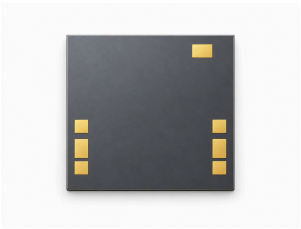
5000–13000 MHz GaN MMIC Power Amplifier Die

LCI-PA-5000-13000-PS25T is a GaN MMIC power amplifier supplied as bare die for 5000–13000 MHz. It supports CW and pulsed operation.

The RF table specifies: Saturated output power: 25 dBm (typical); Power gain: 10 dB (typical). RF test conditions: TA = +25 °C; Vd = +28 V; Pin = 15 dBm; °CW. Die dimensions: 1.3 × 1.25 × 0.1 mm.



RF characteristics

TA = +25 °C; Vd = +28 V; Pin = 15 dBm; °CW

Parameter	Symbol	Minimum	Typical	Maximum	Unit
Operating frequency	f	5000	-	13000	MHz
Saturated output power	Psat	-	25	-	dBm
Power gain	Gp	-	10	-	dB
Power-gain flatness	ΔGp	-	-	±0.5	dB
Small-signal gain	S21	10	11	12	dB
Small-signal gain flatness	ΔS21	-	-	±1	dB
Input VSWR	VSWR(in)	-	2	2.5	-

DC bias and current

TA = +25 °C

Parameter	Symbol	Minimum	Typical	Maximum	Unit
Drain voltage	Vd	-	28	32	V
Quiescent drain current	Id	-	0.08	-	A
Dynamic drain current	Idd	-	0.09	-	A

Absolute limits

Absolute limits; these are not normal operating targets.

Parameter	Symbol	Minimum	Typical	Maximum	Unit
Maximum drain-source voltage	Vd	-	-	32	V
Maximum input power	Pin	-	-	23	dBm
Maximum channel temperature	Top	-	-	225	°C
Storage temperature	TSTG	-65	-	150	°C

Die dimensions

Parameter	Value	Unit
Die dimensions	1.3 × 1.25 × 0.1	mm
Plan-view outline tolerance	±100 (Plan-view outline only; the source does not specify thickness tolerance.)	µm

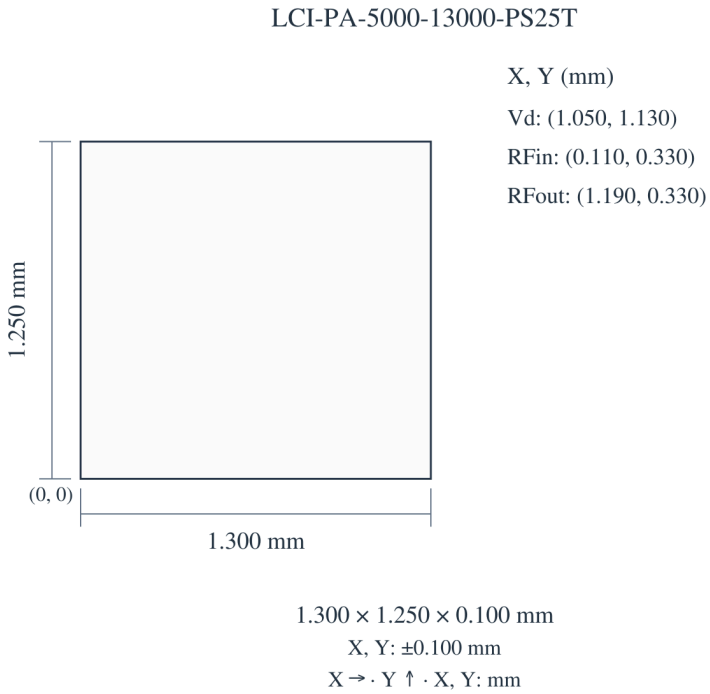
Current publication record · 1.9 · 2026-11-12. Product description or editorial content updated. Replaces revision 1.8.

Bond-pad dimensions

Symbol: RFin; Dimensions (µm): 100 × 150. Symbol: Vd1; Dimensions (µm): 150 × 100. Symbol: RFout; Dimensions (µm): 100 × 150.

Mechanical Outline

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

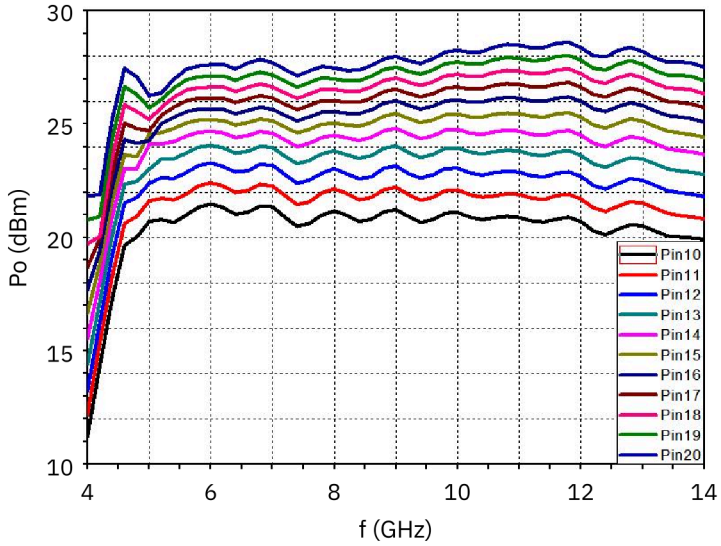


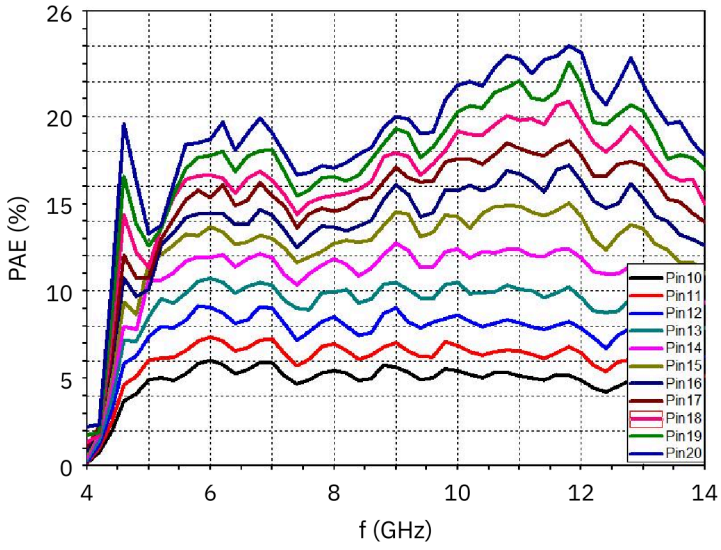
Performance curves

Each performance plot applies to its stated operating conditions.

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

Figure notes: TA=+25°C; Vd = +28V. Pin10 / Pin12 / Pin14 / Pin16 / Pin18 / Pin20; 4–14 GHz. Conditions apply to the indicated plots and their own legends. Read symbols and units as labeled on the axes.





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.