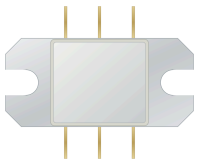
8000–12000 MHz GaN Packaged Power Amplifier — PSAT 42 dBm (typical)

LCI-PA-8000-12000-PS42T-C · 8000–12000 MHz · GaN Packaged Power Amplifier.



The RF table specifies: PSAT 42 dBm (typical); Power gain 21 dB (typical); PAE 38 % (typical). RF test conditions: TA = +25 °C; VDS = 28 V; VGS ∈ [-3.2, -2.4] V; Pin = 21 dBm; PW = 100 µs; D = 10%.

FPC0808-06h

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: 17.78 × 8.33 × 1.62 mm.

RF characteristics

TA = +25 °C; VDS = 28 V; VGS ∈ [-3.2, -2.4] V; Pin = 21 dBm; PW = 100 µs; D = 10%

Parameter	Symbol	Minimum	Typical	Maximum	Unit
Operating frequency	f	8000	-	12000	MHz
Saturated output power	-	-	42	-	dBm
Power gain	-	-	21	-	dB
Power-added efficiency	-	-	38	-	%
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, -2.4]	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	-	-	-	27	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	17.78 × 8.33 × 1.62	mm

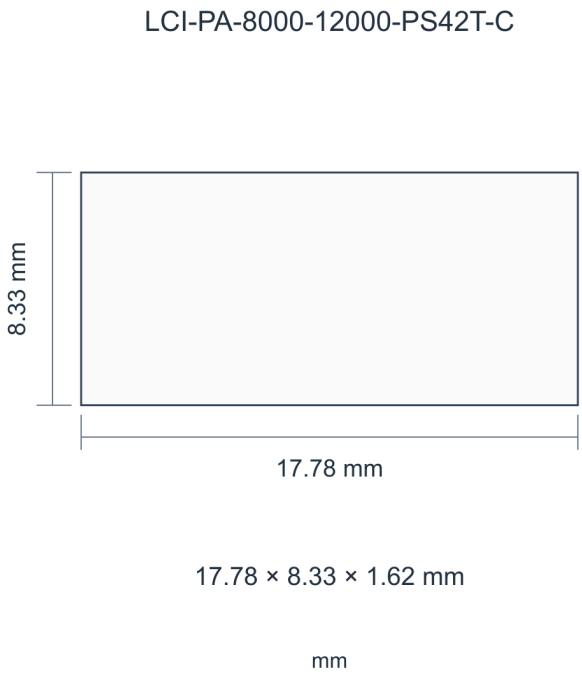
Current publication record · 1.6 · 2026-11-12. Product description or editorial content updated. Replaces revision 1.5.

Integration notes

FPC0808-06h 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.

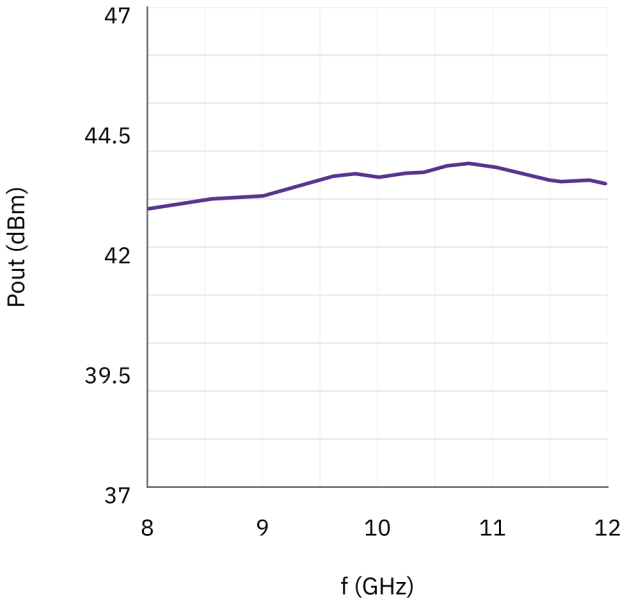


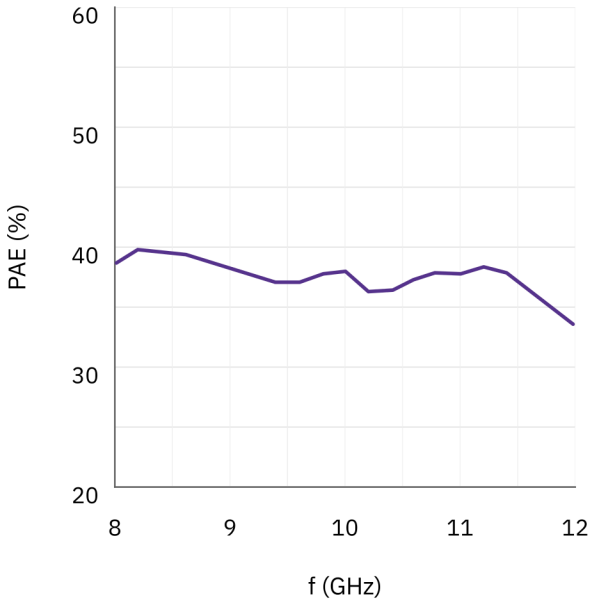
Performance curves

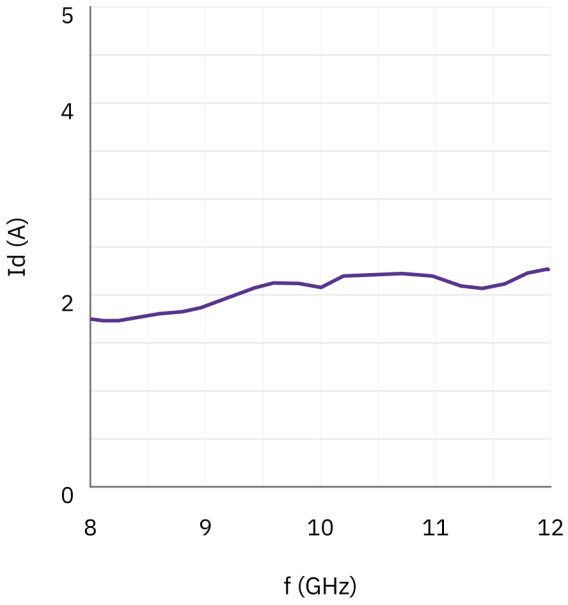
Each performance plot applies to its stated operating conditions.

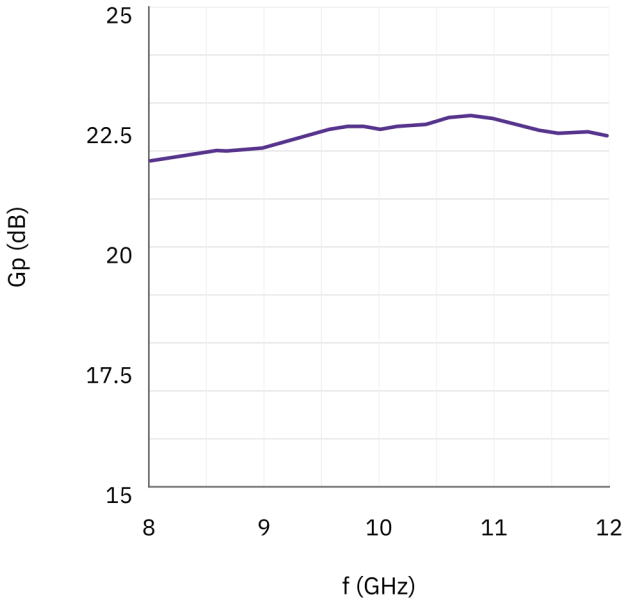
Output power; Power-added efficiency; Drain current; Power gain.

Readings are approximate. Figure notes: Vd = 28 V; Vg = −2.6 V; Pin = 21 dBm. Pulse width = 100 µs; duty cycle = 10%.









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.