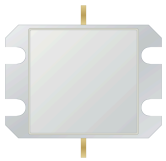
8500–9600 MHz GaN Internally Matched Power Transistor — PSAT 51 dBm (typical)

LCT-8500-9600-PS51T · 8500–9600 MHz · GaN Internally Matched Power Transistor.



The RF table specifies: PSAT 51 dBm (typical); Power gain 9 dB (typical); PAE 38 % (typical). RF test conditions: Vd = +28 V; Vg = -3 V; PW = 100 µs; D = 10%; Pin = 42 dBm.

CMW025B

Apply gate bias before drain bias. Remove drain bias before gate bias.

Vg: C = 10 µF

RF characteristics

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

Parameter	Symbol	Minimum	Typical	Maximum	Unit
Operating frequency	f	8500	-	9600	MHz
Saturated output power	-	50	51	-	dBm
Power gain	-	8	9	-	dB
Power-added efficiency	-	-	38	-	%
Power-gain flatness	-	-	-	±0.8	dB

DC bias and current

Parameter	Symbol	Minimum	Typical	Maximum	Value	Unit
Drain operating voltage	-	-	-	-	28	V
Gate operating voltage	-	-	-	-	-3	V

Absolute limits

Absolute limits; these are not normal operating targets.

Parameter	Symbol	Minimum	Typical	Maximum	Unit
Maximum drain-source voltage	-	-	-	32	V
Minimum gate bias	-	-5	-	-	V
Storage temperature	-	-65	-	150	°C
Maximum input power	-	-	-	45	dBm
Maximum channel temperature	-	-	-	200	°C

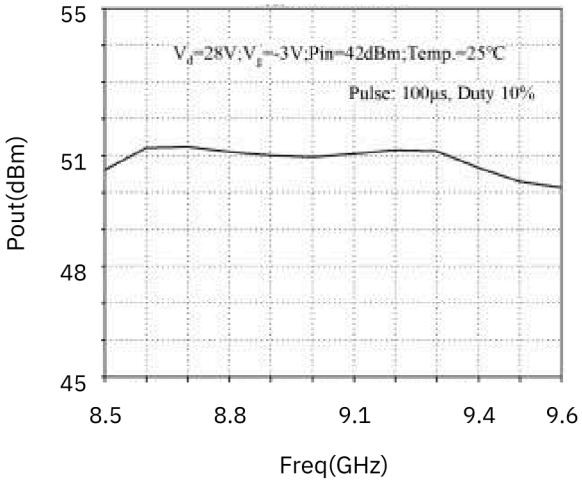
Current publication record · 1.5 · 2026-11-12. Product description or editorial content updated. Replaces revision 1.4.

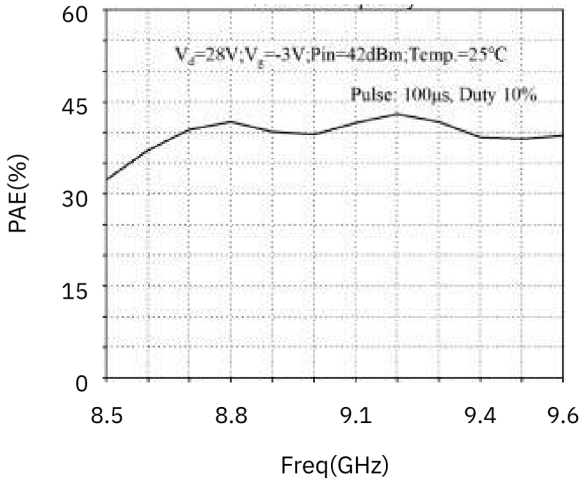
Integration notes

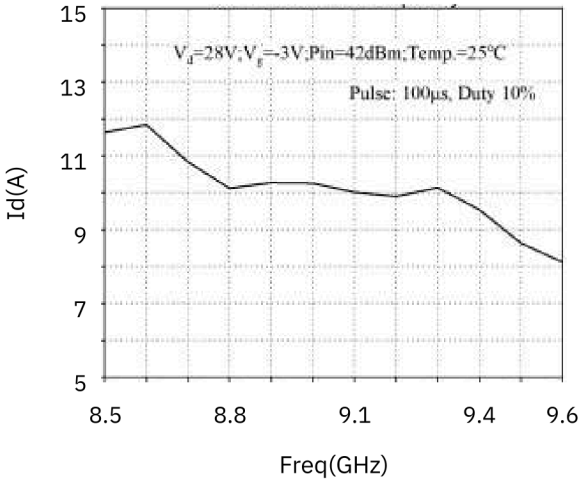
CMW025B Apply gate bias before drain bias. Remove drain bias before gate bias. Vg: C = 10 µF G: RF input D: RF output S: Source / ground

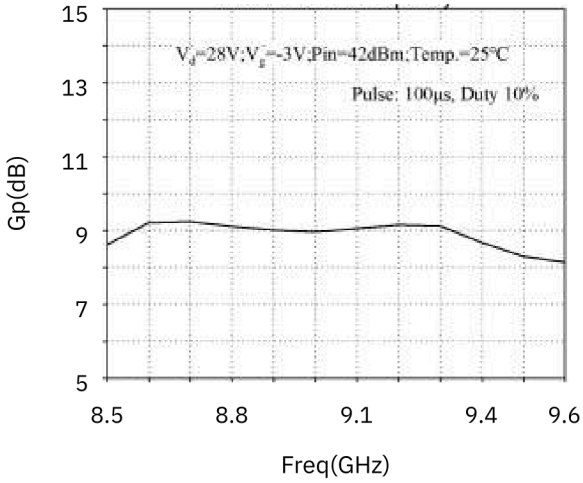
Performance curves

Read each figure with its stated operating conditions.









Output power; Power-added efficiency; Drain current; Power gain. Vd = 28 V; Vg = -3 V; Pin = 42 dBm; TA = 25 °C; PW = 100 µs; D = 10%.

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.