34000–64000 MHz GaN MMIC Power Amplifier Die

LCI-PA-34000-64000-PS30T is a GaN MMIC power amplifier supplied as bare die for 34000–64000 MHz.

PSAT: 30 dBm (typical); PAE: 17 % (typical); Power gain: 17 dB (typical). Die dimensions: 3.9 × 2.3 × 0.07 mm.



RF characteristics

TA = +25 °C; Vd = +4 V; Id = 0.81 A

Parameter	Symbol	Minimum	Typical	Maximum	Unit
Operating frequency	f	34000	-	64000	MHz
Small-signal gain	S21	-	19	-	dB
Output power at 1 dB compression	-	-	27	-	dBm
Saturated output power	Psat	-	30	-	dBm
Power-added efficiency	PAE	-	17	-	%
Power gain	Gp	-	17	-	dB
Input VSWR	VSWR(in)	-	1.5	-	-
Output VSWR	-	-	1.5	-	-
Saturation current	-	-	0.87	-	A

DC bias and current

Parameter	Symbol	Minimum	Typical	Maximum	Value	Unit
Drain voltage [1]	Vd	-	-	-	4	V
Gate voltage [1]	Vg	-	-	-	-0.4	V
Bias current [2]	-	-	-	-	0.81	A

[1] Value stated without a Min/Typ/Max qualification.

[2] Vd = +4 V; Vg = -0.4 V; Value stated without a Min/Typ/Max qualification.

Absolute limits

Parameter	Symbol	Minimum	Typical	Maximum	Unit
Maximum drain-source voltage	Vd	-	-	6	V
Minimum gate bias	Vg	-1	-	-	V
Maximum input power	Pin	-	-	20	dBm
Storage temperature	TSTG	-65	-	150	°C

Environmental specifications

Parameter	Symbol	Minimum	Typical	Maximum	Unit
Operating temperature	-	-55	-	85	°C

Die dimensions

Parameter	Value	Unit
Die dimensions	3.9 × 2.3 × 0.07	mm

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

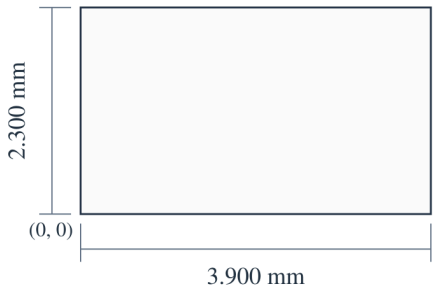
Die integration and bias sequencing

Separate characterization: TA = +25 °C; Vd = +4 V; Id = 0.81 A. Apply gate bias before drain bias. Remove drain bias before gate bias. Use only one of Vg1/Vg2 for gate bias.

Mechanical Outline

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

LCI-PA-34000-64000-PS30T



X (mm)
(3/4): 0.370
(5/7): 1.400
(6/8): 3.400

Y (mm)
RFin: 1.450
RFout: 0.850

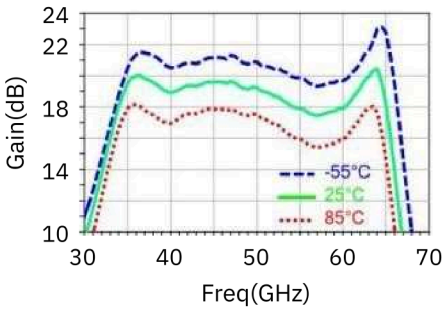
3.900 × 2.300 × 0.070 mm
X, Y: ±0.050 mm
X → · Y ↑ · X, Y: mm

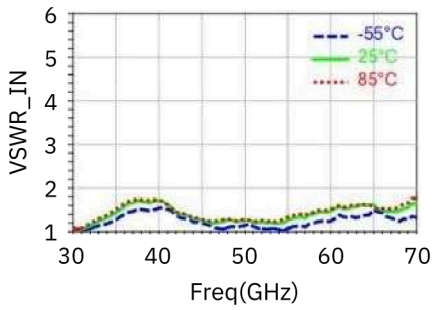
Performance curves

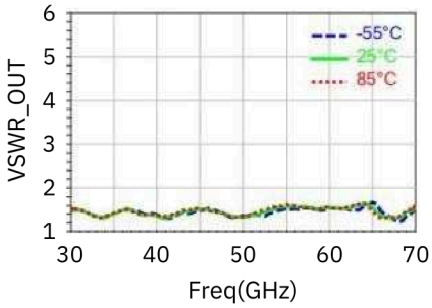
Each performance plot applies to its stated operating conditions.

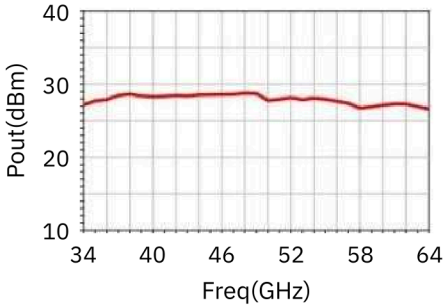
Gain; VSWR; Pout; PAE.

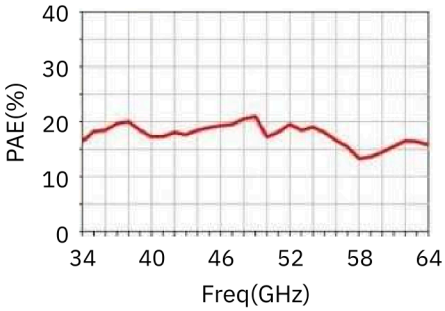
Figure notes: Vd = 4 V; Id = 810 mA; T = −55 / +25 / +85 °C. Pout / PAE vs f: Pin = 10 dBm. (6): Gain / Pout / PAE vs Pin; f = 50 GHz. Conditions apply to the indicated plots and their own legends.

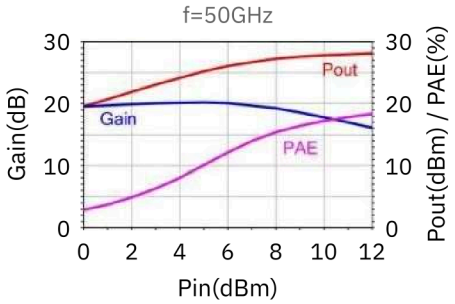












Document notice

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.