Product catalog

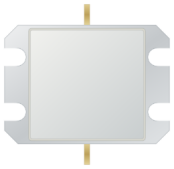
RF Power Transistors

RF power transistors are discrete active devices that turn bias and RF drive into usable output power inside amplifier stages. They appear in transmitter chains, pulsed or CW power modules, industrial RF equipment and high-power test hardware.



Products: 11

Revision: 10 · Revision date: 2026-11-11



LCT-5700-7100-PS51T

5700–7100 MHz GaN Internally Matched Power Transistor — PSAT 51 dBm (typical)

5700–7100 MHz; PSAT 51 dBm (typical); Power gain 11 dB (typical); PAE 45 % (typical).

Operating frequency: Symbol: f; Minimum: 5700; Maximum: 7100; Value: 5700–7100; Unit: MHz

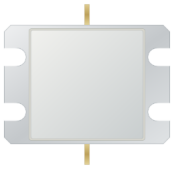
Saturated output power: Minimum: 50.5; Typical: 51; Unit: dBm

Power gain: Minimum: 10.5; Typical: 11; Unit: dB

Power-added efficiency: Minimum: 40; Typical: 45; Unit: %

TA = +25 °C; VDS = 28 V; VGS ∈ [-3.2, -2.4] V; Pin = 40 dBm; D = 10%; PW = 100 µs

Product details Product datasheet



LCT-2700-3500-PS56p5T

2700–3500 MHz GaN Internally Matched Power Transistor — PSAT 56.5 dBm (typical)

2700–3500 MHz; PSAT 56.5 dBm (typical); Power gain 13.5 dB (typical); PAE 55 % (typical).

Operating frequency: Symbol: f; Minimum: 2700; Maximum: 3500; Value: 2700–3500; Unit: MHz

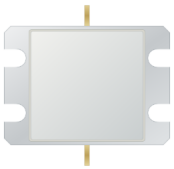
Saturated output power: Minimum: 56; Typical: 56.5; Unit: dBm

Power gain: Minimum: 13; Typical: 13.5; Unit: dB

Power-added efficiency: Minimum: 50; Typical: 55; Unit: %

TA = +25 °C; VDS = 44 V; VGS ∈ [-4, -2] V; IDS = (0.2–0.5) IDSS; PW = 300 µs; D = 10%

Product details Product datasheet



LCT-5300-5900-PS56p5T

5300–5900 MHz GaN Internally Matched Power Transistor — PSAT 56.5 dBm (typical)

5300–5900 MHz; PSAT 56.5 dBm (typical); Power gain 12.5 dB (typical); PAE 45 % (typical).

Operating frequency: Symbol: f; Minimum: 5300; Maximum: 5900; Value: 5300–5900; Unit: MHz

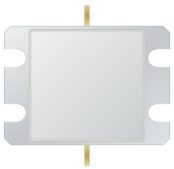
Saturated output power: Minimum: 56; Typical: 56.5; Unit: dBm

Power gain: Minimum: 12; Typical: 12.5; Unit: dB

Power-added efficiency: Minimum: 40; Typical: 45; Unit: %

TA = +25 °C; VDS = 40 V; VGS ∈ [-4, -2] V; IDS = (0.2–0.5) IDSS; PW = 10 µs; D = 1%

Product details Product datasheet



LCT-2700-3900-PS48p5T

2700–3900 MHz GaN Internally Matched Power Transistor — PSAT 48.5 dBm (typical)

2700–3900 MHz; PSAT 48.5 dBm (typical); Power gain 12.5 dB (typical); PAE 50 % (typical).

Operating frequency: Symbol: f; Minimum: 2700; Maximum: 3900; Value: 2700–3900; Unit: MHz

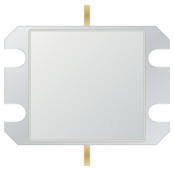
Saturated output power: Minimum: 48; Typical: 48.5; Unit: dBm

Power gain: Minimum: 12; Typical: 12.5; Unit: dB

Power-added efficiency: Minimum: 45; Typical: 50; Unit: %

TA = +25 °C; VDS = 24–28 V; VGS ∈ [-4, -2] V; IDS = (0.2–0.5) IDSS

Product details Product datasheet



LCT-2700-3500-PS53p5T

2700–3500 MHz GaN Internally Matched Power Transistor — PSAT 53.5 dBm (typical)

2700–3500 MHz; PSAT 53.5 dBm (typical); Power gain 13.5 dB (typical); PAE 65 % (typical).

Operating frequency: Symbol: f; Minimum: 2700; Maximum: 3500; Value: 2700–3500; Unit: MHz

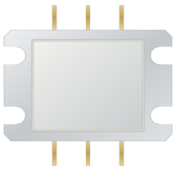
Saturated output power: Minimum: 53; Typical: 53.5; Unit: dBm

Power gain: Minimum: 13; Typical: 13.5; Unit: dB

Power-added efficiency: Minimum: 60; Typical: 65; Unit: %

TA = +25 °C; VDS = 28 V; VGS ∈ [-4, -2] V; Pin = 40 dBm; D = 10%; PW = 100 µs

Product details Product datasheet



LCT-2300-3900-PS50T

2300–3900 MHz GaN Internally Matched Power Transistor — PSAT 50 dBm (typical)

2300–3900 MHz; PSAT 50 dBm (typical); Power gain 12 dB (typical); PAE 50 % (typical).

Operating frequency: Symbol: f; Minimum: 2300; Maximum: 3900; Value: 2300–3900; Unit: MHz

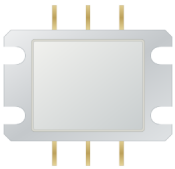
Saturated output power: Minimum: 49; Typical: 50; Unit: dBm

Power gain: Minimum: 11; Typical: 12; Unit: dB

Power-added efficiency: Minimum: 45; Typical: 50; Unit: %

TA = +25 °C; VGS ∈ [-4, -2] V; VDS = 24–28 V; IDS = (0.2–0.5) IDSS

Product details Product datasheet



LCT-2600-3700-PS49T

2600–3700 MHz GaN Internally Matched Power Transistor — PSAT 49 dBm (typical)

2600–3700 MHz; PSAT 49 dBm (typical); Power gain 13 dB (typical); PAE 50 % (typical).

Operating frequency: Symbol: f; Minimum: 2600; Maximum: 3700; Value: 2600–3700; Unit: MHz

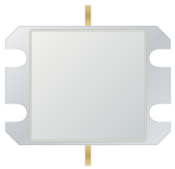
Saturated output power: Minimum: 48; Typical: 49; Unit: dBm

Power gain: Minimum: 12; Typical: 13; Unit: dB

Power-added efficiency: Minimum: 45; Typical: 50; Unit: %

TA = +25 °C; VDS = 28 V; VGS ∈ [-3.2, -2.2] V; Pin = 36 dBm; CW

Product details Product datasheet



LCT-8500-9600-PS51T

8500–9600 MHz GaN Internally Matched Power Transistor — PSAT 51 dBm (typical)

8500–9600 MHz; PSAT 51 dBm (typical); Power gain 9 dB (typical); PAE 38 % (typical).

Operating frequency: Symbol: f; Minimum: 8500; Maximum: 9600; Value: 8500–9600; Unit: MHz

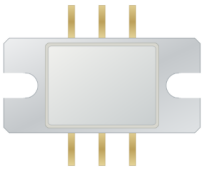
Saturated output power: Minimum: 50; Typical: 51; Unit: dBm

Power gain: Minimum: 8; Typical: 9; Unit: dB

Power-added efficiency: Typical: 38; Unit: %

Vd = +28 V; Vg = -3 V; PW = 100 µs; D = 10%; Pin = 42 dBm

Product details Product datasheet



LCT-2000-6000-PO45p51T

2000–6000 MHz GaN Internally Matched Power Transistor — Pout 45.51 dBm @ 6000 MHz (typical)

2000–6000 MHz; Reference output power 45.51 dBm (typical); Power gain 19.51 dB (typical); Drain efficiency 39.82 % (typical) @ 6000 MHz.

Operating frequency: Symbol: f; Minimum: 2000; Maximum: 6000; Value: 2000–6000; Unit: MHz

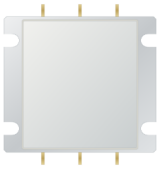
Reference output power: Typical: 45.51; Unit: dBm; Notes: f = 6000 MHz

Power gain: Typical: 19.51; Unit: dB; Notes: f = 6000 MHz

Drain efficiency: Symbol: ηD; Typical: 39.82; Unit: %; Notes: f = 6000 MHz

TA = +25 °C; VDS = 28 V; IDQ = 1.3 A; CW; f = 6000 MHz; Pin = 26 dBm

Product details Product datasheet



LCT-700-6200-PS49T

700–6200 MHz GaN Internally Matched Power Transistor — PSAT 49 dBm @ 6000 MHz (typical)

700–6200 MHz; Saturated output power 49 dBm (typical); Power gain 7 dB (typical); Drain efficiency 35 % (typical) @ 6000 MHz.

Operating frequency: Symbol: f; Minimum: 700; Maximum: 6200; Value: 700–6200; Unit: MHz

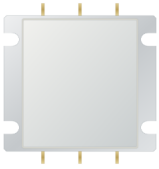
Saturated output power: Symbol: Psat; Typical: 49; Unit: dBm; Notes: f = 6000 MHz

Power gain: Typical: 7; Unit: dB; Notes: f = 6000 MHz

Drain efficiency: Symbol: ηD; Typical: 35; Unit: %; Notes: f = 6000 MHz

TA = +25 °C; VDS = 28 V; IDQ = 1 A; CW; f = 6000 MHz

Product details Product datasheet



LCT-2000-6200-PO50p1T

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

2000–6200 MHz; Reference output power 50.1 dBm (typical); Power gain 8.6 dB (typical); Drain efficiency 52.4 % (typical) @ 6000 MHz.

Operating frequency: Symbol: f; Minimum: 2000; Maximum: 6200; Value: 2000–6200; Unit: MHz

Reference output power: Typical: 50.1; Unit: dBm; Notes: f = 6000 MHz

Power gain: Typical: 8.6; Unit: dB; Notes: f = 6000 MHz

Drain efficiency: Symbol: ηD; Typical: 52.4; Unit: %; Notes: f = 6000 MHz

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

Product details Product datasheet

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.