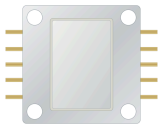
6000–12000 MHz GaN Packaged Power Amplifier — PSAT 46 dBm (typical)

LCI-PA-6000-12000-PS46T · 6000–12000 MHz · GaN Packaged Power Amplifier.

The RF table specifies: PSAT 46 dBm (typical); Power gain 22 dB (typical); PAE 30 % (typical). RF test conditions: TA = +25 °C; VDS = 28 V; VGS ∈ [-3.2, -2.4] V; Pin = 25 dBm; D = 10%; PW = 100 µs.



CMW017C

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

Vg: C = 10 µF

Vg: 1, 5

RFin: 3

NC: 2, 4, 7, 9

Vd: 6, 10

RFout: 8

Package outline dimensions: 15.25 × 15.25 × 1.4 mm.

RF characteristics

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

Parameter	Symbol	Minimum	Typical	Maximum	Unit
Operating frequency	f	6000	-	12000	MHz
Saturated output power	-	-	46	-	dBm
Power gain	-	-	22	-	dB
Power-added efficiency	-	-	30	-	%
Power-gain flatness	-	-	-	±0.7	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	-	-	-	28	dBm

Package outline dimensions

Parameter	Value	Unit
Package outline dimensions	15.25 × 15.25 × 1.4	mm

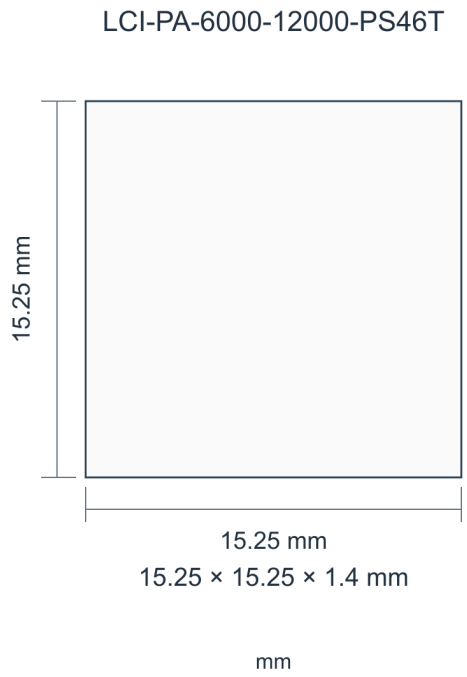
Current publication record · 1.6 · 2026-11-12. Product description or editorial content updated. Replaces revision 1.5.

Integration notes

CMW017C Apply gate bias before drain bias. Remove drain bias before gate bias. Vg: C = 10 µF Vg: 1, 5 RFin: 3 NC: 2, 4, 7, 9 Vd: 6, 10 RFout: 8

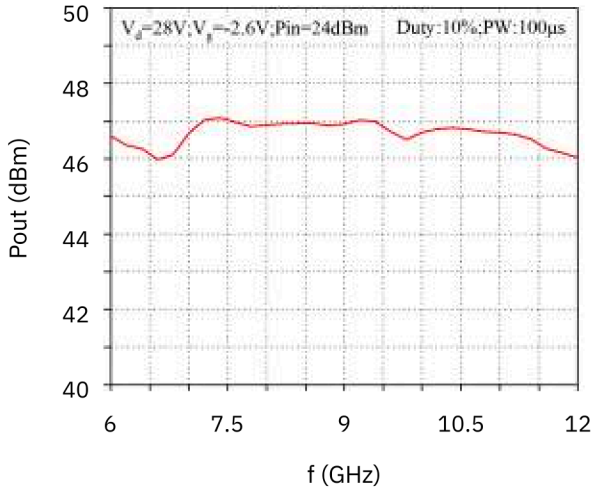
Mechanical Outline

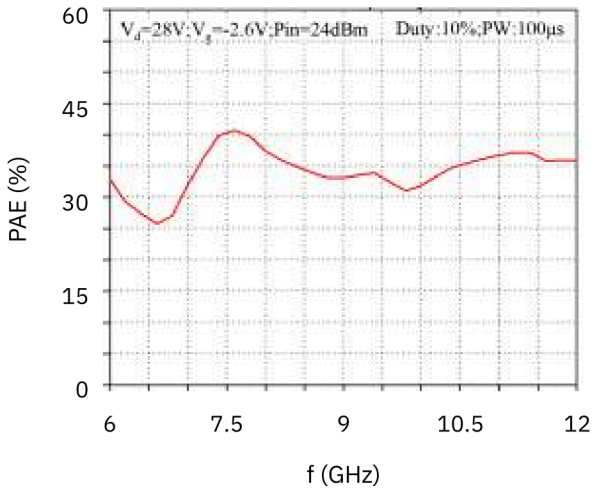
Partial drawing showing confirmed dimensions in mm. Use the complete installation drawing for installation.

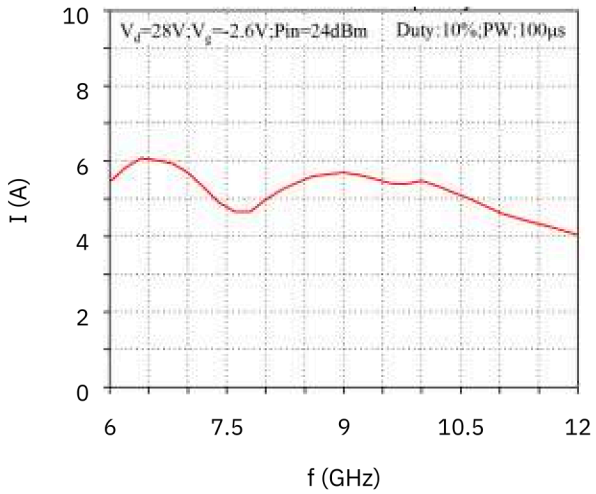


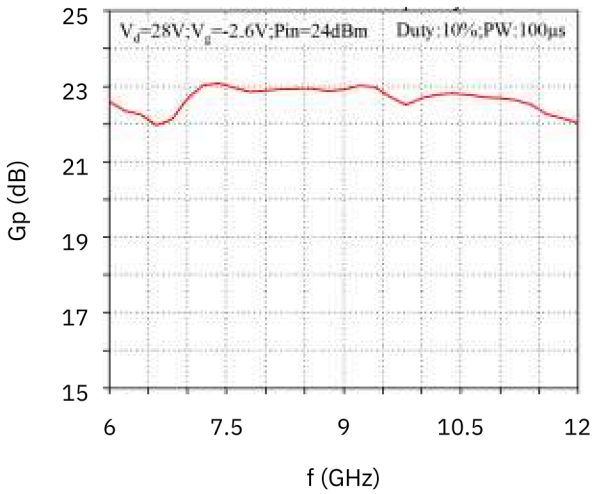
Performance curves

Each performance plot applies to its stated operating conditions.









Output power; Power-added efficiency; Drain current; Power gain. Vd = 28 V; Vg = −2.6 V; Pin = 24 dBm; D = 10%; PW = 100 µs.

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.