

Jersey Microwave

GaAs FET Power Amplifier

Model: WPA Series

Features

- ✓ High output power (up to 100W)
- ✓ High linearity and reliability
- ✓ Internal voltage regulator & delay circuits included
- ✓ Low cost

Options

- ✓ Over-temperature protection
- ✓ Output monitor / detector
- ✓ Heat sink
- ✓ Attenuation / mute control
- ✓ Isolators Customizable to specific requirements



Description

Jersey Microwave's WPA series solid state power amplifiers incorporate a wide variety of techniques to offer high performance over a wide range of specification requirements. The amplifier can be used in a multitude of applications including wireless base stations (PCS, CDMA, TDMA, GSM, WLL), point-to-point radios, and other communications systems. All designs are implemented using microstrip technology and standard printed circuit board constructions for maximum repeatability, lowest production cost, and highest reliability. All models include voltage regulator, delay and protection circuits.

Electrical Specifications

Model No.	Freq. (GHz)	Gain (dB) Min.	Flatness (+/- dB) Max.	N.F. (dB) Max.	Po (1 dB) (dBm) Min.	IP3 (dBm) Typ.	VSWR Input/Output Max.	Current* (Amps) Typ.	Size (LxWxH in.)
WPA-009-3733	0.95 – 1.55	37	+/- 0.75	4.0	33.0	43.0	1.5:1/1.5:1	1.15	2.5x4.0x0.75
WPA-112-4040	1.00 – 1.40	40	+/- 0.75	4.0	40.0	50.0	1.5:1/1.5:1	4.75	2.5x5.25x0.75
WPA-114-4037	1.40 – 1.70	40	+/- 0.50	4.0	37.0	47.0	1.5:1/1.5:1	2.5	2.5x4.5x0.75
WPA-117-4037	1.70 – 1.90	40	+/- 0.50	4.0	37.0	47.0	1.5:1/1.5:1	2.5	2.5x4.5x0.75
WPA-118A-4540	1.80 – 1.88	40	+/- 0.50	4.0	40.0	50.0	1.5:1/1.5:1	4.0	2.5x4.5x0.75
WPA-118A-4843	1.80 – 1.88	43	+/- 0.50	4.0	43.0	53.0	1.5:1/1.5:1	8.5	3.0x5.0x0.75
WPA-118A-5046	1.80 – 1.88	46	+/- 0.50	4.0	46.0	56.0	1.5:1/1.5:1	10.5	3.0x5.5x0.75
WPA-118B-4040	1.85 – 1.99	40	+/- 0.50	4.0	40.0	50.0	1.5:1/1.5:1	4.0	2.5x4.5x0.75
WPA-118B-4843	1.85 – 1.99	43	+/- 0.50	4.0	43.0	53.0	1.5:1/1.5:1	8.5	3.0x5.0x0.75
WPA-118B-5046	1.85 – 1.99	46	+/- 0.50	4.0	46.0	56.0	1.5:1/1.5:1	10.5	3.0x5.5x0.75
WPA-220A-4037	1.70 – 2.20	40	+/- 0.50	4.0	37.0	47.0	1.5:1/1.8:1	3.4	2.5x4.5x0.75
WPA-220A-4040	1.70 – 2.20	40	+/- 0.75	4.0	41.0	51.0	1.5:1/1.8:1	6.0	2.5x4.5x0.75
WPA-220B-4037	2.00 – 2.50	40	+/- 0.75	4.0	37.0	47.0	1.5:1/1.8:1	3.4	2.5x4.5x0.75
WPA-220B-4041	2.00 – 2.50	40	+/- 0.75	4.0	41.0	51.0	1.5:1/1.8:1	6.0	2.5x4.5x0.75
WPA-221A-4037	2.30 – 2.70	40	+/- 0.50	4.0	37.0	47.0	1.5:1/1.8:1	3.4	2.5x4.5x0.75
WPA-221A-4041	2.30 – 2.70	40	+/- 0.50	4.0	41.0	51.0	1.5:1/1.8:1	6.0	2.5x4.5x0.75

* - Current drawn given at +12 (+/- 5%) VDC

Note: Specifications are subject to change without notice