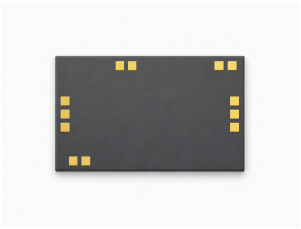
3400–5600 MHz GaN MMIC Power Amplifier Die

LCI-PA-3400-5600-PS40T is a GaN MMIC power amplifier supplied as bare die for 3400–5600 MHz. It supports CW operation.



The RF table specifies: PSAT 40 dBm (typical); Power gain 17 dB (typical); PAE 46% (typical). RF test conditions: TA = +25 °C; Vd = +28 V; Vg = -2.8 V; Pin = 23 dBm; CW.

Die dimensions: 2.32 × 1.42 mm. Thickness is not specified.

RF characteristics

TA = +25 °C; Vd = +28 V; Vg = -2.8 V; Pin = 23 dBm; CW

Parameter	Symbol	Minimum	Typical	Maximum	Unit
Operating frequency	f	3400	-	5600	MHz
Saturated output power	Psat	39	40	-	dBm
Power gain	Gp	16	17	-	dB
Power-gain flatness	ΔGp	-	-	1	dB
Power-added efficiency	PAE	40	46	-	%
Small-signal gain	S21	29	31	33	dB
Small-signal gain flatness	ΔS21	-	-	±2	dB
Input VSWR	VSWR(in)	-	1.8	2	-

DC bias and current

Parameter	Symbol	Minimum	Typical	Maximum	Value	Unit
Drain voltage	Vd	-	28	-	-	V
Gate voltage	Vg	-	-2.8	-	-	V
Quiescent drain current	Id	-	-	-	0.035 (Vd = +28 V)	A

Absolute limits

Absolute limits; these are not normal operating targets.

Parameter	Symbol	Minimum	Typical	Maximum	Unit
Maximum drain-source voltage	Vd	-	-	32	V
Minimum gate bias	Vg	-5	-	-	V
Maximum input power	Pin	-	-	30	dBm
Storage temperature	TSTG	-65	-	150	°C
Maximum channel temperature	Top	-	-	200	°C

Die dimensions

Parameter	Value	Unit
Die dimensions	2.32 × 1.42	mm
Plan-view outline tolerance	±100 (Plan-view outline only; the source does not specify thickness tolerance.)	µm

Current publication record · 1.7 · 2026-11-12. Product description or editorial content updated. Replaces revision 1.6.

Die integration and bias sequencing

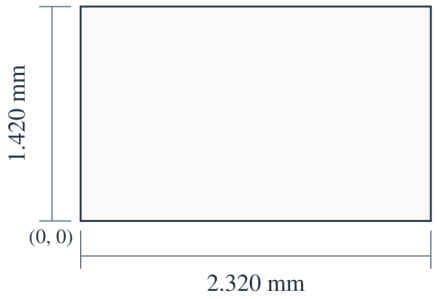
Integrated DC blocking: RFin / RFout. DC path to ground: RFin / RFout → GND. Apply gate bias before drain bias. Remove drain bias before gate bias. Outline and dimensioned coordinates in mm. Use this drawing as a dimensional reference. Fabrication and wire bonding require complete drawings.

Bond-pad dimensions

RFin: 100 × 100 µm. Vg: 100 × 100 µm. Vd1: 100 × 100 µm. Vd2: 120 × 100 µm. RFout: 100 × 120 µm.

Mechanical Outline

LCI-PA-3400-5600-PS40T



X (mm)
Vd1: 0.942
Vd2: 2.010
Vg: 0.362

Y (mm)
RFin / RFout: 0.710

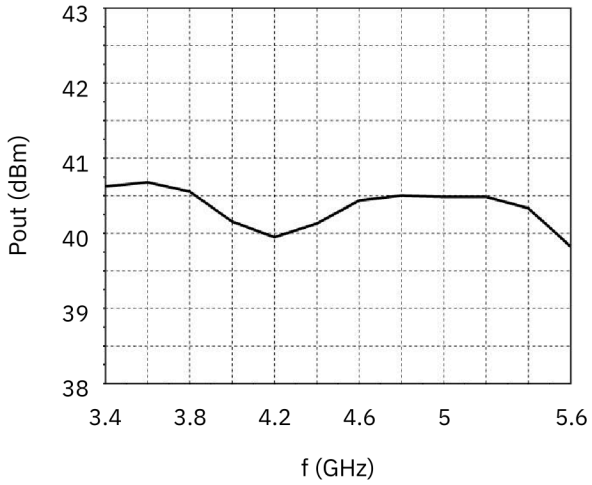
2.320 × 1.420 mm
X, Y: ±0.100 mm
X → · Y ↑ · X, Y: mm

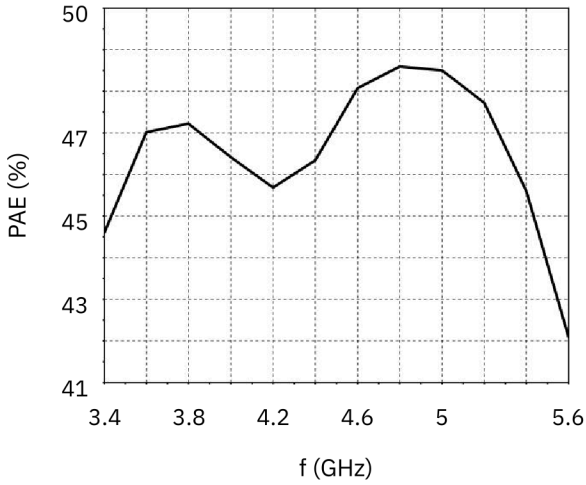
Performance curves

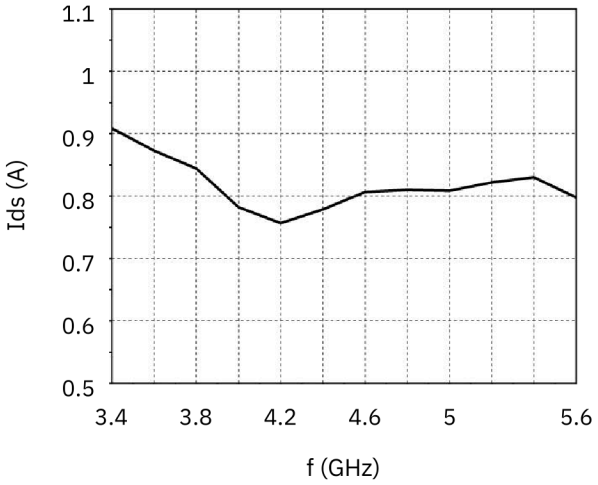
Read each figure with its stated operating conditions.

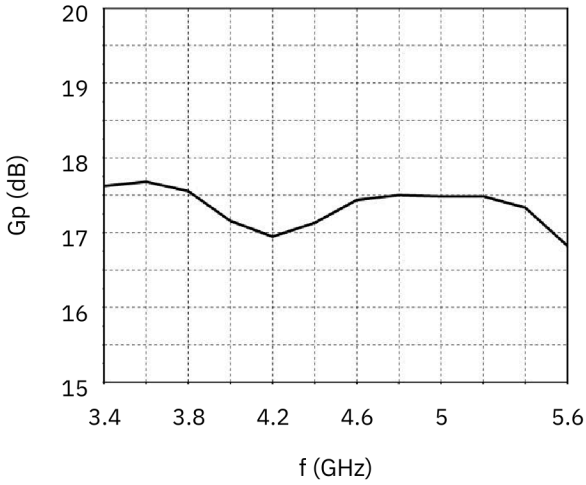
Continuous wave (CW) — Saturated output power; Dynamic drain current; Power-added efficiency; Power gain.

Figure notes: TA=+25°C; Vd=+28V; Vg=-2.8V; Pin=23dBm.









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.