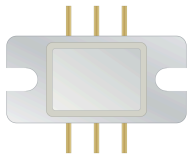
4000–8000 MHz GaN Packaged Power Amplifier — PSAT 47 dBm (typical)

LCI-PA-4000-8000-PS47T · 4000–8000 MHz · GaN Packaged Power Amplifier.



The RF table specifies: PSAT 47 dBm (typical); Power gain 19 dB (typical); PAE 40 % (typical). RF test conditions: TA = +25 °C; VDS = 28 V; VGS ∈ [-3.2, -2.2] V; Pin = 28 dBm; D = 10%; PW = 100 µs.

CMW010B

Apply gate bias before drain bias. Remove drain bias before gate bias.

Vg: C = 10 µF

Vg: 1, 3

RFin: 2

Vd: 4, 6

RFout: 5

Package outline dimensions: 18.03 × 8.7 mm.

RF characteristics

TA = +25 °C; VDS = 28 V; VGS ∈ [-3.2, -2.2] V; Pin = 28 dBm; D = 10%; PW = 100 µs

Parameter	Symbol	Minimum	Typical	Maximum	Unit
Operating frequency	f	4000	-	8000	MHz
Saturated output power	-	46.5	47	-	dBm
Power gain	-	18.5	19	-	dB
Power-added efficiency	-	32	40	-	%
Power-gain flatness	-	-	-	1.5	dB

DC bias and current

Parameter	Symbol	Minimum	Typical	Maximum	Value	Unit
Drain voltage	-	-	-	-	28	V
Gate voltage	-	-	-	-	[-3.2, -2.2]	V

Absolute limits

Absolute limits; these are not normal operating targets.

Parameter	Symbol	Minimum	Typical	Maximum	Unit
Maximum drain-source voltage	-	-	-	32	V
Minimum gate bias	-	-5	-	-	V
Storage temperature	-	-65	-	150	°C
Maximum input power	-	-	-	32	dBm

Absolute limits

Absolute limits; these are not normal operating targets.

Parameter	Symbol	Minimum	Typical	Maximum	Unit
Maximum channel temperature	-	-	-	225	°C

Package outline dimensions

Parameter	Value	Unit
Package outline dimensions	18.03 × 8.7	mm
Terminal span	14.7	mm

Current publication record · 1.6 · 2026-11-12. Product description or editorial content updated. Replaces revision 1.5.

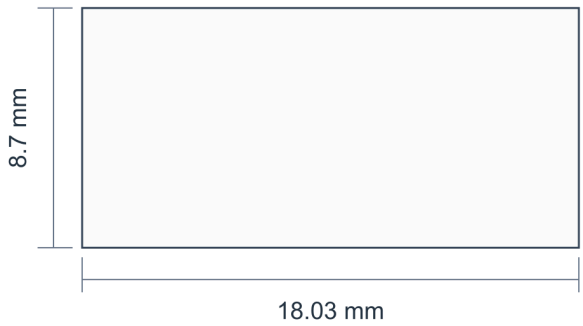
Integration notes

CMW010B Apply gate bias before drain bias. Remove drain bias before gate bias. Vg: C = 10 µF Vg: 1, 3 RFin: 2 Vd: 4, 6 RFout: 5

Mechanical Outline

Partial drawing showing confirmed dimensions in mm. Use the complete installation drawing for installation.

LCI-PA-4000-8000-PS47T



18.03 × 8.7 mm

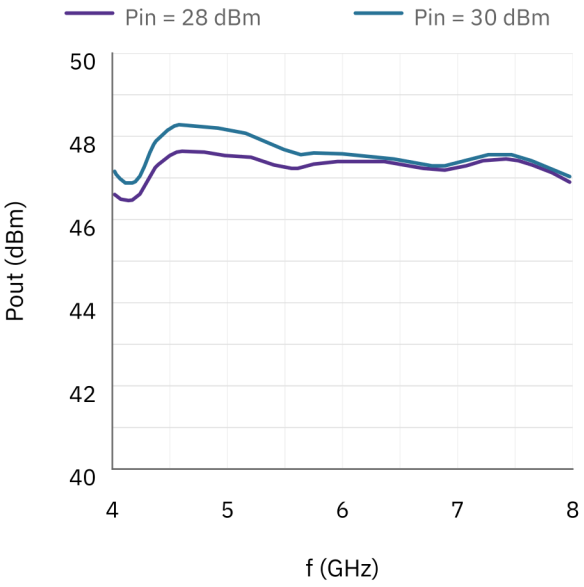
mm

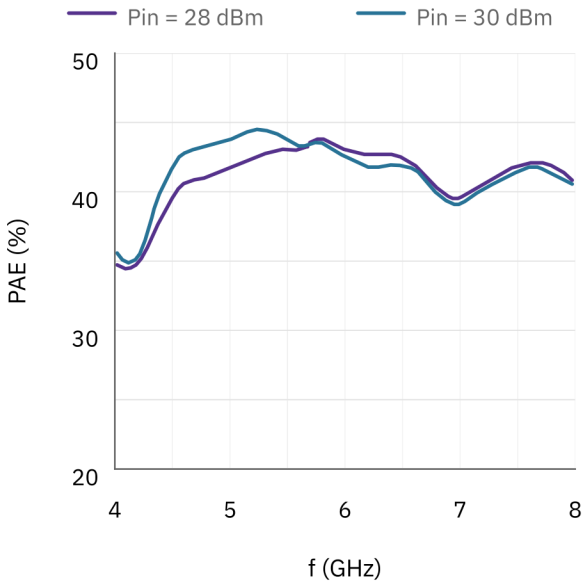
Performance curves

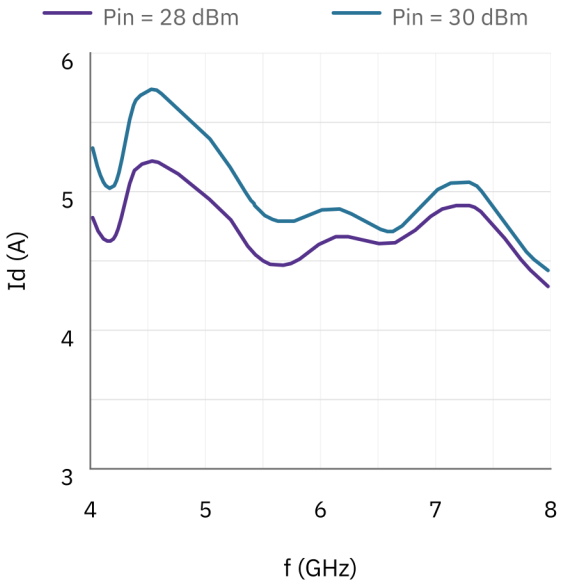
Each performance plot applies to its stated operating conditions.

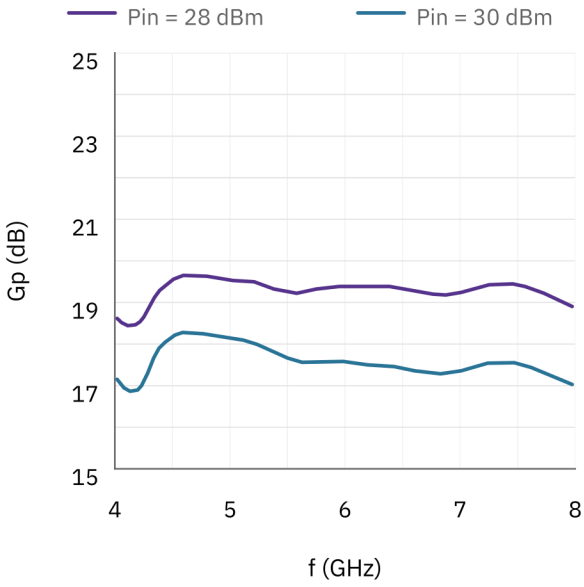
Pulsed — Output power; Power-added efficiency; Drain current; Power gain.

Readings are approximate. Figure notes: TA = +25 °C; Vd = 28 V; Vg = −2.6 V; Pin = 28 / 30 dBm. Read each trace with the conditions shown in its plot. Pulse width = 100 µs; duty cycle = 10%.



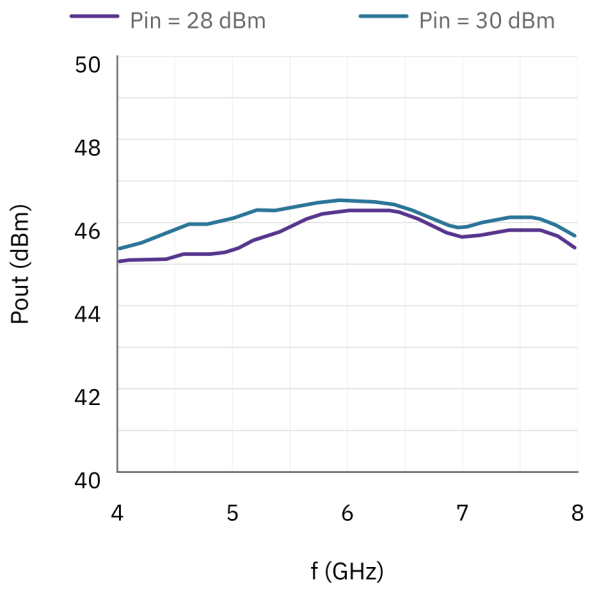


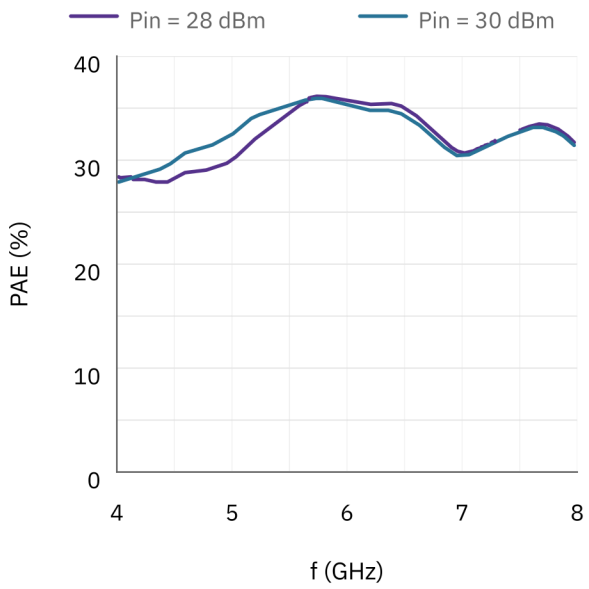


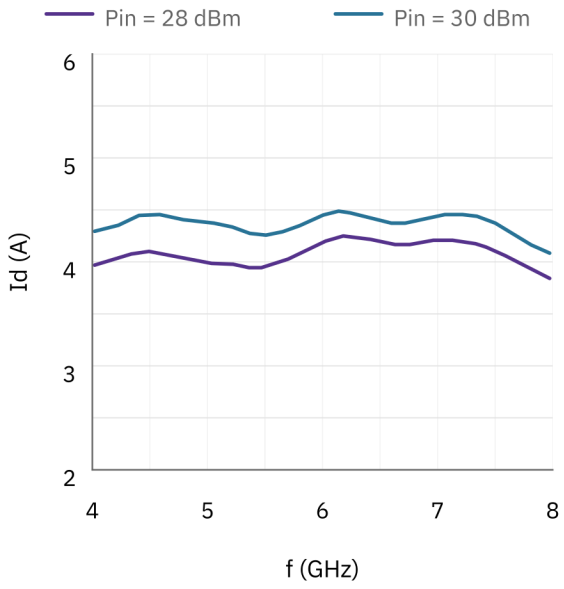


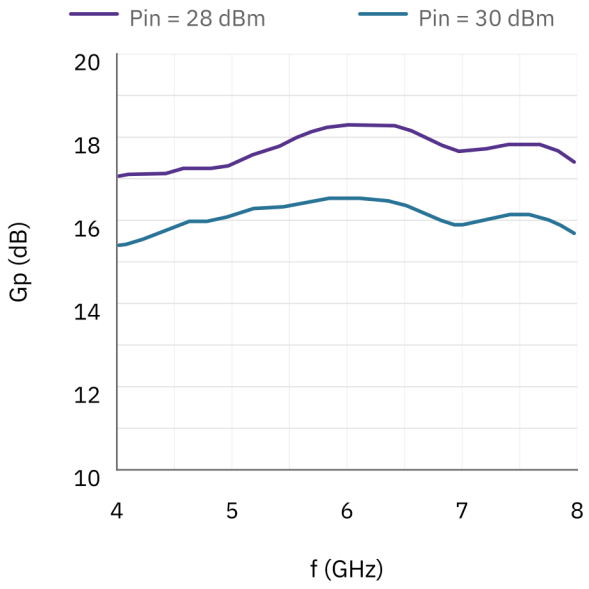
Continuous wave (CW) — Output power; Power-added efficiency; Drain current; Power gain.

Readings are approximate. Figure notes: TA = +25 °C; Vd = 28 V; Vg = −2.6 V; Pin = 28 / 30 dBm. Read each trace with the conditions shown in its plot.









Document notice

Specifications are subject to revision. Before design release, confirm the current document revision and product-specific requirements with LCRF. The approved quotation and order documentation define the supplied configuration.