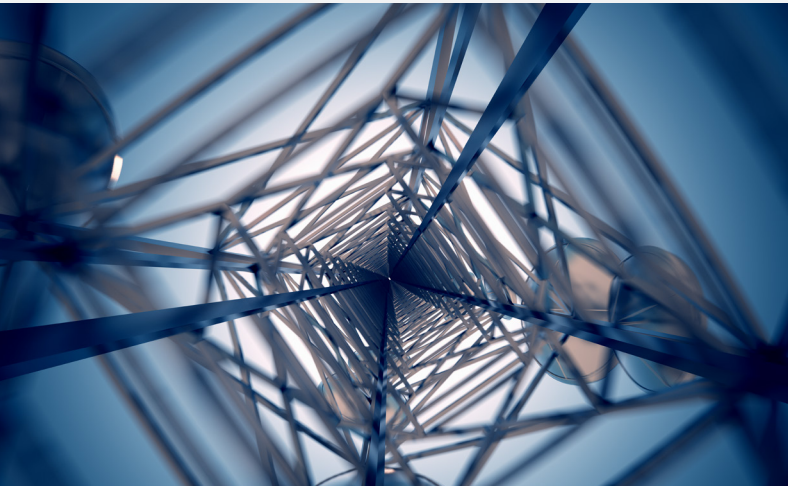


AMPLEON



Product Catalog

RF power solutions for
Wireless Infrastructure



July 2026

Advancing society through RF

Established in 2015, Ampleon embodies over five decades of leadership in RF power technology and is dedicated to unlocking the full potential of data and energy transfer within the RF spectrum. Our commitment to RF technology fuels our interactions with customers, suppliers, and partners, driving innovation and progress.

The advent of 5G NR (New Radio) since 2019 has ushered in a new era with demanding prerequisites for RF power components. Ampleon meets these challenges head-on by offering technology-agnostic solutions, harnessing cutting-edge **LDMOS**, **GaN**, and other semiconductor technologies for market leading RF power products.

Ampleon stands at the forefront, providing market leading RF power solutions for the **mMIMO** (Massive Multiple Input Multiple Output) up to 128 simultaneous transmit and receive streams, high efficiency **Small Cell**, and high-power **Macro** base stations.

A paradigm shift toward lowest power consuming systems and environmental consciousness compels base station requirements to also achieve unprecedented levels of RF power device efficiency. Simultaneously, the trend favoring higher power and wider bandwidth product solutions stimulate Ampleon's talented engineers to craft novel architectures and design methodologies, paving the way for more compact and discreet base stations.

Download the **latest** version



www.ampleon.com/mpc

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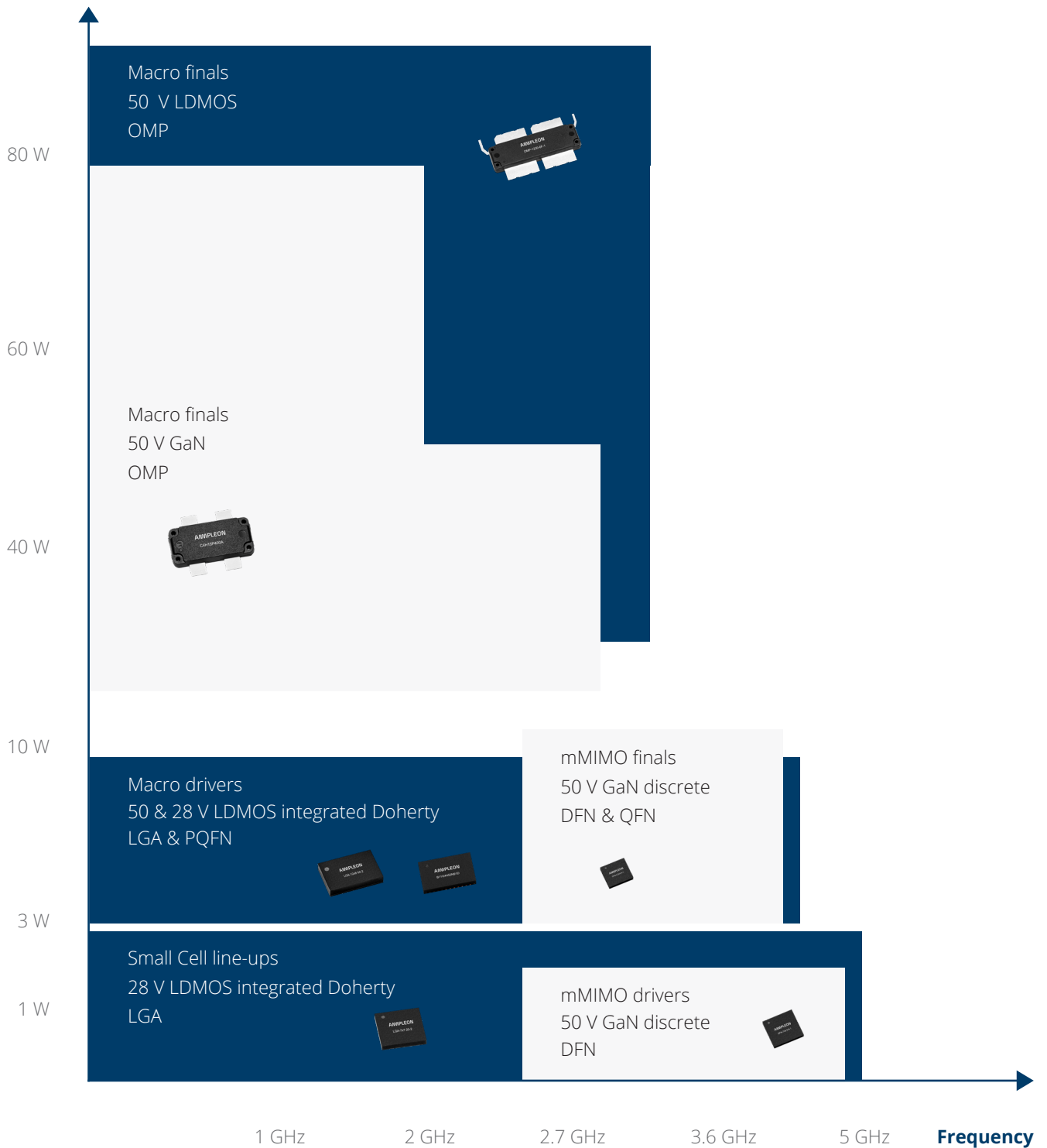
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Package naming convention

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Recommended PA solutions

Average output power



Base station product finder

The tool supports the selection of Ampleon's products for base station applications (Macro, massive MIMO and Small Cell) regarding frequency bands and target average power levels.



www.ampleon.com/support/rf-design-tools/base-station-product-finder

Macro products

Explore the RF power transistor selection guide at: www.ampleon.com/products/mobile-broadband, an intuitive resource featuring easy-to-use parametric filters to assist in identifying the right product for your specific design needs.

When opting for Ampleon's Macro solutions, you gain access to:

- A comprehensive array of solutions where Driver and Finals seamlessly integrate, catering to 4G, 5G, and future mobile requirements
- A fusion of top-tier, dependable GaN and LDMOS technology coupled with cost-effective, exceptional thermal packaging, and advanced design methodologies. These are manufactured and rigorously tested using highly automated volume-scale capabilities, delivering:
 - Consistently reliable performance
 - High line-up gain with minimal variation
 - Elevated linearized efficiency
 - Unprecedented power and efficiency from a single packaged transistor across diverse frequency bands
 - Streamlined, cost-effective line-up solutions facilitated by integrated drivers and Doherty optimized finals, resulting in compact designs

Macro finals

| Frequency (MHz) | Type number | Package type | Package outline | P _{PEAK} (W) | V _{DS} (V) | η _D (%) | G _P (dB) | Recommended driver | Status |
|-----------------|-----------------|--------------|-----------------|-----------------------|---------------------|--------------------|---------------------|--------------------|------------|
| 600–960 | BLP9H10S-350A | OMP-780 | OMP-780-4F-1 | 450 | 48 | 53 | 18.6 | BLP9H10-30G | Production |
| 600–960 | BLP9H10S-500AWT | OMP-780 | OMP-780-6F-1 | 620 | 48 | 52.5 | 17.6 | BLP9H10-30G | Production |
| 600–1000 | C4H10P800A | OMP-780 | OMP-780-4F-1 | 800 | 50 | 61.1 | 18.3 | B10H0710N40D | Production |
| 617–960 | BLP9H10S-850AVT | OMP-1230 | OMP-1230-6F-1 | 850 | 48 | 52 | 18 | BLM9H0610S-60PG | Production |
| 700–1000 | C4H10P600A | OMP-780 | OMP-780-4F-1 | 600 | 48 | 62.4 | 18.7 | BLP9H10-30G | Production |
| 1432–1517 | C4H15P400A | OMP-780 | OMP-780-4F-1 | 300 | 50 | 57 | 18.4 | BLP9G0722-20G | Production |
| 1800–2200 | C4H22P400A | OMP-780 | OMP-780-4F-1 | 300 | 48 | 60 | 16 | C4H2327N55P | Production |
| 2300–2400 | C4H24F550AV | ACC-780 | SOT1249B | 550 | 48 | 50.8 | 16.1 | B11G2327N71D | Production |
| 2496–2690 | C4H27F400AV | ACC-780 | SOT1249B | 400 | 48 | 56.5 | 15.1 | B11G2327N71D | Production |
| 2496–2690 | C4H27F700AV | ACC-780 | SOT1249B | 700 | 52 | 51 | 15 | B11G2327N71D | Production |
| 2620–2690 | C4H27P400A | OMP-780 | OMP-780-4F-1 | 400 | 50 | 58 | 14 | B10G2327N55D | Production |

Macro drivers

| Frequency (MHz) | Type number | Package type | Package outline | P _{PEAK} (W) | V _{DS} (V) | η _D (%) | G _P (dB) | Technology | Status |
|-----------------|------------------|--------------|-----------------|-----------------------|---------------------|--------------------|---------------------|------------|------------|
| 100–2700 | BLP9G0722-20G | TO-270 | SOT1483-1 | 20 | 28 | 22 | 19 | LDMOS | Production |
| 600–800 | B10H0608N40D | LGA-12x8 | LGA-12x8-34-2 | 49 | 48 | 27 | 30 | LDMOS | Production |
| 600–1000 | BLM9H0610S-60PG | OMP-780 | OMP-780-16G-1 | 60 | 48 | 11 | 35.5 | LDMOS | Production |
| 617–960 | BLP9H10-30G | TO-270 | SOT1483-1 | 30 | 50 | 14 | 18.3 | LDMOS | Production |
| 700–1000 | B10H0710N40D | LGA-12x8 | LGA-12x8-34-2 | 50 | 48 | 25 | 31 | LDMOS | Production |
| 1400–1600 | B10H16N40D | LGA-7x7 | LGA-7x7-20-3 | 47 | 48 | 24 | 32.6 | LDMOS | Production |
| 1800–2200 | B10H1822N60D | LGA-7x7 | LGA-7x7-20-3 | 56 | 48 | 21 | 29 | LDMOS | Production |
| 1800–2200 | BLM9D1822-30B | PQFN-8x8 | SOT1462-1 | 39 | 28 | 26 | 30 | LDMOS | Production |
| 1800–2200 | B11G1822N60D | PQFN-12x7 | PQFN-12x7-36-1 | 70 | 28 | 29 | 30 | LDMOS | Production |
| 1800–2200 | B11G1822N120D | PQFN-12x7 | PQFN-12x7-36-1 | 125 | 30 | 27 | 30 | LDMOS | Production |
| 2300–2700 | BLM9D2327-26B | PQFN-8x8 | SOT1462-1 | 31.6 | 28 | 27 | 29.3 | LDMOS | Production |
| 2300–2700 | BLM9D2327S-50PBG | OMP-780 | OMP-780-16G-1 | 58 | 28 | 25.7 | 29 | LDMOS | Production |
| 2300–2700 | B11G2327N72D | PQFN-12x7 | PQFN-12x7-36-1 | 72 | 28 | 30 | 31.2 | LDMOS | Production |
| 2300–2700 | B11G2327N71D | PQFN-12x7 | PQFN-12x7-36-1 | 85 | 28 | 22 | 30 | LDMOS | Production |
| 2496–2690 | B10H27N70D | LGA-7x7 | LGA-7x7-20-3 | 70 | 48 | 21.0 | 30.1 | LDMOS | Production |
| 3300–3800 | B11G3338N81D | PQFN-12x7 | PQFN-12x7-36-1 | 80 | 28 | 25 | 34 | LDMOS | Production |
| 3400–3800 | BLM10D3438-35AB | PQFN-8x8 | SOT1462-1 | 35 | 28 | 23 | 33.4 | LDMOS | Production |
| 3700–4200 | B11G3742N81D | PQFN-12x7 | PQFN-12x7-36-1 | 80 | 28 | 20 | 32 | LDMOS | Production |
| 4400–5000 | B11G4450N91D | PQFN-12x7 | PQFN-12x7-36-1 | 90 | 28 | 13 | 30.4 | LDMOS | Production |
| 4800–5000 | C5H4850N55D | QFN-8x8 | QFN-8x8-20-1 | 55 | 50 | 48.2 | 13.3 | GaN | Production |

Massive MIMO products

Explore the RF power transistor selection guide at: www.ampleon.com/products/mobile-broadband, an intuitive resource featuring easy-to-use parametric filters to assist in identifying the right product for your specific design needs.

When opting for Ampleon's massive MIMO (mMIMO) solutions, you gain access to:

- Ampleon's robust mMIMO portfolio, leveraging LDMOS and GaN discrete and integrated Doherty solutions, delivering consistently high performance within a compact form factor. This facilitates cost-effectiveness and simplicity in 4G and 5G mMIMO power Amplifiers (PAs):
 - Excellent DPD linearization achieved through Ampleon's LDMOS and GaN technologies
 - Compact footprint tailored to meet space constraints in mMIMO systems
 - High line-up gain
 - Unwaveringly consistent performance
 - Proven track record of reliable high-volume supply, ensuring consistent availability

mMIMO line-up

| Frequency (MHz) | Type number | Package type | Package outline | P _{PEAK} (W) | V _{DS} (V) | η _D (%) | G _p (dB) | Technology | Status |
|-----------------|-----------------|--------------|-----------------|-----------------------|---------------------|--------------------|---------------------|------------|------------|
| 2300–2690 | C4H2327N110A | DFN-7x6.5 | DFN-7x6.5-6-1 | 110 | 50 | 57 | 15 | GaN | Production |
| 2300–2700 | BLM9D2327-26B | PQFN-8x8 | SOT1462-1 | 32 | 28 | 42 | 29 | LDMOS | Production |
| 2300–2700 | B10G2327N55D | PQFN-8x8 | SOT1462-1 | 55 | 28 | 43 | 27.5 | LDMOS | Production |
| 2300–5000 | C4H2350N10 | DFN-4.5x4 | DFN-4.5x4-6-1 | 10 | 50 | 15.5 | 19 | GaN | Production |
| 2500–2700 | BLM10D2327-40AB | PQFN-8x8 | SOT1462-1 | 43 | 28 | 45 | 29 | LDMOS | Production |
| 3400–3800 | BLM10D3438-35AB | PQFN-8x8 | SOT1462-1 | 35 | 28 | 41 | 33 | LDMOS | Production |
| 3300–3700 | C5H3337N110D | QFN-8x8 | QFN-8x8-20-1 | 110 | 48 | 55 | 14.5 | GaN | Production |

mMIMO finals

| Frequency (MHz) | Type number | Package type | Package outline | P _{PEAK} (W) | V _{DS} (V) | η _D (%) | G _p (dB) | Technology | Status |
|-----------------|--------------|--------------|-----------------|-----------------------|---------------------|--------------------|---------------------|------------|------------|
| 2300–2690 | C4H2327N55P | DFN-7x6.5 | DFN-7x6.5-6-1 | 50 | 50 | 55 | 16.7 | GaN | Production |
| 2300–2690 | C4H2327N110A | DFN-7x6.5 | DFN-7x6.5-6-1 | 110 | 50 | 57 | 15 | GaN | Production |
| 3400–3800 | C5H3438N110D | QFN-8x8 | QFN-8x8-20-1 | 110 | 48 | 55 | 15 | GaN | Production |
| 3300–3700 | C5H3337N110D | QFN-8x8 | QFN-8x8-20-1 | 110 | 48 | 55 | 14.5 | GaN | Production |
| 3400–3801 | G1M3438P70C | LGA-12x8 | LGA-12x8-34-3 | 70 | 48 | 48 | 30 | GaN | Production |
| 3400–4000 | C5H3440N70D | QFN-8x8 | QFN-8x8-20-1 | 63 | 48 | 51.6 | 12.7 | GaN | Production |
| 4800–5000 | C5H4850N55D | QFN-8x8 | QFN-8x8-20-1 | 55 | 50 | 48.2 | 13.3 | GaN | Production |

mMIMO drivers

| Frequency (MHz) | Type number | Package type | Package outline | P _{PEAK} (W) | V _{DS} (V) | η _D (%) | G _P (dB) | Technology | Status |
|-----------------|----------------|--------------|-----------------|-----------------------|---------------------|--------------------|---------------------|------------|------------|
| 1800–5000 | C5H2350N10 | DFN-4.5x4 | DFN-4.5x4-6-1 | 10 | 48 | 13 | 15.8 | GaN | Production |
| 1805–1880 | BLM9D1819-08AM | LGA-7x7 | LGA-7x7-20-1 | 8 | 28 | 43.5 | 27.5 | LD MOS | Production |
| 1805–1880 | B10G1819N10DL | LGA-7x7 | LGA-7x7-20-2 | 10 | 28 | 45.2 | 32.2 | LD MOS | Production |
| 1880–2025 | BLM9D1920-08AM | LGA-7x7 | LGA-7x7-20-1 | 8.9 | 28 | 42 | 26.8 | LD MOS | Production |
| 2110–2170 | BLM9D2022-08AM | LGA-7x7 | LGA-7x7-20-1 | 8 | 28 | 40.7 | 26.6 | LD MOS | Production |
| 2110–2170 | B10G2022N10DL | LGA-7x7 | LGA-7x7-20-2 | 8.9 | 26 | 48.5 | 50.5 | LD MOS | Production |
| 2300–2400 | BLM9D2324-08AM | LGA-7x7 | LGA-7x7-20-1 | 8 | 28 | 42.5 | 27 | LD MOS | Production |
| 2300–2400 | B10G2324N10DL | LGA-7x7 | LGA-7x7-20-2 | 9.1 | 28 | 46.1 | 31.3 | LD MOS | Production |
| 2300–5000 | C4H2350N05 | DFN-4.5x4 | DFN-4.5x4-6-1 | 5 | 48 | 13 | 18.5 | GaN | Production |
| 2300–5000 | C4H2350N10 | DFN-4.5x4 | DFN-4.5x4-6-1 | 10 | 50 | 15.5 | 19 | GaN | Production |
| 2496–2700 | BLM9D2527-09AM | LGA-7x7 | LGA-7x7-20-1 | 9 | 28 | 46.6 | 26.5 | LD MOS | Production |
| 2500–2700 | B10G2527N10DL | LGA-7x7 | LGA-7x7-20-2 | 9.3 | 28 | 45.4 | 30 | LD MOS | Production |
| 3300–3600 | B10G3336N16DL | LGA-7x7 | LGA-7x7-20-2 | 16 | 28 | 35 | 35 | LD MOS | Production |
| 3300–3650 | BLM9D3336-12AM | LGA-7x7 | LGA-7x7-20-2 | 12 | 28 | 30 | 31.8 | LD MOS | Production |
| 3300–3650 | BLM9D3336-14AM | LGA-7x7 | LGA-7x7-20-2 | 14 | 28 | 33.7 | 32.4 | LD MOS | Production |
| 3400–3800 | BLM9D3438-16AM | LGA-7x7 | LGA-7x7-20-2 | 16 | 28 | 24.3@ 0.8 W | 32.5 | LD MOS | Production |
| 3500–3800 | BLM9D3538-12AM | LGA-7x7 | LGA-7x7-20-2 | 12 | 28 | 30.8 | 32 | LD MOS | Production |
| 3600–4000 | B10G3640N16DL | LGA-7x7 | LGA-7x7-20-2 | 16 | 28 | 22 | 36 | LD MOS | Production |
| 3700–4000 | BLM9D3740-16AM | LGA-7x7 | LGA-7x7-20-2 | 16 | 28 | 31.3@ 1.6 W | 31.2 | LD MOS | Production |
| 3800–4200 | BLM9D3842-16AM | LGA-7x7 | LGA-7x7-20-2 | 16 | 28 | 28.5@ 1.6 W | 30.2 | LD MOS | Production |
| 4700–5000 | B10G4750N12DL | LGA-7x7 | LGA-7x7-20-2 | 12 | 28 | 32 | 30 | LD MOS | Production |

Small Cell products

Explore the RF power transistor selection guide at: www.ampleon.com/products/mobile-broadband, an intuitive resource featuring easy-to-use parametric filters to assist in identifying the right product for your specific design needs.

When opting for Ampleon's Small Cell solutions, you gain access to:

- LDMOS technology breakthrough within the GaAs dominated small cell market, offering:
 - Up to 300 MHz instantaneous bandwidth
 - Enhanced output power for expanded coverage
 - High linearized efficiency
 - Excellent DPD linearization capabilities
 - Compact product line in standardized package footprints, ensuring seamless deployment and integration

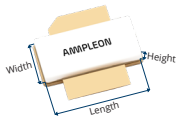
Small Cell

| Frequency (MHz) | Type number | Package type | Package outline | P _{PEAK} (W) | V _{DS} (V) | η _D (%) | G _P (dB) | Technology | Status |
|-----------------|----------------|--------------|-----------------|-----------------------|---------------------|--------------------|---------------------|------------|------------|
| 728-821 | BLM9D0708-05AM | LGA-7x7 | LGA-7x7-20-2 | 5 | 28 | 39.5 | 17.8 | LDMOS | Production |
| 859-960 | BLM9D0910-05AM | LGA-7x7 | LGA-7x7-20-2 | 5 | 28 | 38.4 | 18 | LDMOS | Production |
| 1805-1880 | BLM9D1819-08AM | LGA-7x7 | LGA-7x7-20-1 | 8 | 28 | 43.5 | 27.5 | LDMOS | Production |
| 1805-1880 | B10G1819N10DL | LGA-7x7 | LGA-7x7-20-2 | 10 | 28 | 45.2 | 32.2 | LDMOS | Production |
| 1880-2025 | BLM9D1920-08AM | LGA-7x7 | LGA-7x7-20-1 | 8.9 | 28 | 42 | 26.8 | LDMOS | Production |
| 2110-2170 | BLM9D2022-08AM | LGA-7x7 | LGA-7x7-20-1 | 8 | 28 | 40.7 | 26.6 | LDMOS | Production |
| 2110-2170 | B10G2022N10DL | LGA-7x7 | LGA-7x7-20-2 | 8.9 | 26 | 48.5 | 50.5 | LDMOS | Production |
| 2300-2400 | BLM9D2324-08AM | LGA-7x7 | LGA-7x7-20-1 | 8 | 28 | 42.5 | 27 | LDMOS | Production |
| 2300-2400 | B10G2324N10DL | LGA-7x7 | LGA-7x7-20-2 | 9.1 | 28 | 46.1 | 31.3 | LDMOS | Production |
| 2496-2700 | BLM9D2527-09AM | LGA-7x7 | LGA-7x7-20-1 | 9 | 28 | 46.6 | 26.5 | LDMOS | Production |
| 2500-2700 | B10G2527N10DL | LGA-7x7 | LGA-7x7-20-2 | 9.3 | 28 | 45.4 | 30 | LDMOS | Production |
| 3300-3600 | B10G3336N16DL | LGA-7x7 | LGA-7x7-20-2 | 16 | 28 | 35 | 35 | LDMOS | Production |
| 3300-3650 | BLM9D3336-12AM | LGA-7x7 | LGA-7x7-20-2 | 12 | 28 | 30 | 31.8 | LDMOS | Production |
| 3300-3650 | BLM9D3336-14AM | LGA-7x7 | LGA-7x7-20-2 | 14 | 28 | 33.7 | 32.4 | LDMOS | Production |
| 3400-3800 | BLM9D3538-12AM | LGA-7x7 | LGA-7x7-20-2 | 12 | 28 | 30.8 | 32 | LDMOS | Production |
| 3400-3800 | BLM9D3438-16AM | LGA-7x7 | LGA-7x7-20-2 | 16 | 28 | 24.3@ 0.8 W | 32.5 | LDMOS | Production |
| 3600-4000 | B10G3640N16DL | LGA-7x7 | LGA-7x7-20-2 | 16 | 28 | 22 | 36 | LDMOS | Production |
| 3700-4000 | BLM9D3740-16AM | LGA-7x7 | LGA-7x7-20-2 | 16 | 28 | 31.3@ 1.6 W | 31.2 | LDMOS | Production |
| 3800-4200 | BLM9D3842-16AM | LGA-7x7 | LGA-7x7-20-2 | 16 | 28 | 28.5@ 1.6 W | 30.2 | LDMOS | Production |
| 4700-5000 | B10G4750N12DL | LGA-7x7 | LGA-7x7-20-2 | 12 | 28 | 32 | 30 | LDMOS | Production |

Package portfolio

Ampleon's package overview is available on www.ampleon.com/packages

Air-Cavity Ceramic (ACP) packages*



Package type
Package outline
(L x W x H (mm))



ACC-780
SOT1249B
(20.02 x 9.53 x 4.75 (mm))

Overmolded Plastic (OMP) packages*



DFN-4.5x4
DFN-4.5x4-6-1
(4.5 x 4.0 x 0.85 (mm))



DFN-7x6.5
DFN-7x6.5-6-1
(7.0 x 6.5 x 0.85 (mm))



LGA-7x7
LGA-7x7-20-1
(7.0 x 7.0 x 0.98 (mm))



LGA-7x7
LGA-7x7-20-2
(7.0 x 7.0 x 0.98 (mm))



LGA-7x7
LGA-7x7-20-3
(7.0 x 7.0 x 1.13 (mm))



LGA-12x8
LGA-12x8-34-2
(12.0 x 8.0 x 0.98 (mm))



LGA-12x8
LGA-12x8-34-3
(12.0 x 8.0 x 1.13 (mm))



OMP-780
OMP-780-4F-1
(20.75 x 9.96 x 3.92 (mm))



OMP-780
OMP-780-6F-1
(20.75 x 9.96 x 3.92 (mm))



OMP-780
OMP-780-16G-1
(20.75 x 9.96 x 3.92 (mm))



OMP-1230
OMP-1230-6F-1
(32.43 x 9.96 x 3.92 (mm))



PQFN-8x8
SOT1462-1
(8.1 x 8.1 x 2.2 (mm))



PQFN-12x7
PQFN-12x7-36-1
(12.0 x 7.0 x 2.1 (mm))



TO-270
SOT1483-1
(9.65 x 6.1 x 2.03 (mm))



QFN-8x8
QFN-8x8-20-1
(8.0 x 8.0 x 1.05 (mm))

* Not drawn to scale

Committed to your success

At Ampleon, we are passionate about your success. Rest assured that we deliver world class innovation for a broad range of applications. In line with your challenges increasing, we continuously improve and enhance our LDMOS technology and strengthen our footprint in GaN.

During the entire process from design to delivery, you will enjoy outstanding technical support from well trained staff and knowledgeable Field Application Engineers (FAEs) as part of our distribution network. Whether you require load-pull data, application boards, samples, ADS / AWR models or other, you will be accompanied in every step on the way to success.

Our application engineering resources are spread around the globe, with our offices (Nijmegen / The Netherlands, Toulouse / France, Smithfield / USA, Shanghai / China) providing local customer support.

Support

Datasheets, test reports and simulation models are available online on: www.ampleon.com/support/documentation

To make sure your request is processed quickly and directed to the right contact partner at Ampleon, please contact us via: www.ampleon.com/contact

Order samples

To support customers in designing new products, Ampleon supplies samples and demonstration boards. Samples can be requested via our online e-samples store: www.ampleon.com/samples (please register at first log-in).

For inquiries, please contact your local sales representative listed on: www.ampleon.com/contact

Additional information

- www.ampleon.com/support
- www.ampleon.com/products
- www.ampleon.com/applications

RF design tools

From precise unit conversions to thermal resistance calculations and device lifetime estimates, our tools provide accurate, customizable solutions for your design needs.



www.ampleon.com/support/rf-design-tools

PA modules (mMIMO modules + Macro driver modules)

| G | m | M | f | P | P_{peak} | x | <i>Italic = optional</i> |
|--|---|---|---|---|------------|---|--------------------------|
| <i>extra Integration / Functionality Options:</i> C = Bias Control + switch (PAM+) D = in-package Doherty combiner, no 50 Ohm Out-match T = internal Video decoupling (internal IPD) ... | | | | | | | |
| P_{peak} @ supply voltage of Datasheet | | | | | | | |
| P LGA N (P)QFN / (P)DFN C Air Cavity T Top side Cool | | | | | | | |
| Operation frequency | | | | | | | |
| M: Module = 50 Ohm I/O multi-stage PA (often hybrid active technology) | | | | | | | |
| Product generation | | | | | | | |
| G = mMIMO PA Module C = Macro Driver PA Module | | | | | | | |

