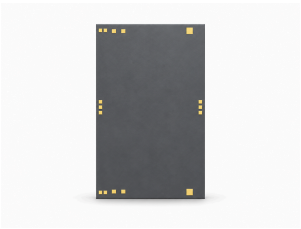
14500–17200 MHz GaN MMIC Power Amplifier Die

LCI-PA-14500-17200-PS48T is a GaN MMIC power amplifier supplied as bare die for 14500–17200 MHz. It supports CW and pulsed operation.

pulsed: PSAT: 48 dBm (typical); Power gain: 20 dB (typical); PAE: 35 % (typical). Die dimensions: 3.6 × 5.9 × 0.08 mm.



RF characteristics

TA = +25 °C; Vd = +28 V; Vg = -2.8 V; Pin = 28 dBm; τ = 100 µs; D = 5%; pulsed

Parameter	Symbol	Minimum	Typical	Maximum	Unit
Operating frequency	f	14500	-	17200	MHz
Saturated output power	Psat	-	48	-	dBm
Power gain	Gp	-	20	-	dB
Power-gain flatness	ΔGp	-	-	±0.35	dB
Power-added efficiency	PAE	-	35	-	%

DC bias and current

TA = +25 °C

Parameter	Symbol	Minimum	Typical	Maximum	Unit
Drain voltage	Vd	-	28	-	V
Gate voltage	Vg	-3.2	-2.8	-2.4	V
Quiescent drain current	Id	-	1.9	-	A
Dynamic drain current	Idd	-	7	-	A
Dynamic gate current	Igg	-	-	10	mA

Absolute limits

Parameter	Symbol	Minimum	Typical	Maximum	Unit
Maximum drain-source voltage	Vd	-	-	32	V
Minimum gate bias	Vg	-5	-	-	V
Maximum input power	Pin	-	-	32	dBm
Storage temperature	TSTG	-65	-	150	°C
Maximum channel temperature	Top	-	-	200	°C

Die dimensions

Parameter	Value	Unit
Die dimensions	3.6 × 5.9 × 0.08	mm

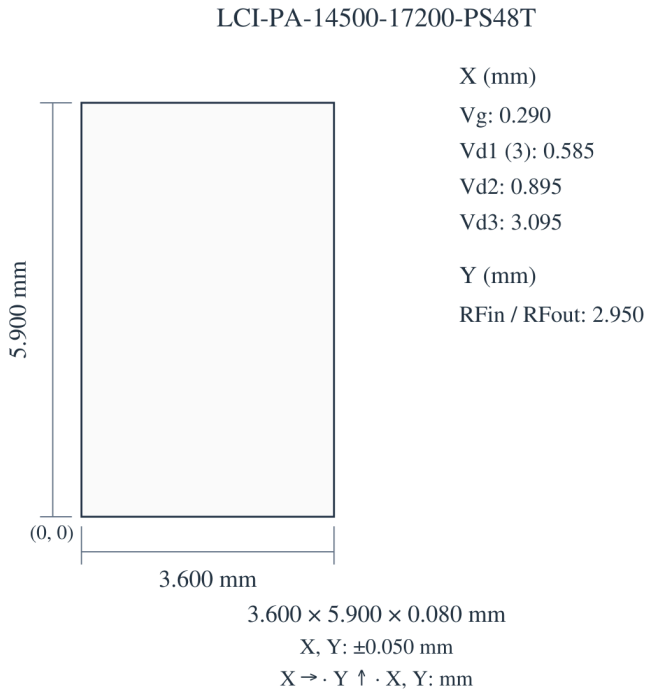
Current publication record · 1.9 · 2026-11-12. Product description or editorial content updated. Replaces revision 1.8.

Die integration and bias sequencing

Integrated DC blocking: RFin / RFout. DC path to ground: RFin → GND. Separate characterization: TA = +25 °C; Vd = +28 V; Vg = -2.8 V; Pin = 28 dBm. Apply gate bias before drain bias. Remove drain bias before gate bias.

Mechanical Outline

Outline and dimensioned coordinates in mm. Use this drawing as a dimensional reference. Fabrication and wire bonding require complete drawings.

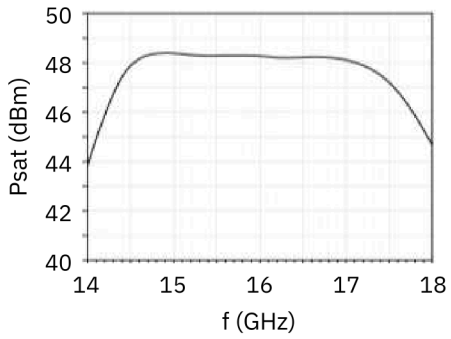


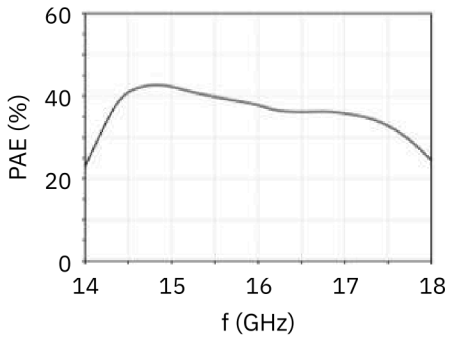
Performance curves

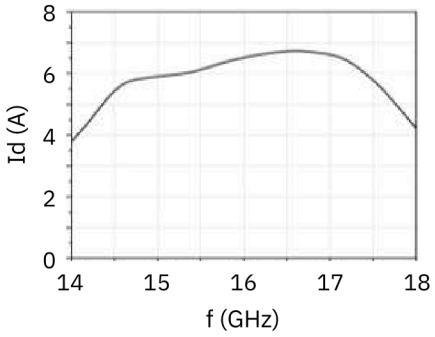
Each performance plot applies to its stated operating conditions.

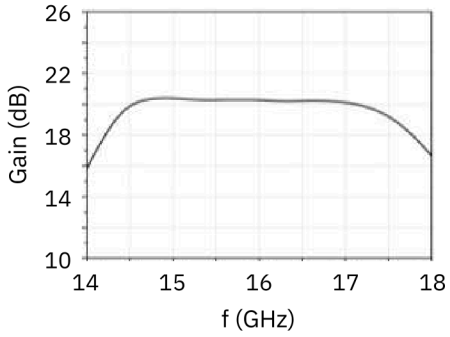
Pulsed — Output power; Power-added efficiency; Drain current; Small-signal gain; Input matching; Gain.

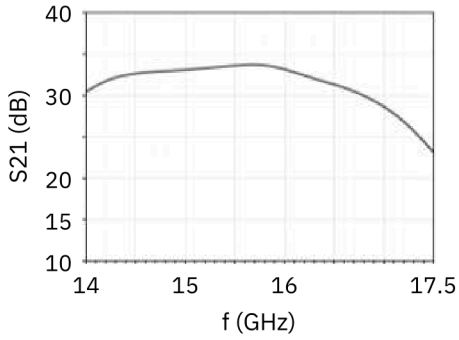
Figure notes: TA= +25°C; Vd=+28V; Vg=-2.8V; Pin=28dBm. Conditions apply to the indicated plots and their own legends. Use the axis labels to identify the plotted quantities.

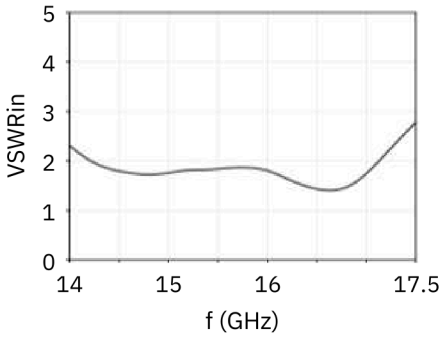












Document notice

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.