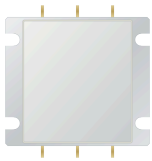
2000–6200 MHz GaN Internally Matched Power Transistor — Pout 50.1 dBm @ 6000 MHz (typical)

LCT-2000-6200-PO50p1T · 2000–6200 MHz · GaN Internally Matched Power Transistor.



The RF table specifies: Reference output power 50.1 dBm (typical); Power gain 8.6 dB (typical); Drain efficiency 52.4 % (typical) @ 6000 MHz. RF test conditions: TA = +25 °C; VDS = 28 V; IDQ = 0.5 A; CW; f = 6000 MHz; Pin = 41.5 dBm.

MH902F6AA

Typical application-circuit reference data at 6000 MHz.

Package outline dimensions: 30.8 × 27.4 × 5.1 mm.

RF characteristics

TA = +25 °C; VDS = 28 V; IDQ = 0.5 A; CW; f = 6000 MHz; Pin = 41.5 dBm

Parameter	Symbol	Minimum	Typical	Maximum	Unit
Operating frequency	f	2000	-	6200	MHz
Reference output power [1]	-	-	50.1	-	dBm
Power gain [1]	-	-	8.6	-	dB
Drain efficiency [1]	ηD	-	52.4	-	%

[1] f = 6000 MHz

DC bias and current

TA = +25 °C

Parameter	Symbol	Minimum	Typical	Maximum	Value	Unit
Drain operating voltage	-	-	-	-	28	V
Quiescent drain current	-	-	-	-	0.5	A
Gate threshold voltage	-	-4	-2.8	-1	VDS = 28 V; ID = 20.88 mA	V
Quiescent gate bias	-	-	-2.6	-	VDS = 28 V; ID = 500 mA	V

Absolute limits

Absolute limits; these are not normal operating targets.

Parameter	Symbol	Minimum	Typical	Maximum	Unit
Maximum drain-source voltage	-	-	-	55	V
Minimum gate bias	-	-10	-	-	V
Storage temperature	-	-65	-	150	°C
Maximum channel temperature	-	-	-	225	°C
Maximum gate bias	-	-	-	2	V

Package outline dimensions

Parameter	Value	Unit
Package outline dimensions	30.8 × 27.4 × 5.1	mm

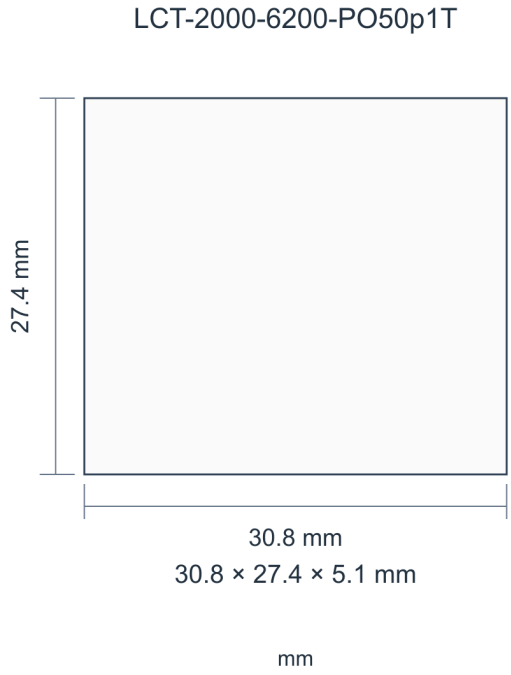
Current publication record · 1.3 · 2026-11-12. Product description or editorial content updated. Replaces revision 1.2.

Integration notes

MH902F6AA Typical application-circuit reference data at 6000 MHz.

Mechanical Outline

Reference drawing showing selected dimensions in mm. Use the complete installation drawing for mounting.



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.