

# USBA2010 RF Power Amplifier

20 MHz to 1GHz - 6 W



- **MULTIPLE APPLICATIONS**

- Electromagnetic Compatibility (EMC) testing
- Instrumentation
- Antenna field measurements
- Communication systems

- **BROADBAND PERFORMANCE**

43 dB of flat gain from 20 MHz to 1 GHz, 6 W typical saturated power

- **UNBREAKABLE**

- Can sustain infinite load VSWR at full power
- Input power of up to 0.5 W
- Non destructive inverse-polarity protection
- Can sustain overvoltage of up to 28 V

The USBA2010 broadband RF power amplifier by US Microwave Laboratories offers exceptional performance at a very competitive price. Covering the frequency range from 20 MHz to 1 GHz, it provides 43 dB of flat gain, typical 6 W of output power, low noise figure, and it can continuously operate into a mismatched load at full power.

These amplifiers are ideal for Electromagnetic Compatibility (EMC) testing and certification. The USBA2010 can excite with no damage EMC near-field probes for conducted immunity troubleshooting in a design laboratory without resorting to high power equipment and antennas.

Designed and manufactured in the U.S.A., the USBA2010 conforms to the European RoHS requirements and is ECCN EAR99.



**RF & microwave  
components  
and equipment**

**All our products are  
designed and manufactured  
in the U.S.A.**



[www.usmicrolabs.com](http://www.usmicrolabs.com)    [info@usmicrolabs.com](mailto:info@usmicrolabs.com)

7412 Summerfield Rd. #303, Summerfield, NC 27358, USA

Phone: (+1) 336-582-0603

Specifications subject to change without notice

# Specifications

	Min	Typ	Max	UNIT
Frequency range	20		1000	MHz
Saturated output power	4	6	9	W
P1dB	1.5	3	5	W
Gain	42	43	44	dB
Gain flatness			±1.5	dB
Input VSWR			2:1	-
Output VSWR			3:1	-
2 <sup>nd</sup> harmonic at P1dB			-20	dBc
3 <sup>rd</sup> harmonic at P1dB			-20	dBc
Noise figure		5.5	6	dB
Operating supply voltage	17.5	18.5	18.5	V dc
Supply voltage (non operational)			28	V dc
Current consumption		1.9	3.0	A
Input/ reverse output power (no damage)			0.5 (27)	W (dBm)
Input/output dc voltage at RF connectors			12	V dc
Operating temperature	0	25	50	°C
Weight		3.3 (1.5)		lbs (kg)
Dimensions	9.72 (246.9) D, 4.3 (109.2) W, 2.7 (68.6) H			inch (mm)
Output load VSWR	∞ at any phase angle at full power			
Cooling	Built-in fans			
ESD & transient protection	Yes			
Reverse polarity protection	Yes, non destructive			
RF connectors	SMA female (USBA2010S) or N female (USBA2010N)			



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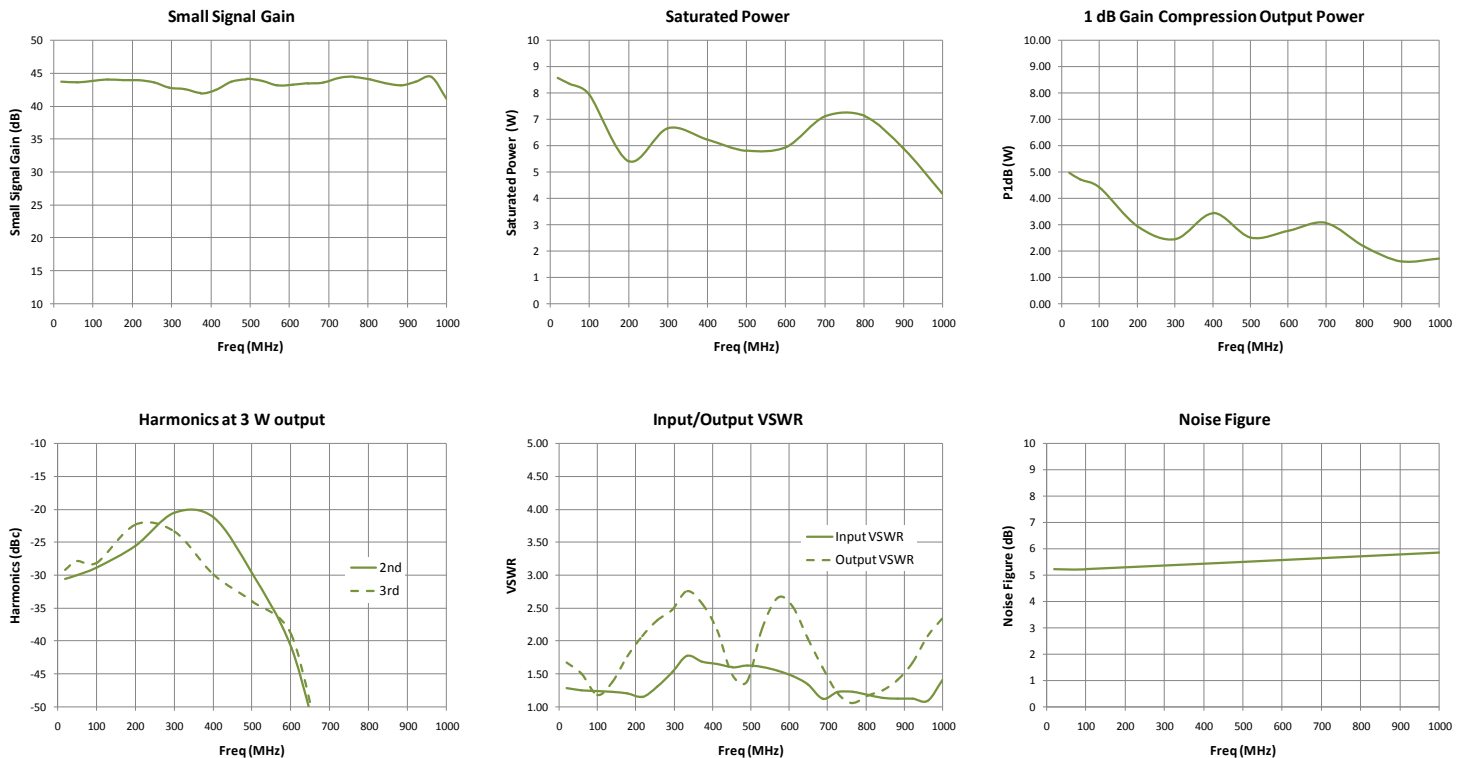
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## Accessories supplied

External AC adaptor: 100 to 240 V AC, 47 to 63 Hz; European and US plugs; 0 to 50 °C operation; CE and UL approved.

## Typical Performance



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