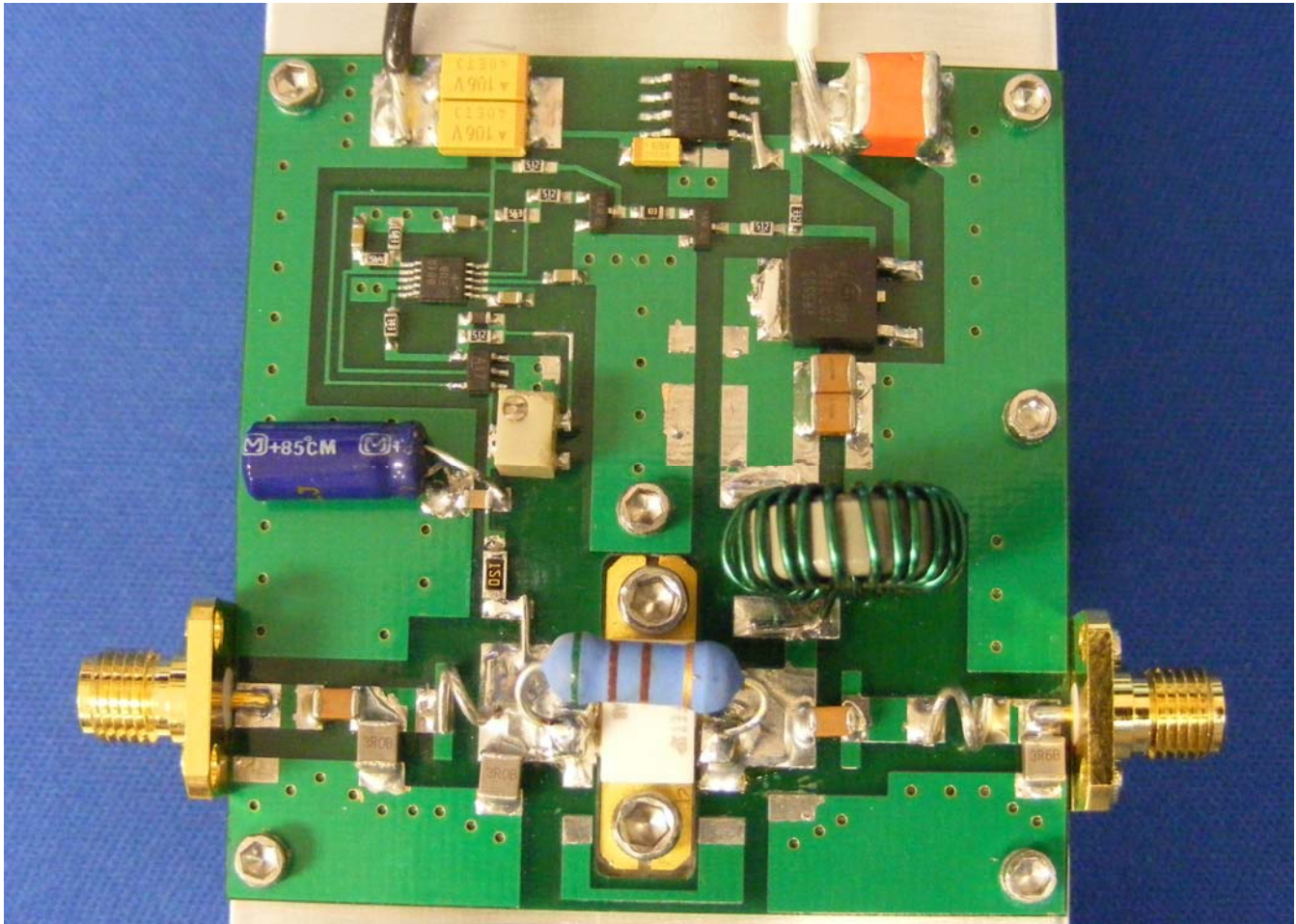
Gain=11dB

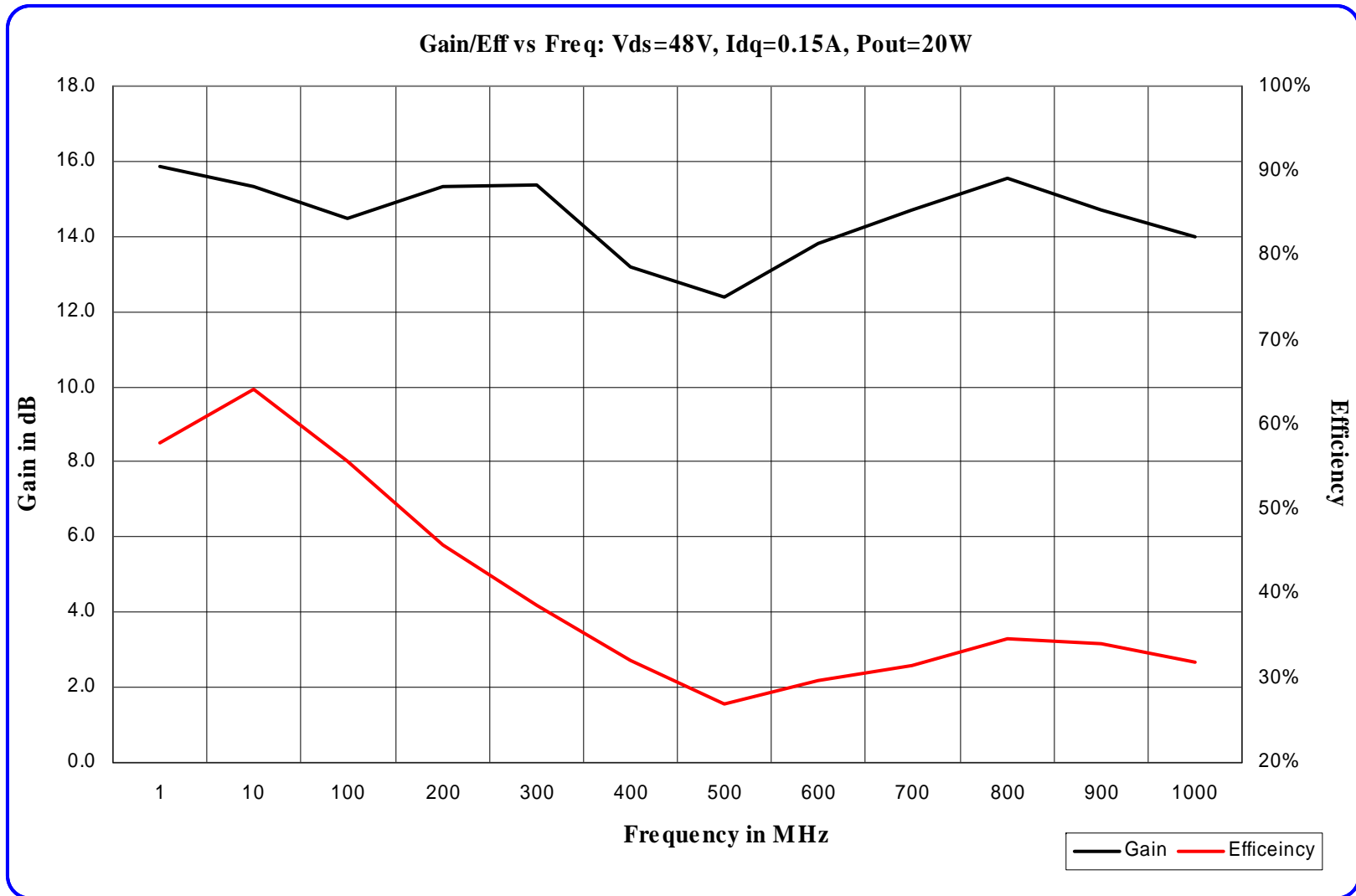
Vds=48Vdc

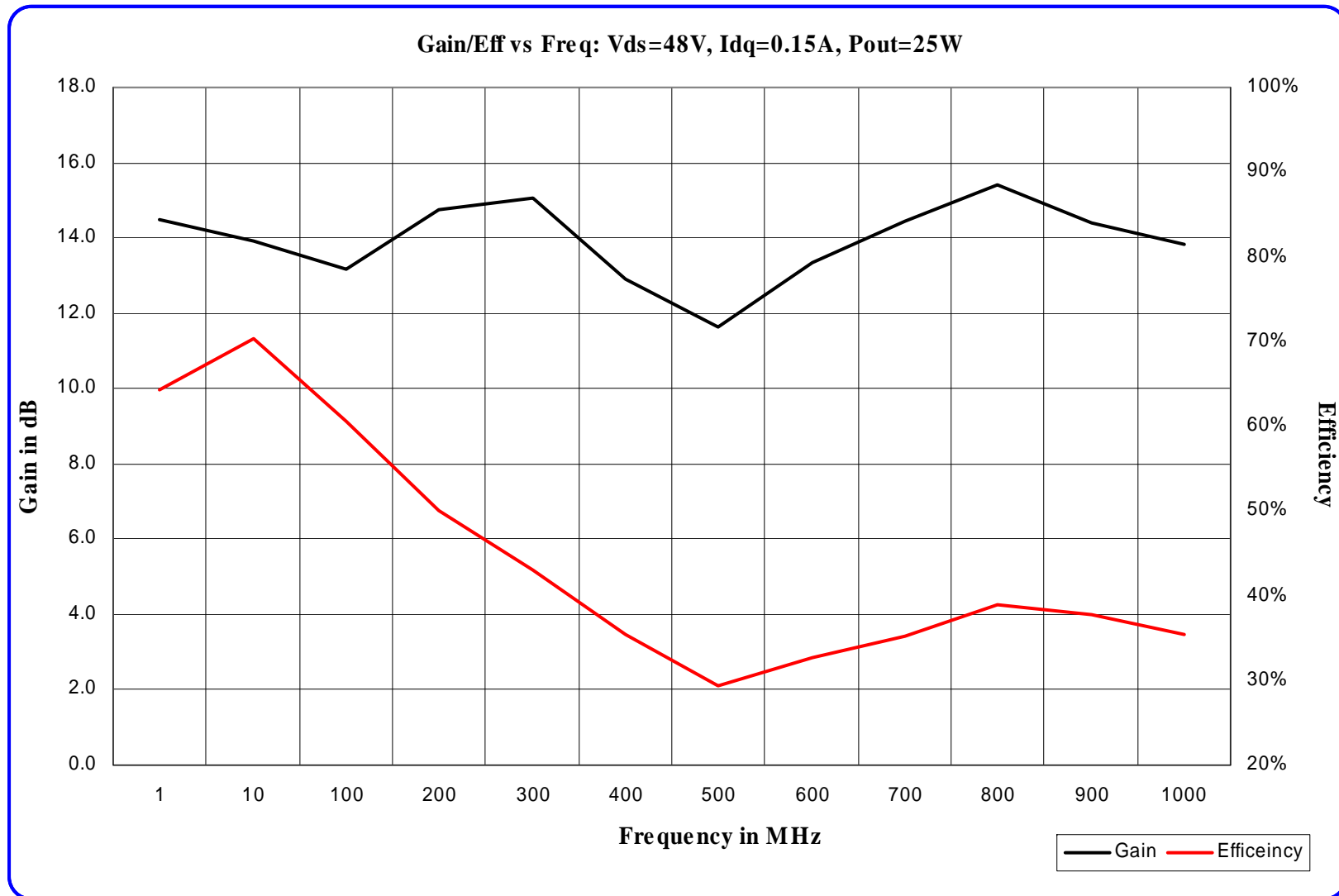
Idq=0.15A

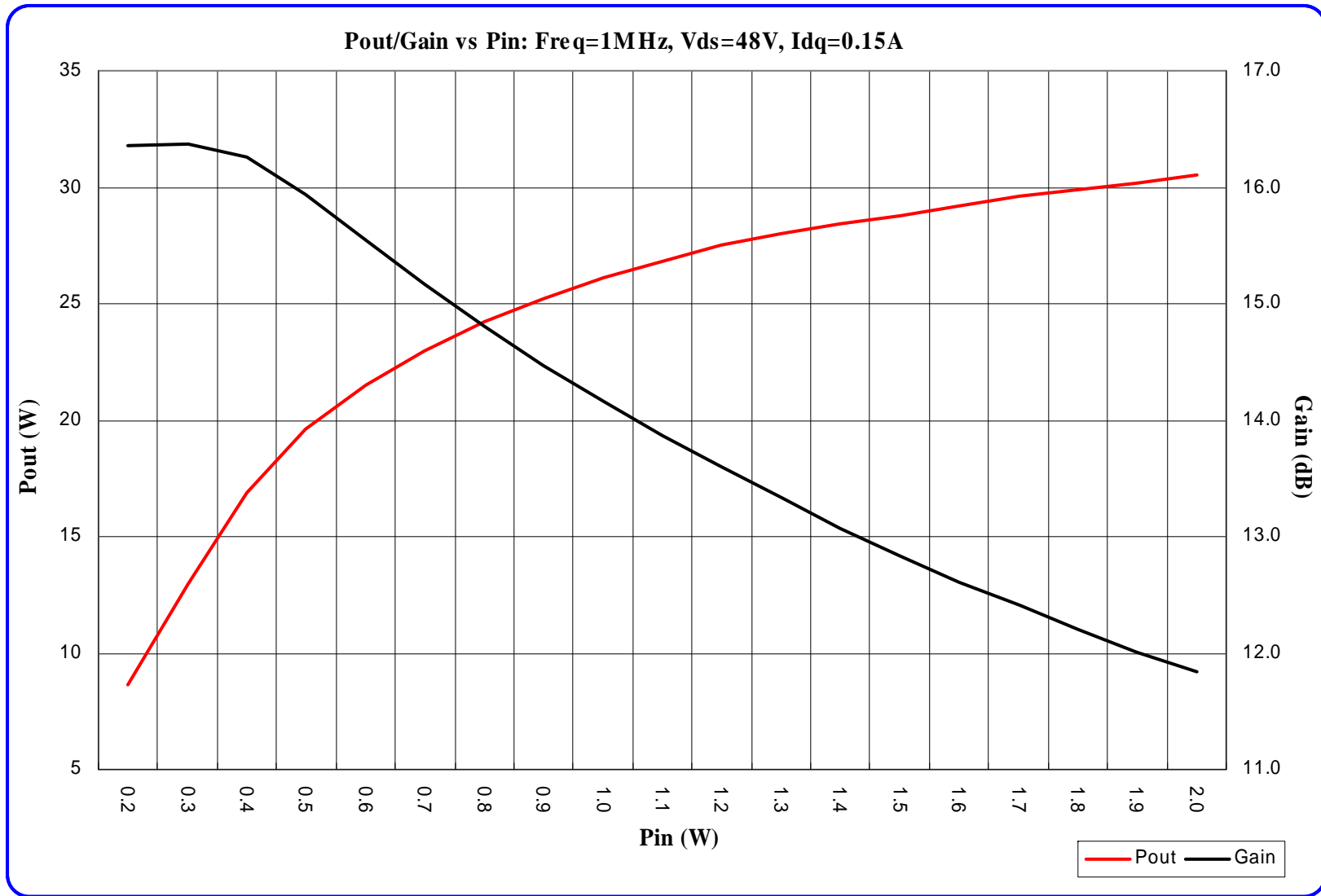
Efficiency=30 to 70%

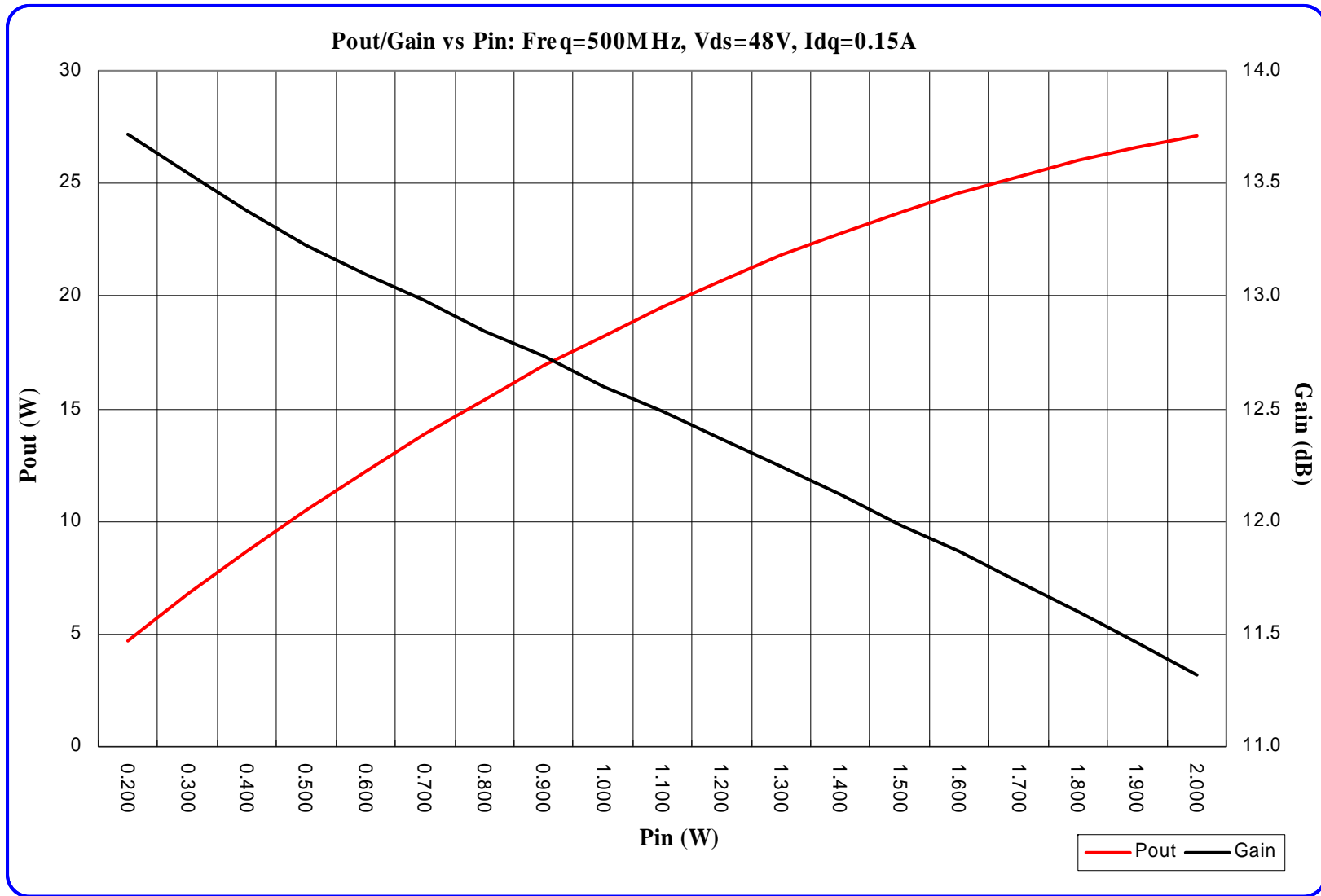
GX141

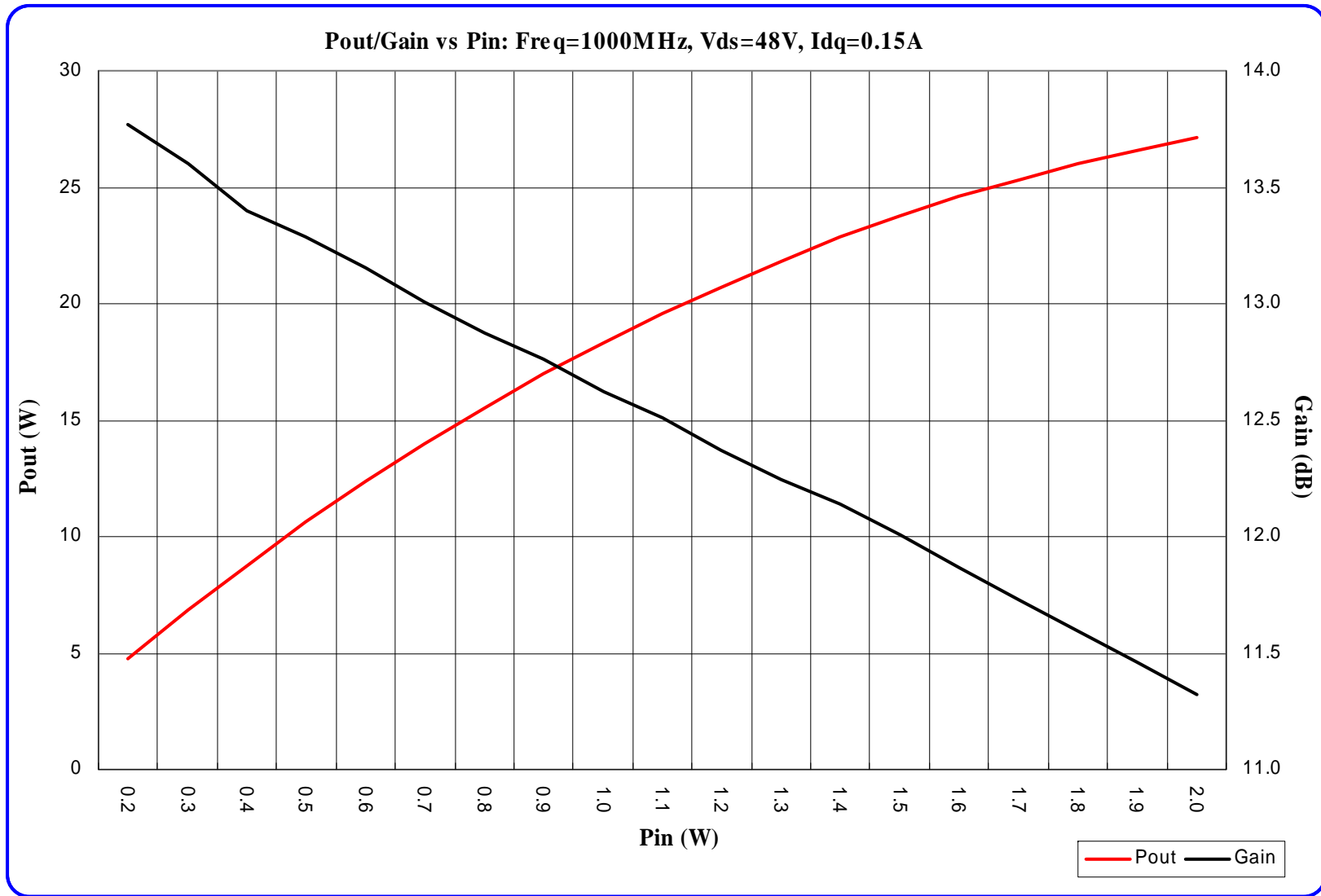


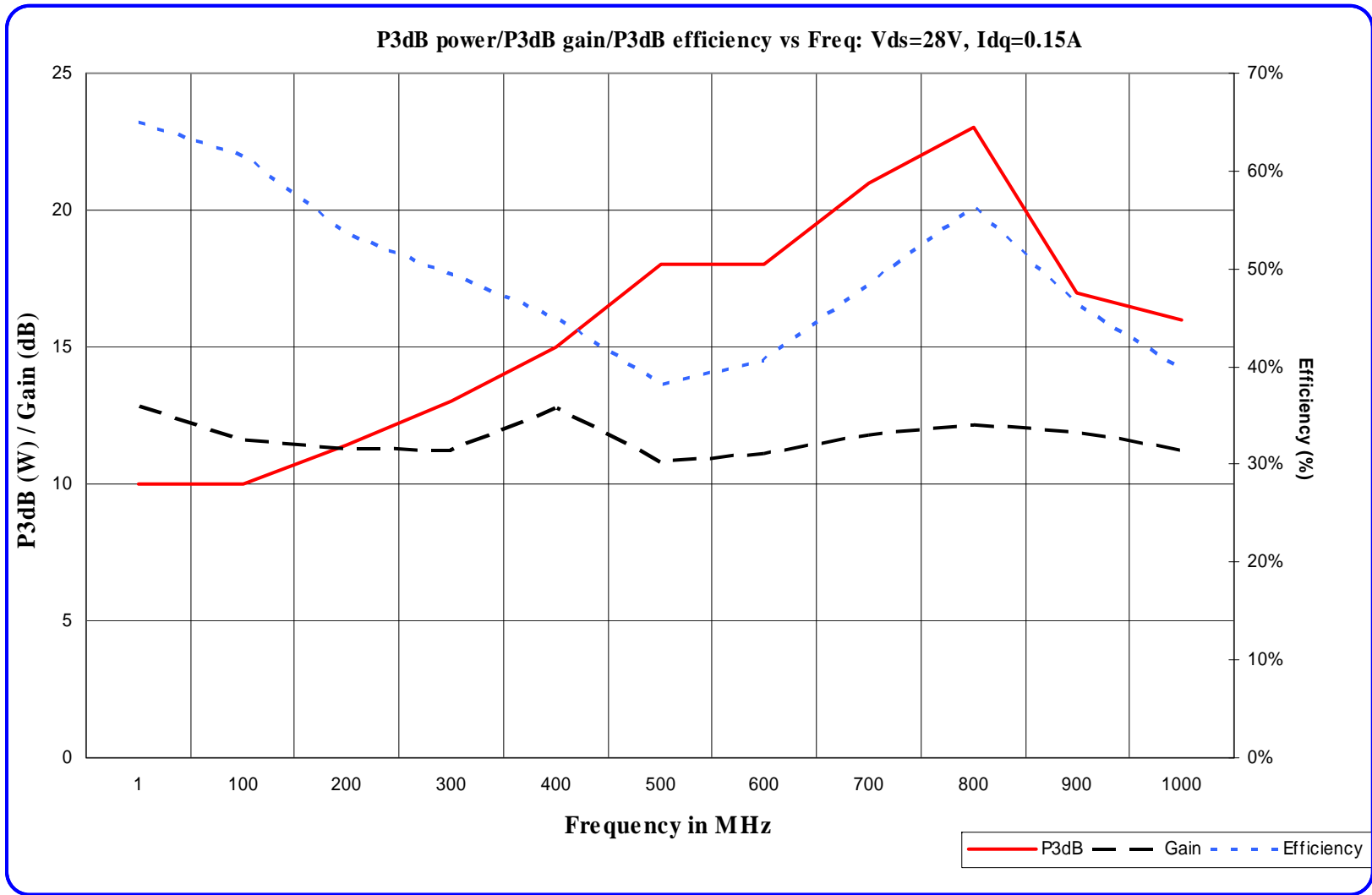


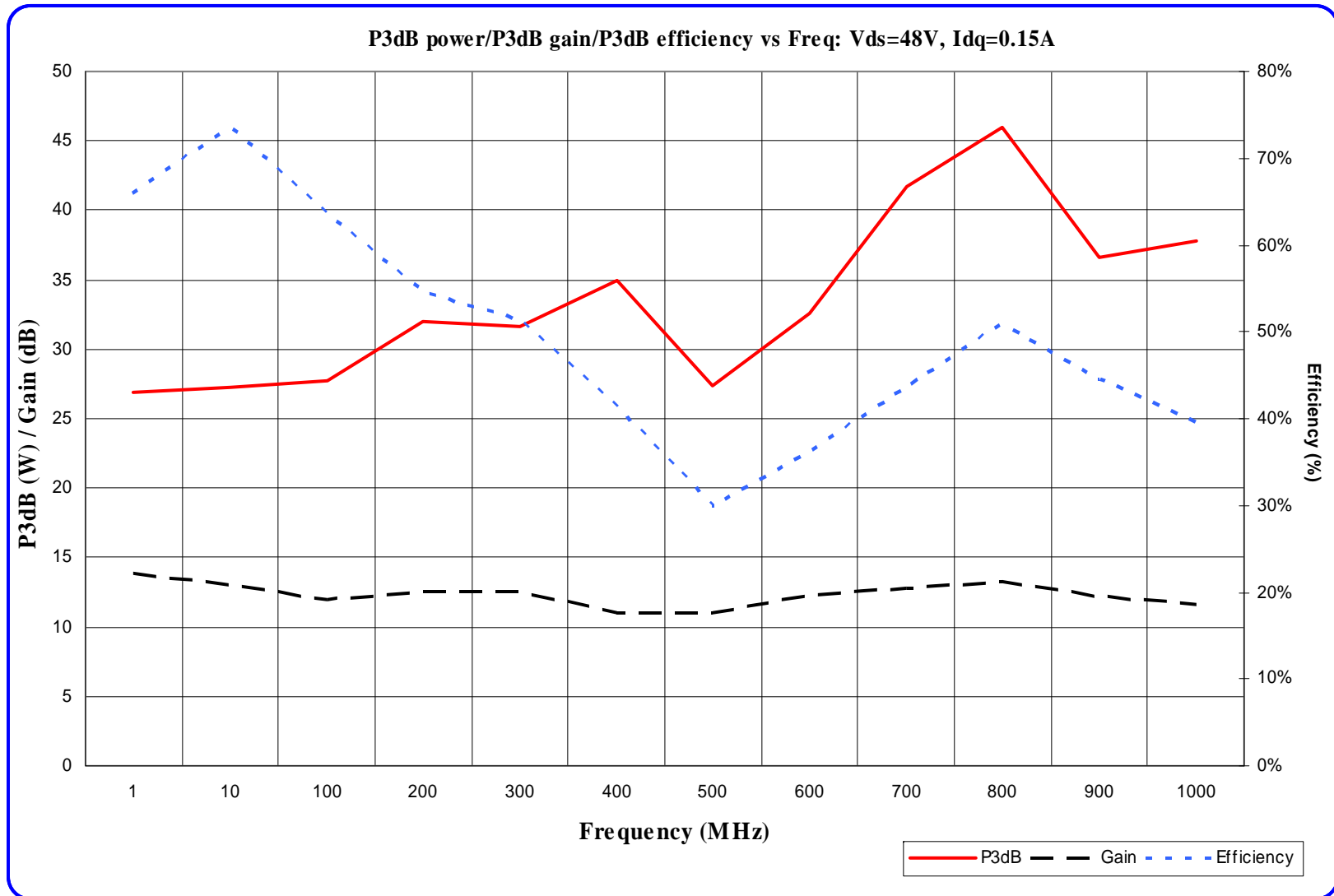




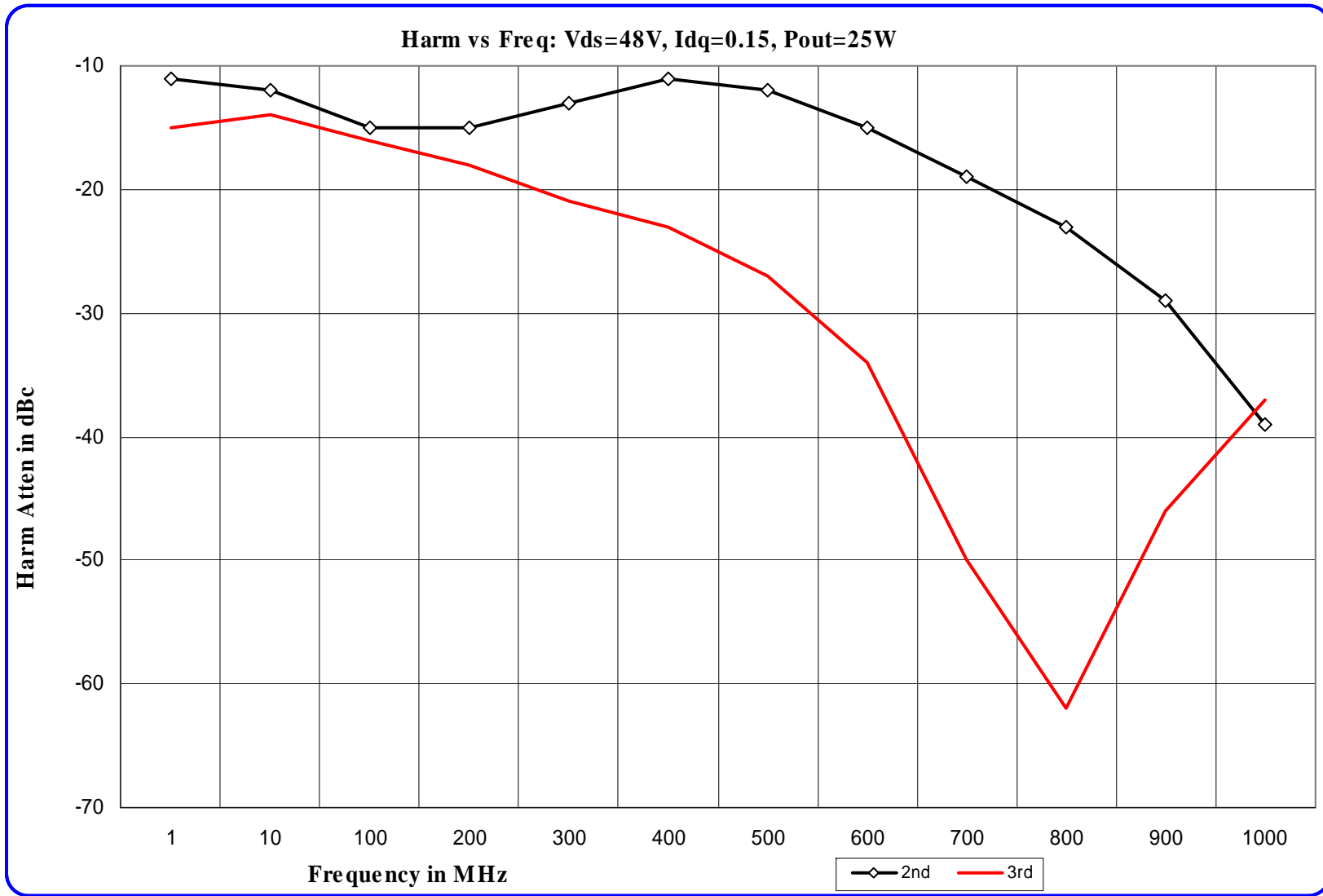


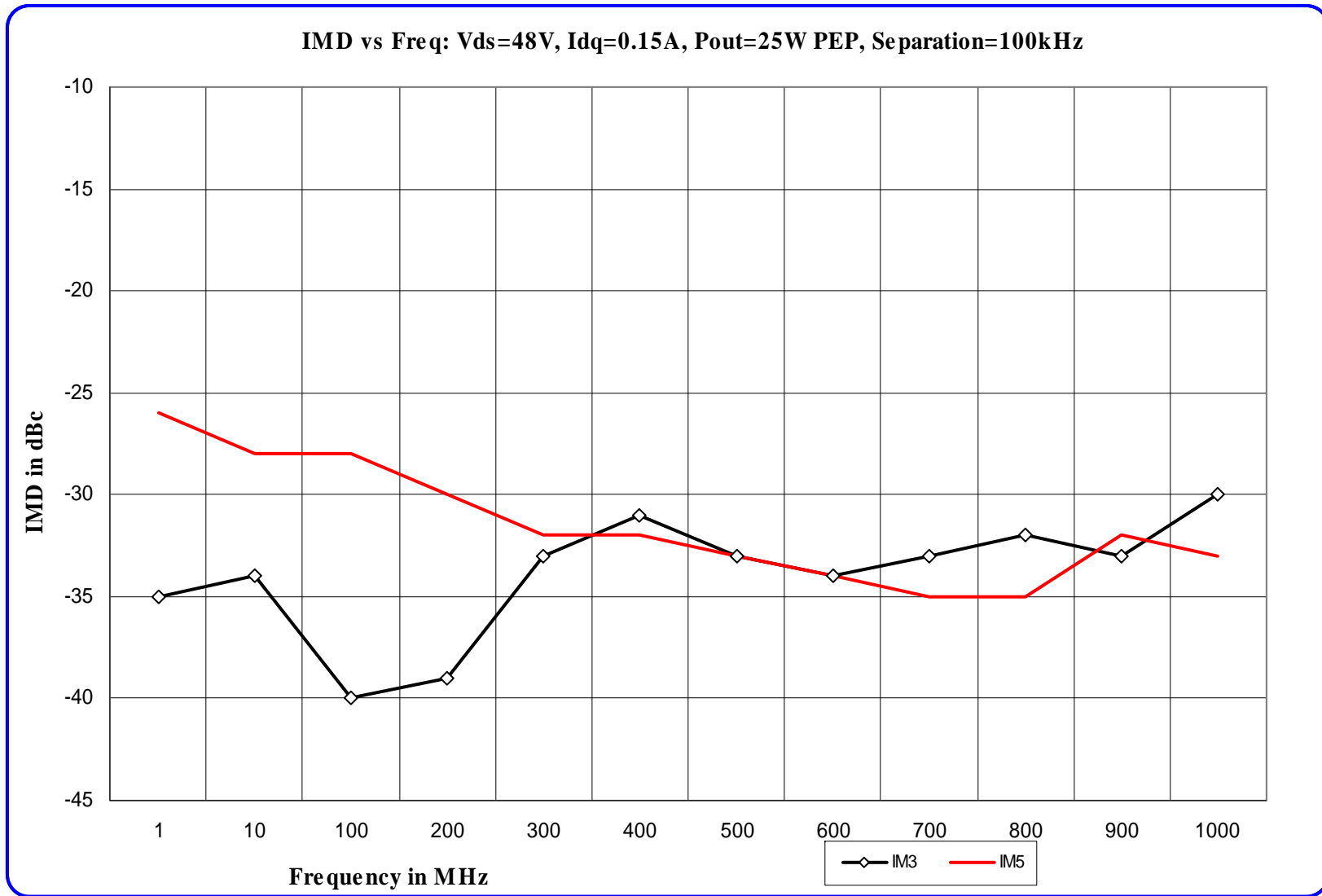


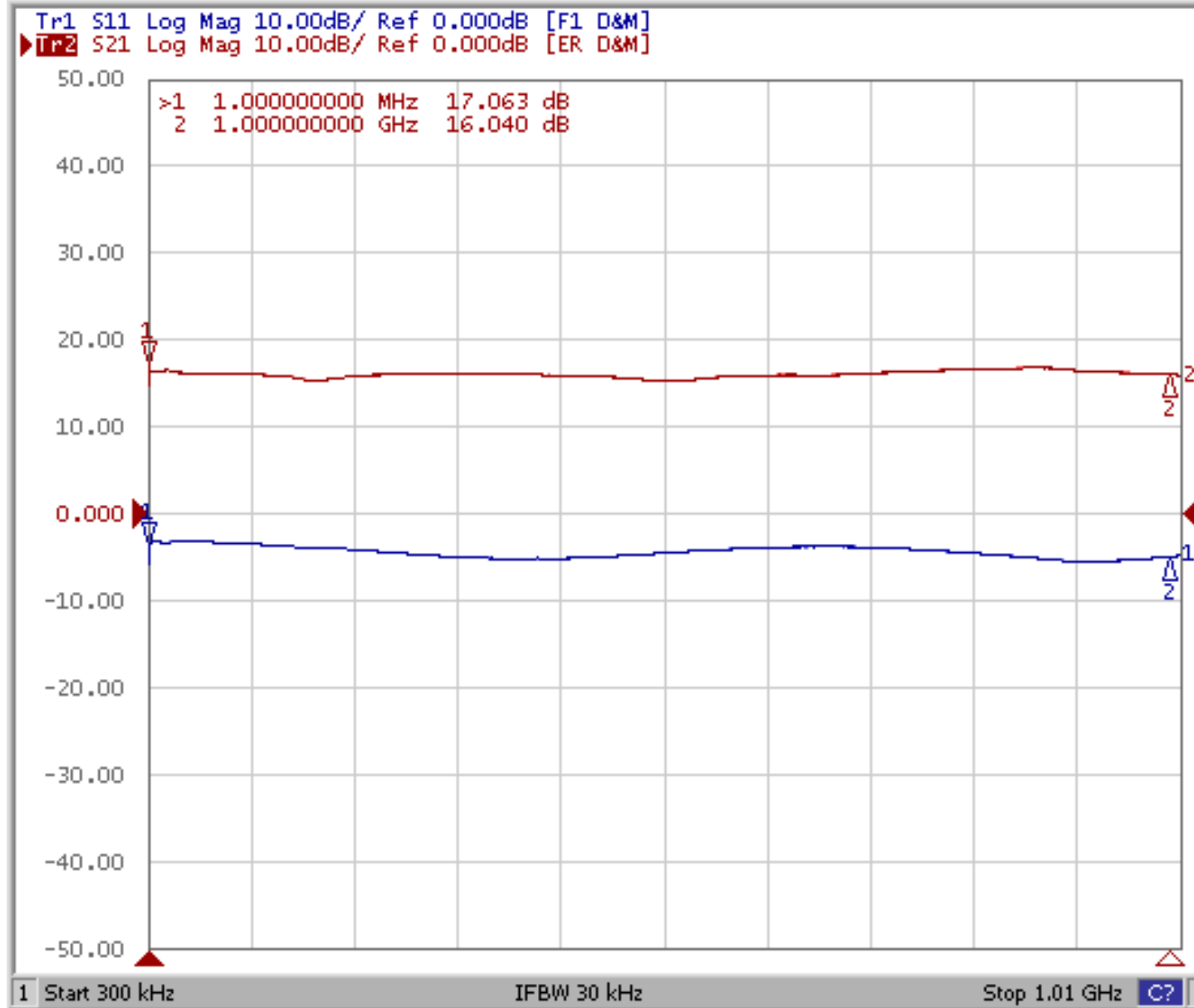


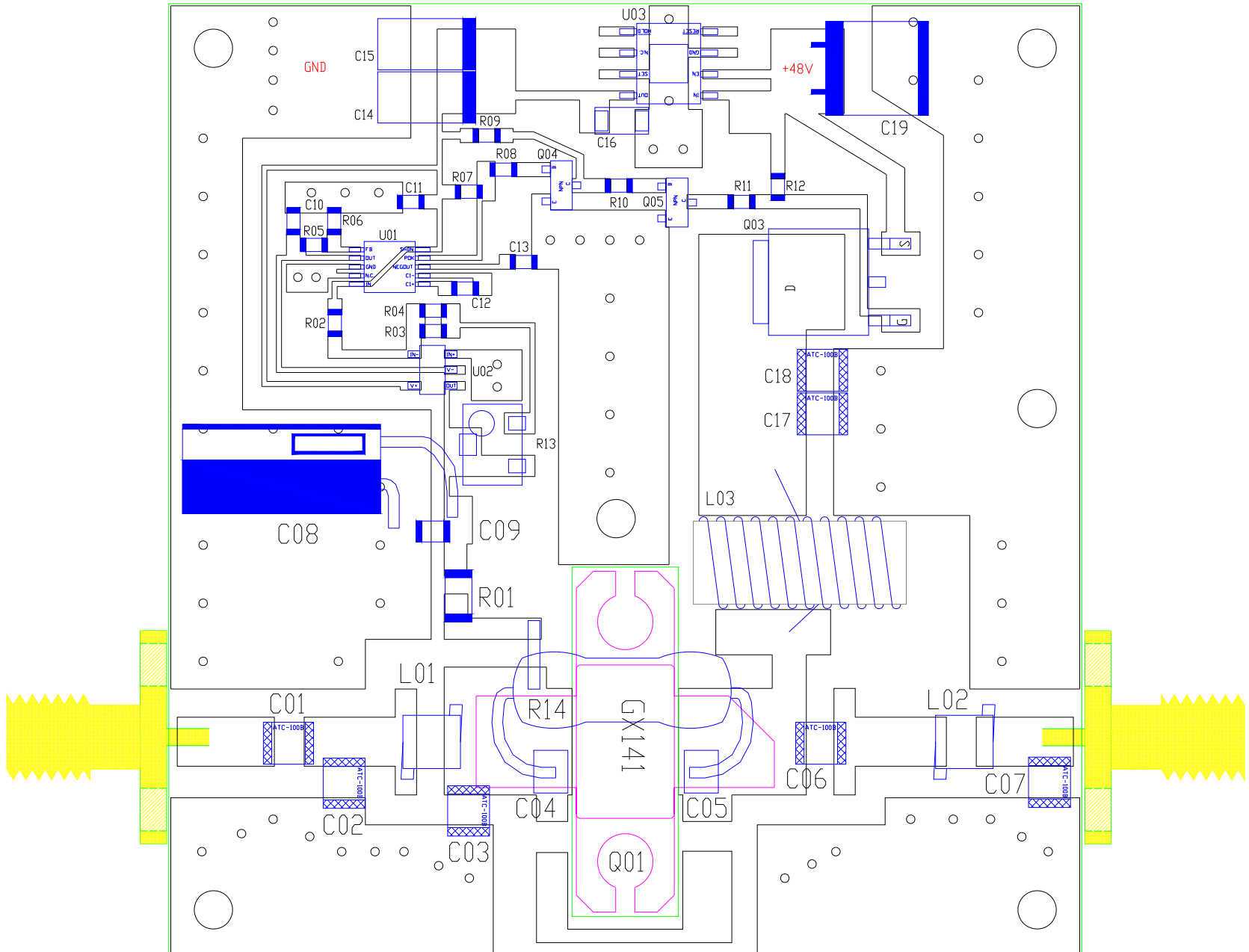










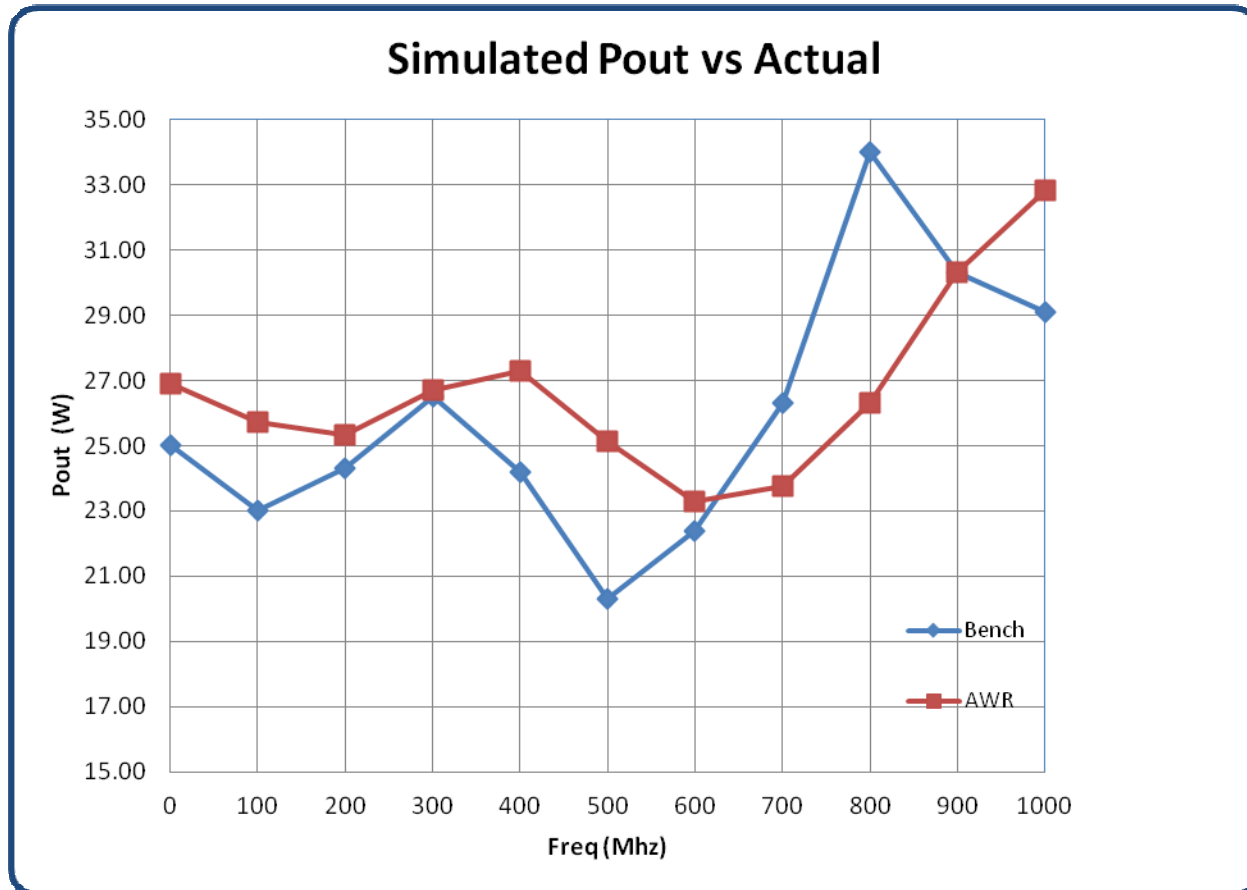


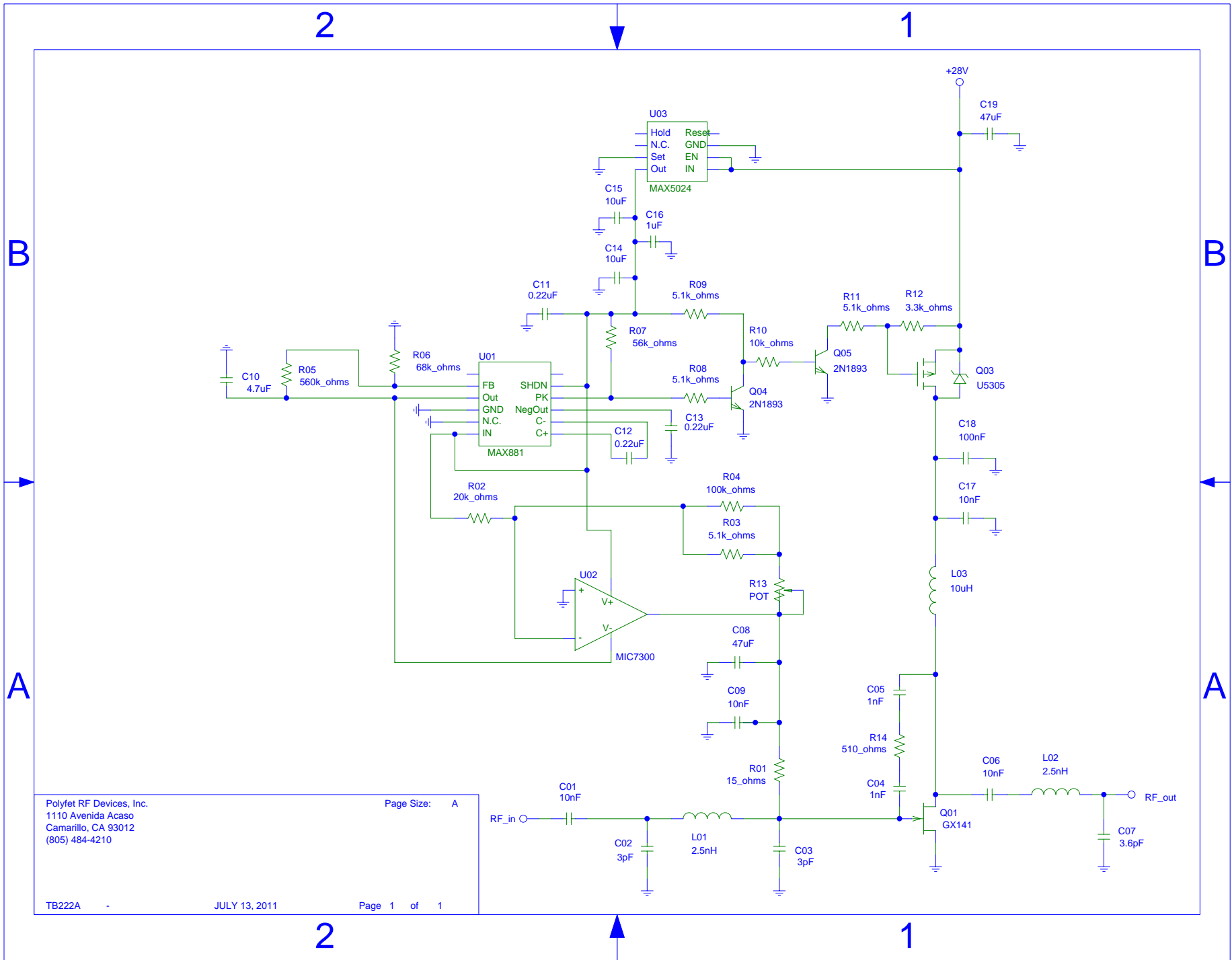


**Polyfet TB222A B.O.M.**

<b>NOMENCLATURE</b>	<b>DESCRIPTION</b>	<b>Manufacturer</b>	<b>VENDER PART #</b>
C01	10nF 200B Series	America Technical Ceramics	200B103MW 50X
C02	3.0pF E-Series EIA 1111	Johanson Technology	102S42E3R0BV3S
C03	3.0pF E-Series EIA 1111	Johanson Technology	101S42E102KV3S
C04	1nF E-Series EIA 1111	Johanson Technology	101S42E102KV3S
C05	1nF E-Series EIA 1111	Johanson Technology	101S42E102KV3S
C06	10nF 200B Series	American Technical Ceramics	200B103MW 50X
C07	3.6pF E-Series EIA 1111	Johanson Technology	102S42E3R6BV3S
C08	CAP ALUM 47UF 25V 20% RADIAL	Panasonic	ECA-1EM470B
C09	CAP CER 10000pF 50V 10% X7R 0805	Panasonic	ECJ-2VB1H103K
C10	4.7uF 10% Multilayer Ceramic Capacitor	AVX	0603ZD475KAT2A
C11		AVX	0603YD224KAT2A
C12		AVX	0603YD224KAT2A
C13		AVX	0603YD224KAT2A
C14	CAP TANT 10uF 10%	AVX	TAJC106K035RNJ
C15	CAP TANT 10uF 10%	AVX	TAJC106K035RNJ
C16	CAP TANT 1uF 10%	AVX	TAJA105K035RNJ
C17	100B SERIES 10,000pF CAP	American Technical Ceramics	200B103MW 50XT
C18	200B SERIES 100,000pF CAP	American Technical Ceramics	200B104MW 50X
C19	47uF 50V 20% Tantalum	Vishay/Sprague	71-597D476X0050Z2T
L01	2.5nH MINI SPRING Inductor	Coilcraft	A01TKL
L02	2.5nH MINI SPRING Inductor	Coilcraft	A01TKL
L03	22AWG wrapped 24X thru 35mu toroid	Amidon	T50-3
R01	RES 15 Ohms 1206 1/4W 1% SMD	Panasonic	
R02	20k Ohms	YAGEO	RC0603JR-0720KL
R03	5.1k Ohms	YAGEO	RC0603FR-075K1L
R04	100k Ohms	Panasonic - ECG	ERT-J1VV104J
R05	560k Ohms	PHYCOMP	RT0603FRE07560KL
R06	68k Ohms	YAGEO	RC0603FR-0768KL
R07	56k Ohms	PHYCOMP	RC0603FR-0756KL
R08	5.1k Ohms	YAGEO	RC0603FR-075K1L
R09	5.1k Ohms	YAGEO	RC0603FR-075K1L
R10	10k Ohms	Bourns	CR0603-JW-103ELF
R11	5.1k Ohms	YAGEO	RC0603FR-075K1L
R12	3.3k Ohms	YAGEO	RC0603FR-073K3L
R13	20k Ohms	Bourns	3224W-1-203E
R14	RES 510 Ohms 2W 5% Metal Oxide	Panasonic	ERG-2SJ511

NOMENCLATURE	DESCRIPTION	Manufacturer	VENDER PART #
Q01	GaN Fet	POLYFET RF DEVICES	GX141
Q03	HEX-FET	International Rectifier	IRFR/U5305PbF
Q04	NPN Transistor	ON Semiconductor	MMBT3904
Q05	NPN Transistor	ON Semiconductor	MMBT3904
U01	Low-noise, inverting power supply	Maxim Integrated Products	MAX881REUB+
U02	Op-Amp	Micrel Inc.	MIC7300YM5 TR
U03	High-Voltage linear Regulator	Maxim Integrated Products	MAX5024
PCB	FR4 H=0.03in 1/1oz Cu		





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 (805) 484-4210

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