



Microwave Town Company, LLC

MTPA20250328302

2000MHz-50000MHz Broadband Power Amplifier

2 - 50GHz High Gain Power Amplifier



Product Highlights

- 30dBm output power @ 10GHz
- 26dBm output power @ 40GHz
- 28dB gain to 26GHz
- 25dB gain to 40GHz
- Useful gain and power to 50GHz
- Small Size

Description

The MTPA20250328302 Amplifier is a broadband, high power, high gain instrumentation grade amplifier. The amplifier was designed to provide exceptional gain flatness per octave over greater than 5 octaves of frequency coverage. The 2 GHz to 50 GHz amplifier provides up to 30dB of gain and 30dBm output power with low harmonics and low residual phase noise.

Applications

The MTPA20250328302 Amplifier is an ideal selection for laboratory and instrumentation systems where a high performance broadband RFpower amplifier is required. Examples include use as a post amplifier for synthesizers, mixers, modulators, etc. where output powers are low and need to be increased to the 20dBm to 30dBm range. The amplifier was designed for use in communications systems, test equipment, military systems, etc.

Key Characteristics @ 25°C

Power requirement (Full Range) 110~240 VAC, 47~63 Hz

Parameter	Description	2-10 Typ	10-26 Typ	26-40 Typ	40-50GHz Typ
Psat (dBm)	Saturated Output Power	30	28	26	22
P1dB (dBm)	1db Compressed Power	28	27	25	20
S21 (dB)	Small Signal Gain	29	28	25	24
S11 (dB)	Input Match	-15	-15	-10	-8
S22 (dB)	Output Match	-12	-10	-6	-6
S12 (dB)	Reverse Isolation	-60	-60	-50	-50
NF (dB)	Noise Figure	9	9	10.5	12

Note: Usable to 53GHz(with output power: ~20dBm)

Ph: (626) 823-4815

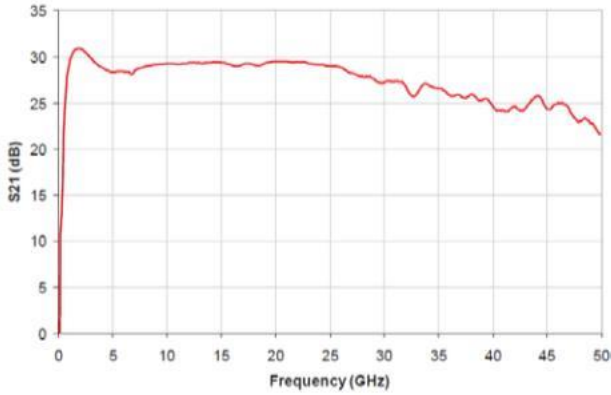
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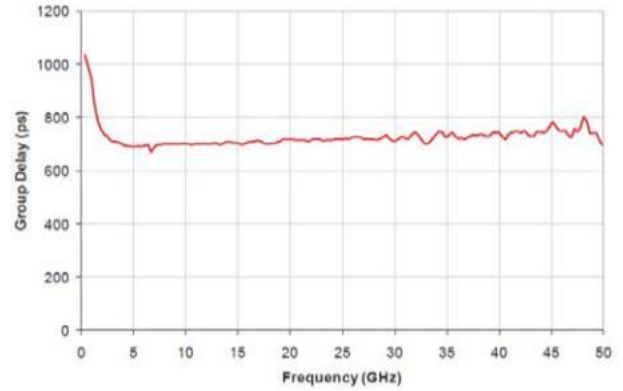


Typical Performance

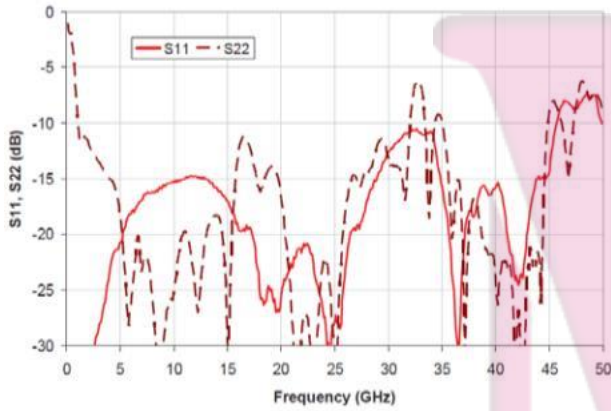
MTPA20250328302 S21



MTPA20250328302 Group Delay



MTPA20250328302 S11, S22



MTPA20250328302 Saturated Output Power

