

PRODUCT SELECTION GUIDE

2026 V1.2



Powering reliable wireless communications through advanced RF IC



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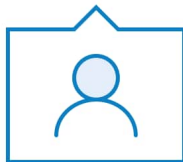


Bonray Headquarter
Third-Generation Semiconductor
Industry Innovation Center

Company Profile



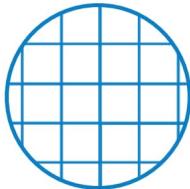
100+ IP



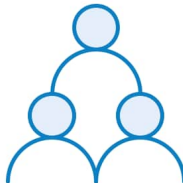
300+ Talents



4 Sites



IDM (Self Owned Wafer Fab)



State-distinguished
expert team



National Key Advanced
Technology Enterprise

Application Scenarios



Satellite Communications



Radar Systems



Aerospace



Intelligent Transportation



Low-altitude Economy



Mobile Communications

Powering reliable wireless communications through advanced RF IC



Unmanned Platforms



Medical Electronics



Monitoring and Early Warning



Instrumentation



Smart Security



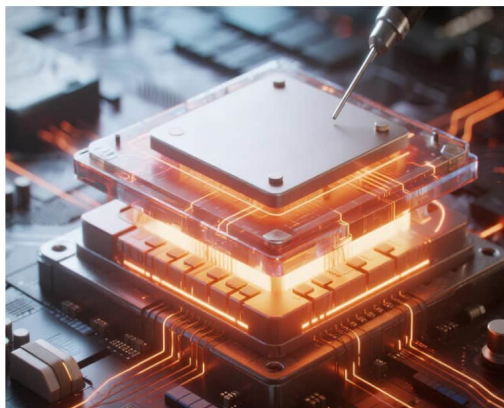
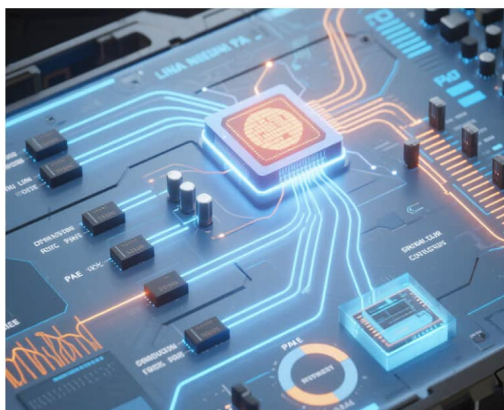
Energy & Power

R&D
Capability

Bonray

Relying on the talent team of top universities in China, the core technology is independent and controllable, with high level of clip R&D and design capability

- RFIC Product Design Technology
- Integrated Circuit Device Modeling Technology
- 3D package simulation technology
- Microwave communication system integration design capability



**IC
Assembly**
Bonray
Supports QFN, DFN, SOT, SOP packages

- Flexible, customizable packaging for various quality grades
- High-precision fully automatic gold thermosonic bonding
- 270° omnidirectional 3-light inspection; laser marking, wire cutting, lead frame mapping
- RF & microwave chip test & verification platform
- Full-process MES; traceability to each individual chip


**Package
Specification**
Bonray
Full range of package types; available in die, plastic, ceramic & hermetic metal packages

Package	Size(units:mm)	Pictures
SMO-8C	12.2*12.2*5	
SOT89	4.5*4.1*1.5	
SOT343	2.1*2.25*0.95	
SOT23-6	2.92*2.8*1.15	
MSOP8	3*4.9*1	
eMSOP8	3*4.9*1	
DFN6	2*1.3*0.75	
	1.5*1.2*0.75	
DFN8	2*2*0.8	
DFN8L	4.9*6*0.9	
QFN16	3*3*0.8	
	4*4*0.75	
QFN20	4*4*1	
	5*5*0.75	

Package	Size(units:mm)	Pictures
QFN24	4*4*0.8	
	5*5*0.8	
QFN32	5*5*0.8	
QFN48	7*7*1.7	
QFN64	9*9*1.7	
PD	5.1*4.1*3.05	
PG	14*4.1*3.05	
PC	20.3*5.8*3.88	
PF	29*5.8*3.88	
PN	34*9.8*4.7	
PH	18*8.7*2.34	
PJ	24*17.4*4.5	
PP	24*17.4*4.5	
PT	21*12.9*4.7	

Reliability
Test**Failure Analysis and Reliability Testing Capabilities****Rigorous Product Reliability Testing**

Supports reliability test including high/low temperature test, die shear strength, bond strength, X-ray, ultrasonic inspection, high-temperature storage, temperature cycling, burn-in, HAST, PCT, external visual inspection, internal visual inspection, dimensional measurement

- Humidity Resistance Testing
- Internal Defect Detection
- Thermal Cycling Resistance Testing
- Bonding Strength Testing
- High/Low Temperature Life Testing
- High-Temperature Storage Testing
- External/Internal Visual Inspection and Measurement

Quality System

- Comprehensive Industry Qualifications
- Full-lifecycle Quality Management System
- Stringent Reliability Testing and Qualification
- Design for Reliability (DFR)
- Failure Analysis
- Preventive Optimization



Main Products

Small Signal Products

- Low Noise Amplifiers
- Low Phase Noise Amplifiers
- Gain Block/Amplifiers
- RF Switches
- Digitally Controlled Attenuators
- Fixed Attenuators
- Coaxial Attenuators
- Phase Shifters
- Mixers
- Limiters
- Equalizers
- RMS Detectors
- Couplers
- Power Dividers
- Filters
- Power Load



Frequency Source & Timing Products

- PLL with Integrated VCO
- VCO
- Prescalers
- Direct Digital Synthesis(DDS)
- Fanout Buffers
- SPI
- RF SOC



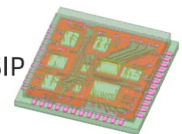
Large Signal Products

- GaN Transistors
- Internally Matched Power Amplifiers
- Driver Amplifiers
- GaN MMIC Power Amplifiers
- GaAs MMIC Power Amplifiers
- GaN Switches



Integrated Products

- Variable Gain Amplifiers
- Amplitude limiting & Phase shift SIP
- Bi-Directional Amplifiers
- Beamforming Chip for K-band
- Micro Module



Product Features :

- Full frequency coverage from HF/VHF to Microwave and Millimeter-wave
- Featuring Broadband, Low power dissipation, high integration, and high reliability
- Multiple specialized product lines including small-signal, large-signal, time-frequency, and SiP, delivering complete solutions

Small Signal Products >>>

Full Product Spectrum with Full-Link Solutions Available

With deep expertise in devices including Low Noise Amplifiers, Gain Block/Amplifiers, RF Switches, Mixers, Digitally Controlled Attenuators, Phase Shifters, and Limiters, we achieve full frequency coverage from HF to Millimeter-wave. Our products feature low noise, high linearity, low power dissipation, ultra-broadband, and high reliability. We offer flexible system-level solutions ranging from discrete devices to complete RF chains, tailored to meet diverse application requirements in complex environment communications, satellite communications, low-altitude economy, radar systems, instrumentation, and more. Leveraging a mature rapid development platform, we are committed to delivering high-reliability solutions with short lead times.

Small Signal

Active Amplifier Products:

- Ultra-Low Noise Series
- Low Power Dissipation Series
- Anti-blocking Series
- High Linearity Series
- Low Phase Noise Series
- High Gain Flatness Series
- HF/MF/LF Series

Small Signal

Passive Products:

- Broadband, full product spectrum
- Digitally Controlled Attenuators, Phase Shifters
- RF Switches
- Mixers
- Equalizers
- Limiters
- Detectors
- Couplers
- Power Dividers
- Filters
- Power Load

Sub 6GHz Low Noise Amplifier | BR9371DAJ

- Frequency coverage: 30MHz~4GHz
- Low noise (0.7dB), high flatness, high P1dB, low power dissipation
- Suitable for power, size and noise-sensitive applications such as tactical radios, satellite communications, and phased-array radar

Low Noise Amplifier with Integrated Bypass | BR9388DAJ

- Frequency coverage: 500MHz~4GHz
- Bypass, low noise, high flatness
- Suitable for complex environment applications such as tactical radios, and UAVs

Ku-Band Low Noise Amplifiers | BR9912/13FDJ

- Frequency coverage: 10.5GHz~14.5GHz
- High gain flatness, high gain
- Suitable for satellite communications, phased-array radar, and other applications

Anti-blocking Amplifiers | BR8121/8122/8123

- Coverage across UHF/VHF bands
- Low noise, high linearity, high IP1dB, internally matched
- Ideal for complex communication environments

High-Power Limiter | BR9309FPJ

- Frequency coverage: DC~4GHz
- High power handling (50W), broadband, low insertion loss
- Used in Beidou anti-jamming antennas, front-end protection for communication receivers, etc.



Low Noise Amplifiers » Integrated Shutdown/Bypass Control Function



Part Number	Features	Freq. (GHz)	Gain (dB)	OP1dB (dBm)	OIP3 (dBm)	NF (dB)	Vs (V)	Is (mA)	Package Type	Product Lifecycle
BR9923DAJ	Bypass, Low Power Dissipation	0.03~2	20.0±0.5	20.6	33.3	1.0	3.3	23	DFN8	Production
BR9924DAJ	Bypass, Low Power Dissipation	0.03~2	16.6±0.7	19.4	26.5	1.4	3.3	21	DFN8	Production
NEW BR9392DAJ	Shutdown	0.03~4.5	16.7	20.5	36.8	0.8	5	77	DFN8	Production
BR9392LDZ	Shutdown	0.03~4.5	16.7	20.5	36.8	0.8	5	77	Die	Production
NEW BR9394DAJ	Shutdown	0.03~4.5	22.3±0.7	21.8	34.0	0.9	5	80	DFN8	Production
BR9394LDZ	Shutdown	0.03~4.5	22.3±0.7	21.8	34.0	0.9	5	80	Die	Production
NEW BR9395DAJ	Shutdown, High Gain	0.03~4.5	28.6±1.8	17.7	32.3	1.0	5	89	DFN8	Production
BR9395LDZ	Shutdown, High Gain	0.03~4.5	28.6±1.8	17.7	32.3	1.0	5	89	Die	Production
BR9925DAJ	Bypass	0.2~4	19.9	21.9	35.0	1.0	5	75	DFN8	Production
NEW BR9388DAJ	Bypass	0.5~4	21.5±1.3	18.6	32.3	0.7	5/3.3	70/36	DFN8	Production
HOT BR9511DA	Shutdown, Ultra Low Noise	0.6~4.2	20.8	19.1	35.5	0.6	5	67	DFN8	Production
BR9511LDL	Shutdown, Ultra Low Noise	0.6~4.2	20.8	19.1	35.5	0.6	5	67	Die	Production
HOT BR9928DAJ	Shutdown, High Linearity	0.6~6	21.8	20.1	33.4	0.6	5/3.3	78/42	DFN8	Production
BR9625DA	Shutdown, Ultra Low Noise	0.7~6	18.0	21.8	35.4	0.5	5	77	DFN8	Production
NEW BR9911DAJ	Shutdown, Ultra Low Noise	2~4.5	23.8±1.3	15.7	32.6	0.4	5/3.3	65/33	DFN8	Production
NEW BR9396DAJ	Shutdown, High Linearity	2~6	21.5	20.4	35.6	0.8	5	76	DFN8	Production
BR9926DAJ	Bypass	4~6	21.0±0.45	17.9	33.0	1.5	5	64	DFN8	Production



Low Noise Amplifiers » High Gain Flatness Series



Part Number	Features	Freq. (GHz)	Gain (dB)	OP1dB (dBm)	OIP3 (dBm)	NF (dB)	Vs (V)	Is (mA)	Package Type	Product Lifecycle
HOT BR9513TA	High IP1dB	0.001~1	15.5±1.6	21.6	33.0	1.8	5	68	SOT89	Production
HOT BR8121AF	High Linearity, High IP1dB	0.02~1	10.3±0.4	19.1	37.2	1.5	5	61	SMO-8C	Production
HOT BR8122AFF	High Linearity, High IP1dB	0.02~0.7	10.6±0.4	24.1	43.6	1.2	5	100~160	SMO-8C	Production
HOT BR8123AFF	High Linearity, High IP1dB	0.02~0.7	15.6±0.9	24.0	42.3	1.0	5	100~160	SMO-8C	Production
NEW BR81221AFF	High Linearity, High IP1dB	0.02~0.7	10.6±0.7	24/29	45/46	1.2/1.3	5/9	123/226	SMO-8C	Production
NEW BR81231AFF	High Linearity, High IP1dB	0.02~0.7	16.3±0.8	24/29	42/42	1.0/1.2	5/9	125/242	SMO-8C	Production

Low Noise Amplifiers » High Gain Flatness Series



Part Number	Features	Freq. (GHz)	Gain (dB)	OP1dB (dBm)	OIP3 (dBm)	NF (dB)	Vs (V)	Is (mA)	Package Type	Product Lifecycle
BR9562FD	High Linearity	0.03~1	20.5±0.4	22.4	37.5	1.2	5	92	QFN16	Production
BR9562LDL	High Linearity	0.03~1	20.5±0.4	22.4	37.5	1.2	5	92	Die	Production
HOT BR9518TA	Low Power Dissipation, High IP1dB	0.03~2.5	18.3±1.2	21.4	27.6	1.2	5	22	SOT89	Production
BR9518LD	Low Power Dissipation, High IP1dB	0.03~2.5	19.2±0.1	21.4	27.6	1.2	5	22	Die	Production
BR91241TAJ	Low Power Dissipation, High IP1dB	0.03~4	14.7±2.0	19.9	30.5	1.4	5	45	SOT89	Production
BR9124TA	High Linearity, High IP1dB	0.05~4	14.6±1.3	19.9	35.1	1.5	5	52	SOT89	BR91241TAJ is recommended
BR91241LD	Low Power Dissipation, High IP1dB	0.03~4	14.7±2.0	19.9	30.5	1.4	5	45	Die	Production
HOT BR9339TAJ	Low Power Dissipation, High IP1dB	0.03~4	14.7±1.3	18.5	27.5	1.4	5	30	SOT89	Production
HOT BR9554TA	High Linearity, High IP1dB	0.03~4	15.1±0.2	20.8	35.9	2.2	5	94	SOT89	Production
BR9554FD	High Linearity, High IP1dB	0.03~4	15.4±0.2	20.9	36.6	2.2	5	95	QFN16	Production
BR9554LD	High Linearity, High IP1dB	0.03~4	15.4±0.2	20.9	36.6	2.2	5	95	Die	Production
BR9105TA	Low Power Dissipation	0.03~4	16.7±1.5	15.0	27.7	1.4	5	38	SOT89	Production
HOT BR9371DAJ	Low Power Mode, Ultra Low Noise	0.03~4	22.3±2.0	23.1	29.8	0.7	5	43/21	DFN8	Production
BR9371LD	Low Power Mode, Ultra Low Noise	0.03~4	22.3±2.0	23.1	29.8	0.7	5	43/21	Die	Production
BR9372FDJ	Low Power Mode, High Gain	0.03~4.5	30.5±1.0	19.2	30.6	0.8	5	95/75	QFN16	Production
BR9372LDZ	Low Power Mode, High Gain	0.03~4.5	30.5±1.0	19.2	30.6	0.8	5	95/75	Die	Production
HOT BR9617DAJ	High Linearity	0.02~8	23.2±1.5	20.1	36.3	1.1	5	87	DFN8	Production
BR9617LD	High Linearity	0.02~8	23.2±1.5	20.1	36.3	1.1	5	87	Die	Production
BR9927DAJ	High Gain	0.8~2.5	35.9±0.8	19.0	34.2	0.5	5	60	DFN8	Production
BR9927LDZ	High Gain	0.8~2.5	35.9±0.8	19.0	34.8	0.5	5	58	Die	Production
BR9373FDJ	Low Power Mode, High Gain	2~8	26.2±0.6	18.3	30.0	1.0	5	84/55	QFN16	Production
BR9373LDZ	Low Power Mode, High Gain	2~8	26.0±0.4	17.8	30.1	1.0	5	86/56	Die	Production
BR9375FDJ	Low Power Mode	4~8	22.5±0.4	18.3	28.9	1.3	5	68/45	QFN16	Production
BR9375LDZ	Low Power Mode	4~8	22.3±0.4	18.1	29.5	1.2	5	68/45	Die	Production
BR9376FDJ	Low Power Mode, Positive Gain Slope	5~14	21.7±1.0	17.0	24.8	1.2	5	66/43	QFN16	Production
BR9376LDZ	Low Power Mode, Positive Gain Slope	6~13	21.5±1.0	17.1	24.6	1.4	5	66/41	Die	Production
BR9377FDJ	Low Power Mode, High Gain	8~12	26.2±0.5	16.6	29.1	1.6	5	73/47	QFN16	Production



Low Noise Amplifiers

» High Gain Flatness Series



Part Number	Features	Freq. (GHz)	Gain (dB)	OP1dB (dBm)	OIP3 (dBm)	NF (dB)	Vs (V)	Is (mA)	Package Type	Product Lifecycle
NEW BR9377LDZ	Low Power Mode, High Gain	8~12	25.2±0.4	16.0	27.8	1.6	5	73/48	Die	Production
NEW BR9912FDJ	High Gain	9~15	26.7±1.4	16.6	32.9	0.9	5/3.3	64/36	QFN16	Production
NEW BR9912LDL	High Gain	9~15	27.3±1.3	16.2	31.0	0.8	5/3.3	62/34	Die	Production
NEW BR9913FDJ	High Linearity	8~15	19.6±0.5	17.2	30.5	1.2	5/3.3	69/40	QFN16	Production
NEW BR9913LDL	High Linearity	8~15	20.4±0.5	18.0	31.5	1.1	5/3.3	68/39	Die	Production
NEW BR9914FDJ	High IP1dB	10.5~14.5	12.1±0.4	17.7	30.0	1.8	5/3.3	81/49	QFN16	Production
NEW BR9914LDL	High IP1dB	10.5~14.5	12.5±0.3	17.3	30.1	1.3	5/3.3	80/46	Die	Production
NEW BR9915LDL	Low Power Dissipation	17~21.2	22.5±0.5	13.7	25.5	1.3	5/3.3	47/26	Die	Production
NEW BR9916LDL	Low Power Dissipation	17~21.2	18.5±0.5	10.8	23.4	1.3	5/3.3	24/13	Die	Production
NEW BR9917LDL	High IP1dB	17~21.2	11.0±0.2	18.0	27.6	1.9	5/3.3	69/37	Die	Production
NEW BR9615LD	Low Power Dissipation, Ultra Broadband	0.1~20	17.0±1.3	13.9	24.2	1.2	5	48	Die	Samples
NEW BR9616FDJ	High Linearity	1~9	22.3±0.5	20.5	33.1	1.4	5	85	QFN16	Samples
NEW BR9616LD	High Linearity	1~9	22.3±0.3	20.5	33.1	1.2	5	85	Die	Samples
NEW BR9614FLJ	Ultra Broadband	2~20	16.1±1.8	17.5	28.1	2.2	5	70	QFN32	Samples
NEW BR9614LD	Ultra Broadband	2~20	16.1±1.5	18.0	28.1	1.7	5	70	Die	Samples
NEW BR9618FDJ	High Gain, Positive Gain Slope	6~18	26.5±1.0	16.0	28.5	1.7	5	82	QFN16	Samples
NEW BR9618LD	High Gain, Positive Gain Slope	6~18	26.9±2.0	17.7	29.4	1.4	5	71	Die	Samples
BR9379LDZ	Low Power Dissipation	6~18	19.6±0.4	9.8	24.1	1.5	5	27	Die	Samples
BR9382LDL	Low Power Dissipation, Positive Gain Slope	6~18	23.0±1.5	14.0	26.0	1.5	5	39	Die	Samples
BR9381LDZ	High Gain	6~20	28.4±0.4	13.7	28.6	1.1	5	53	Die	Samples
HOT BR9619FDJ	Ultra Broadband	18~26	21.0±0.8	15.8	20.0	2.4	5	55	QFN16	Samples
NEW BR9619LD	Ultra Broadband	18~26	21.0±0.4	15.8	20.0	1.8	5	55	Die	Samples
BR9383LDL	High Gain, Positive Gain Slope	18~32	25.5±1.0	13.0	25.0	1.7	5	67	Die	Samples
BR9379FDJ	Low Power Dissipation, Positive Gain Slope	6~18	20.0±1.0	11.0	24.0	1.5	5	34	QFN16	Pre-release
BR9382FDJ	Low Power Dissipation, Positive Gain Slope	6~18	24.0±2.0	14.0	-	1.5	5	35	QFN16	Pre-release
BR9381FDJ	High Gain	6~20	28.0±1.0	14.5	20.0	1.4	5	61	QFN16	Pre-release
BR9383FDJ	High Gain, Positive Gain Slope	18~32	25.5±1.0	13.0	25.0	1.7	5	67	QFN16	Pre-release



Low Noise Amplifiers

Part Number	Features	Freq. (GHz)	Gain (dB)	OP1dB (dBm)	OIP3 (dBm)	NF (dB)	Vs (V)	Is (mA)	Package Type	Product Lifecycle
BR9117TA	High IP1dB	0.001~2.5	14.8	19.7	31.5	1.9	5	65	SOT89	Production
BR9534TA	Low Power Dissipation	0.001~4	22.5	14.9	21.9	2.0	3.3	37	SOT89	Production
BR9534LD	Low Power Dissipation	0.001~4	22.5	14.9	21.9	2.0	3.3	37	Die	Production
HOT BR9112TA	High Linearity	0.001~4	22.7	23.2	35.9	1.2	5	130	SOT89	Production
BR9112LD	High Linearity	0.001~4	22.7	23.2	35.9	1.2	5	130	Die	Production
BR9115TA	High Gain	0.001~4	31.7	15.1	25.3	1.2	5	67	SOT89	Production
BR9115LD	High Gain	0.001~4	31.7	15.1	25.3	1.2	5	67	Die	Production
BR9515TA	High Gain, Positive Gain Slope	0.001~4	26.9	16.4	27.7	1.9	5	82	SOT89	Production
HOT BR9555TA	Ultra Low Noise, High Linearity	0.03~1	27.8	23.9	38.6	0.7	5	117	SOT89	Production
BR9555LD	Ultra Low Noise, High Linearity	0.03~1	27.8	23.9	38.6	0.7	5	117	Die	Production
BR9533DC	Ultra Low Noise, Low Power Dissipation	0.03~2	18.7	19.3	18.3	0.6	5	14	DFN6	Production
BR9533LD	Ultra Low Noise, Low Power Dissipation	0.03~2	18.7	19.3	18.3	0.6	5	14	Die	Production
BR9116TA	Low Power Dissipation	0.03~3	15.0	17.1	28.9	1.7	5	36	SOT89	Production
BR9038TA	Low Power Dissipation	0.03~4	14.6	21.5	27.1	1.0	5	45	SOT89	Production
HOT BR9118TC	Ultra Low Noise, Low Power Dissipation	0.03~4	16.6	22.3	31.1	0.7	5	43	SOT343	Production
BR9122TC	Low Power Dissipation	0.03~4	17.5	11.6	21.0	1.4	2.7	20	SOT343	Production
HOT BR91221TCJ	Low Power Dissipation	0.03~4	17.9	12.5	23.3	1.4	2.7	19	SOT343	Production
BR91221LDL	Low Power Dissipation	0.03~4	17.9	12.5	23.3	1.4	2.7	19	Die	Production
BR95321TCJ	Ultra Low Noise	0.03~4	18.0	20.5	33.3	0.7	5	54	SOT343	Production
HOT BR9123TA	Ultra Low Noise, Low Power Dissipation	0.03~4	18.9	22.1	32.4	0.7	5	46	SOT89	Production
HOT BR9549TA	High Linearity	0.03~4	19.4	22.7	36.5	1.2	5	81	SOT89	Production
BR9549LDL	High Linearity	0.03~4	19.4	22.7	36.5	1.2	5	81	Die	Production
BR9549FD	High Linearity	0.03~4	19.6	22.4	36.3	1.3	5	81	QFN16	Production
BR9103TA	High Linearity, Low Power Dissipation	0.03~4	20.0	20.0	30.0	1.5	5	60	SOT89	Production
BR9104TA	High Linearity	0.03~4	17.3	20.3	35.1	1.7	5	66	SOT89	Production
BR9537DA	Ultra Low Noise	0.3~3	19.1	20.9	32.9	0.5	5	63	DFN8	Production
NEW BR9918DAJ	Ultra Low Noise, High Linearity	0.4~2	18.0	22.0	33.8	0.5	5	44	DFN8	Production
HOT BR9919DAJ	Ultra Low Noise, High Linearity	0.8~3	23.6	18.0	37.0	0.4	5	82	DFN8	Production
BR9919LDL	Ultra Low Noise, High Linearity	0.8~3	22.0	18.0	37.0	0.4	5	82	Die	Production

Low Noise Amplifiers



Part Number	Features	Freq. (GHz)	Gain (dB)	OP1dB (dBm)	OIP3 (dBm)	NF (dB)	Vs (V)	Is (mA)	Package Type	Product Lifecycle
BR9335DA	Ultra Low Noise, High IP1dB	1~1.7	13.5	20.9	37.0	0.6	5	60	DFN8	Production
BR9335LD	Ultra Low Noise, High IP1dB	1~1.7	13.5	20.9	37.0	0.6	5	60	Die	Production
HOT BR9384FDJ	Ultra Broadband	0.05~20	21.8	-	-	2.4	5	60	QFN16	Samples
BR9384LDZ	Ultra Broadband	0.05~20	22.4	11.5	23.4	1.7	5	60	Die	Samples
NEW BR9615FLJ	Low Power Dissipation, Ultra Broadband	0.1~20	16.0	13.9	24.2	2.0	5	48	QFN32	Samples

Gain Block Amplifiers



Part Number	Features	Freq. (GHz)	Gain (dB)	OP1dB (dBm)	OIP3 (dBm)	NF (dB)	Vs (V)	Is (mA)	Package Type	Product Lifecycle
BR9035TA	Low Power Dissipation, High Gain Flatness	0.03~3	19.0±1.8	11.8	23.0	4.3	5	39	SOT89	Production
BR9613TC	Low Power Dissipation, High Gain Flatness	0.03~4	14.1±1.9	15.3	29.6	1.9	5	42	SOT343	Production
BR9613LD	Low Power Dissipation, High Gain Flatness	0.03~4	14.1±1.9	15.3	29.6	1.9	5	42	Die	Production
HOT BR9522TA	High Linearity, High Gain Flatness	0.03~4	21.2±1.7	19.9	38.6	2.2	5	81	SOT89	Production
HOT BR9522LD	High Linearity, High Gain Flatness	0.03~4	21.2±1.7	19.9	38.6	2.2	5	81	Die	Production
BR9612TC	Low Power Dissipation	0.03~5	12.1	6.5	21.2	2.8	5	24	SOT343	Production
BR9034DC	Low Power Dissipation, High Gain Flatness	0.03~8	18.0±1.7	14.0	26.1	4.2	5	45	DFN6	Production
BR9034LDL	Low Power Dissipation, High Gain Flatness	0.03~8	18.0±1.7	14.0	26.1	4.2	5	45	Die	Production
HOT BR9035DC	Low Power Dissipation	0.03~8	21.7	11.0	24.4	3.9	5	38	DFN6	Production
BR9035LDL	Low Power Dissipation	0.03~8	21.7	11.0	24.4	3.9	5	38	Die	Production
BR9641FDJ	Low Power Dissipation, High Gain Flatness	0.02~8	17.1±0.9	21.1	34.6	2.7	5	97/60	QFN16	Production
BR9641LDZ	Low Power Dissipation, High Gain Flatness	0.02~8	17.2±1.0	19.5	29.3	3.14	5	97/62	Die	Production
BR9642FDJ	High Gain Flatness	6~12	15.6±1.0	16.6	28.9	1.4	5	53	QFN16	Production
BR9642LDZ	High Gain Flatness	6~12	16.0±0.8	17.1	29.1	1.4	5	54	Die	Production
BR9643LDZ	Low Power Dissipation, High Gain Flatness	2~20	14.4±1.1	16.6	25.4	2.1	5	48	Die	Production
BR9644LDZ	Low Power Dissipation, High Gain Flatness	2~20	19.8±0.8	12.1	24.7	2.8	5	40	Die	Production
BR9649DCJ	High Gain, Efficiency, and Output Power	4~8	26.3	17.2	27.3	4.2	5	55	DFN6	Samples
NEW BR9648LDZ	High Gain Flatness, Low Power Dissipation	12~40	11.0±1.0	11.0	23.0	3.0	5	40	Die	Samples
NEW BR9647LDZ	High Gain Flatness	13~32	10.5±0.5	17.0	28.0	2.0	5	54	Die	Samples
NEW BR9646LDZ	High Gain Flatness	18~40	17.0±0.5	15.0	26.0	2.3	5	68	Die	Samples

Gain Block Amplifiers



Part Number	Features	Freq. (GHz)	Gain (dB)	OP1dB (dBm)	OIP3 (dBm)	NF (dB)	Vs (V)	Is (mA)	Package Type	Product Lifecycle
NEW BR9398LDZ	High Gain Flatness, Low Power Dissipation	18~40	10.0±0.5	12.5	25.0	2.6	5	38	Die	Samples
BR9643FLJ	High Gain Flatness, Low Power Dissipation	2~20	15.0±0.6	18.0	29.0	2.7	5	49	QFN32	Pre-release
BR9644FLJ	High Gain Flatness, Low Power Dissipation	2~20	20.0±1.0	14.0	25.0	2.5	5	39	QFN32	Pre-release
BR9648FLJ	High Gain Flatness, Low Power Dissipation	12~40	11.0±1.0	11.0	23.0	3.0	5	40	QFN32	Pre-release
BR9646FLJ	High Gain Flatness	18~40	16.0±1.0	13.0	-	3.1	5	50	QFN32	Pre-release
BR9647FLJ	Positive Gain Slope	18~40	11.0±1.5	15.0	-	2.9	5	50	QFN32	Pre-release
BR9398FLJ	High Gain Flatness, Low Power Dissipation	18~40	10.0±0.5	12.5	25.0	2.6	5	38	QFN32	Pre-release

Low Phase Noise Amplifiers



Part Number	Features	Freq. (GHz)	Gain (dB)	OP1dB (dBm)	OIP3 (dBm)	Excess Phase Noise (10KHz Freq Offset) (dBc/Hz)	NF (dB)	Vs (V)	Is (mA)	Package Type	Product Lifecycle
HOT BR9192TA	High Linearity	0.03~1	20.1	21.1	39.8	-165	3.4	5	89	SOT89	Production
BR9192DA	High Linearity	0.03~1	20.2	20.8	41.0	-165	3.1	5	92	DFN8	Production
BR9192LD	High Linearity	0.03~1	20.2	20.8	41.0	-165	3.1	5	92	Die	Production
HOT BR9191TA	High Linearity	0.05~1	23.1	19.9	33.5	-165	3.3	5	75	SOT89	Production
HOT BR9108TA	High OP1dB	0.03~4	19.7	21.1	30.9	-165	4.0	5	72	SOT89	Production
HOT BR9108LD	High OP1dB	0.03~4	19.7	21.1	30.9	-165	4.0	5	72	Die	Production

Coaxial Attenuators



Part Number	Features	Freq. (GHz)	Attenuation (dB)	Maximum Attenuation Accuracy (dB)	Max VSWR (: 1)	Max Pin (average) (W)	Max Pin (peak) (W)	Connector Type	Product Lifecycle
BR8491B	Coaxial Fixed Attenuation	DC~18	3/6/10/20/30/40/50/60	±2.0	1.5	2	100	N(m,f)	Samples
BR8493B	Coaxial Fixed Attenuation	DC~18	3/6/10/20/30	±1.0	1.5	2	100	SMA(m,f)	Samples
BR8498A	Coaxial Fixed Attenuation	DC~18	30	±1.0	1.3	30	500	N(m,f)	Samples
BR8493C	Coaxial Fixed Attenuation	DC~26.5	3/6/10/20/30/40	±1.3	1.25	2	100	3.5mm(m,f)	Samples
BR8490D	Coaxial Fixed Attenuation	DC~50	3/6/10/20/30/40	-1.8/+1.5	1.1/1.45	1	100	2.4mm(m,f)	Samples

Fixed Attenuators



Part Number	Features	Freq. (GHz)	Step (dB)	Return Loss (dB)	Attenuation (dB)	Maximum Attenuation Flatness (dB)	Max Input Power (dBm)	Package Type	Product Lifecycle
BR7052-2/3/4/6/8/10/20	Fixed Attenuation	DC~40	-	-	2/3/4/6/8/10/20	±0.2	33.0	Die	Production
BR9661LDZ-0.5/1/2/3/5/6/7/8/9/10/15/20	Fixed Attenuation	DC~40	-	-22.0	0.5/1/2/3/4/5/6/7/8/9/10/15/20	±0.4	27.0	Die	Production
BR9662LDZ	Fixed Multi-Position Attenuation	DC~40	-	-30.0	0/3/5	±0.3	27.0	Die	Production
BR9663LDZ	Fixed Multi-Position Attenuation	DC~40	-	-23.0	0/2/4	±0.2	27.0	Die	Production
BR9664LDL	Fixed Stepped Attenuation	DC~20	0.5	-25.0	0~3.5	±0.2	27.0	Die	Production
BR9665LDL	Fixed Stepped Attenuation	DC~20	0.25	-25.0	1.0~2.75	±0.35	27.0	Die	Production
BRT2001LD~BRT2011LD	Fixed Attenuation	DC~40	-	-15.0	0/3	±0.2	43.0	Die	Samples
		DC~40	-	-15.0	1/2/4/5/6/8	±0.25	43.0	Die	Samples
		DC~40	-	-15.0	10/15/20	±0.5	41.0	Die	Samples

Digitally Controlled Attenuators



	Part Number	Features	Freq. (GHz)	IL (dB)	Peak Attenuation (dB)	Step (dB)	Vs (V)	Is (mA)	Package Type	Product Lifecycle
HOT	BR9158FP	6bit, Parallel Control	0.001~0.5	0.33	31.75	0.25	5	3	QFN24	Production
	BR9155FP	6bit, Parallel Control	0.01~4	1.3	31.5	0.5	5	3	QFN24	Production
HOT	BR9155S	6bit, Serial and Parallel Control	0.1~4	1.6	31.5	0.5	5	4	QFN24	Production
	BR9153S	6bit, Serial and Parallel Control	DC~8	1.2	31.5	0.5	4	3	QFN24	Production
	BR91531FPJ	6bit, Parallel Control	DC~8	1.3	31.5	0.5	5	3	QFN24	Production
	BR9153FP	6bit, Parallel Control	DC~8	1.3	31.5	0.5	5	2	QFN24	Production
	BR9153LD	6bit, Parallel Control	DC~8	1.3	31.5	0.5	5	2	Die	Production
	BR9154FD	5bit, Parallel Control	0.001~8	1.2	31.0	1.0	5	2	QFN16	Production
HOT	BR9361FPJ	7bit, Serial and Parallel Control	0.01~8	1.2	31.75	0.25	5	3	QFN24	Production
	BR9361LDZ	7bit, Serial and Parallel Control	0.01~8	1.2	31.75	0.25	5	3	Die	Production
NEW	BR9365FDJ	1bit, Parallel Control	0.1~8	1.52	16.0	-	5	0.6	QFN16	Production
HOT	BR9363FPJ	6bit, Parallel Control	0.05~10	1.6	31.5	0.5	5	2	QFN24	Production
	BR9156FD	6bit, Parallel Control	2~8	2.0	31.5	0.5	5	2	QFN16	Production
NEW	BR9364LDZ	6bit, Parallel Control	DC~20	3.0	31.5	0.5	-5	5	Die	Samples
	BR9364FPJ	6bit, Parallel Control	DC~20	4.0	31.5	0.5	-5	5	QFN24	Pre-release

Mixers



	Part Number	Features	RF Freq. (GHz)	IF Freq. (GHz)	LO Freq. (GHz)	CL (dB)	IP1dB (dBm)	IIP3 (dBm)	LO Power (dBm)	Package Type	Product Lifecycle
HOT	BR9133EA	High Linearity, Integrated LO Buffer	1.0~3.5	DC~0.5	1.0~3.5	7.5	18.0	26.0	-2/0/2	eMSOP8	Production
	BR9133LDL	High Linearity, Integrated LO Buffer	1.0~3.5	DC~0.5	1.0~3.5	7.5	18.0	26.0	-2/0/2	Die	Production
	BR9134EA	Double Balanced Mixer	1.5~4.5	DC~1.5	1.5~4.5	7.5	12.1	19.0	11/13/15	eMSOP8	Production
	BR9134LD	Double Balanced Mixer	1.5~4.5	DC~1.5	1.5~4.5	7.5	12.1	19.0	11/13/15	Die	Production
HOT	BR9132EA	Double Balanced Mixer	3~8	DC~3	3~8	7.1	11.3	17.8	11/13/15	eMSOP8	Production
HOT	BR9132LD	Double Balanced Mixer	3~8	DC~3	3~8	7.1	11.3	17.8	11/13/15	Die	Production
HOT	BR9136FDJ	Double Balanced Mixer	10~20	DC~6	10~20	7.6	13.8	20.9	13/15	QFN16	Production
	BR9136LD	Double Balanced Mixer	10~20	DC~6	10~20	7.6	13.8	20.9	13/15	Die	Production

Phase Shifters



	Part Number	Features	Freq. (GHz)	IL (dB)	IRL (dB)	Step (°)	Precision (°)	Amplitude (dB)	Package Type	Product Lifecycle
NEW	BR9594FLJ	6 bit, Parallel Control	0.9~1.3	4.9	36.2	5.625	1.8	±0.6	QFN32	Production
NEW	BR9595FLJ	6 bit, Parallel Control	1.6~2.3	3.8	14.9	5.625	1.9	±0.7	QFN32	Production
NEW	BR9595LDZ	6 bit, Parallel Control	1.6~2.3	3.8	14.9	5.625	1.9	±0.7	Die	Production
NEW	BR9596FPJ	6 bit, Parallel Control	2.6~3.6	4.4	15.3	5.625	4.8	±0.8	QFN24	Production
NEW	BR9597FPJ	6 bit, Parallel Control	3.5~4.5	4.6	14.2	5.625	1.4	±0.4	QFN24	Production
	BR9591FPJ	6 bit, Parallel Control	5~6	6.0	15.0	5.625	2.2	±0.8	QFN24	Samples
NEW	BR9591LDZ	6 bit, Parallel Control	5~6	6.0	15.0	5.625	2.2	±0.8	Die	Samples
	BR9592FPJ	6 bit, Parallel Control	8~12	10.0	10.0	5.625	2.5	±0.6	QFN24	Samples
NEW	BR9592LDZ	6 bit, Parallel Control	8~12	10.0	10.0	5.625	2.5	±0.6	Die	Samples
	BR9593FPJ	6 bit, Parallel Control	14~18	9.0	10.0	5.625	3.0	±1.1	QFN24	Samples
NEW	BR9593LDZ	6 bit, Parallel Control	14~18	9.0	10.0	5.625	3.0	±1.1	Die	Samples

Equalizers



Part Number	Features	Freq. (GHz)	IL (dB)	Equalization (dB)	VSWR (: 1)	Package Type	Product Lifecycle
BR9313DA	2dB Equalization	0.5~3	0.5	2.0	1.2	DFN8	Production
BR9313LD	2dB Equalization	0.5~3	0.5	2.0	1.2	Die	Production
BR9314DA	3dB Equalization	0.5~3	0.5	3.0	1.1	DFN8	Production
BR9314LD	3dB Equalization	0.5~3	0.5	3.0	1.1	Die	Production
BR9315DA	4dB Equalization	0.5~3	0.5	4.0	1.2	DFN8	Production
BR9315LD	4dB Equalization	0.5~3	0.5	4.0	1.2	Die	Production
BR9316DA	5dB Equalization	0.5~3	0.4	5.0	1.2	DFN8	Production
BR9317DA	6dB Equalization	0.5~3	0.5	6.0	1.2	DFN8	Production
HOT BR9311DA	3dB Equalization	DC~6	0.4	3.0	1.2	DFN8	Production
HOT BR9312DA	5dB Equalization	DC~6	0.8	5.0	1.1	DFN8	Production
BR9312LDL	5dB Equalization	DC~6	0.8	5.0	1.1	Die	Production
BR9318LD	3dB Equalization	2~18	0.5	3.0	1.5	Die	Production
BR9319LD	6dB Equalization	2~18	0.5	6.0	1.5	Die	Production
BRE2002LD	4dB Equalization	10.7~12.7	1.1	4.0	1.5	Die	Samples
BRE2001LD	4dB Equalization	17.7~21.2	1.3	4.0	1.5	Die	Samples
BRE2003LD	4dB Equalization	27.5~31	2.0	4.0	1.5	Die	Samples
BR9318DAJ	3dB Equalization	2~18	0.6	3.0	1.5	DFN8	Pre-release
BR9319DAJ	6dB Equalization	2~18	0.6	6.0	1.5	DFN8	Pre-release

RMS Detectors



Part Number	Features	Freq. (GHz)	Dynamic Range (dB)	RMS Conversion Gain (V/Vrms)	Vs (V)	Is (mA)	Package Type	Product Lifecycle
BR9261	RMS Response	0.002~2.5	27.0	8.0~18.0	+2.7~+5.5	0.45@3V; 0.6@5V	MSOP8	Production
BR9262EAJ	RMS Response	0.002~1.8	25.0~28.0	4.0~10.5	+2.7~+5.5	3.8@3V; 8@5V	eMSOP8	Production



RF Switches



Part Number	Features	Freq. (GHz)	IL (dB)	Iso. (dB)	IP1dB (dBm)	Control Voltage (V)	Switching Time (ns)	Package Type	Product Lifecycle
BR9503DA	Absorption, SPST	0.03~4	0.6	45.4	31.7	0/+3~-+5	100	DFN8	Production
BR9573TDJ	Reflective, SPDT	0.001~2.5	0.15	28.2	34.6	0/+2.7~-+5	244	SOT23-6	Production
BR9572TD	Reflective, SPDT	0.001~2.5	0.17	28.3	35.3	0/+2.7~-+5	240	SOT23-6	Production
BR9142TD	Reflective, SPDT	0.02~3	0.6	27.0	34.0	0/+3~-+8	90	SOT23-6	Production
HOT BR9508TD	Reflective, SPDT	DC~3	0.3	32.3	38.2	0/+3~-+8	30	SOT23-6	Production
BR9508LD	Reflective, SPDT	DC~3	0.3	32.3	38.2	0/+3~-+8	30	Die	Production
BR9146FD	Reflective, SPDT	0.03~4	0.6	46.0	33.0	0/+3~-+8	25	QFN16	Production
BR9502TD	Reflective, SPDT	0.001~4	0.6	28.5	33.1	0/+3~-+5	66	SOT23-6	Production
HOT BR9147EA	Absorption, SPDT	0.01~4	0.9	51.4	34.0	0/+3~-+5	140	eMSOP8	Production
BR9506EA	Reflective, SPDT	0.01~4	0.4	30.0	39.6	0/+3~-+8	55	eMSOP8	Production
HOT BR9147FD	Absorption, SPDT	0.01~6	0.6	52.0	34.0	0/+3~-+5	130	QFN16	Production
BR9147LD	Absorption, SPDT	0.01~6	0.6	52.0	34.0	0/+3~-+5	130	Die	Production
BR9505EA	Fast Switching, Reflective, SPDT	DC~6	0.7	33.5	33.1 @ IP0.3dB	0/+3~-+5	7	eMSOP8	Production
NEW BR9578FDJ	Reflective, DPDT	1~8	1.9	40.0	33.1	0/-5	115	QFN16	Production
HOT BR9509FD	Absorption, SP4T	0.01~4	1.0	50.0	28.3	0/+3~-+5	100	QFN16	Production
BR9509LD	Absorption, SP4T	0.01~4	1.0	50.0	28.3	0/+3~-+5	100	Die	Production
BR9575FPJ	Absorption, SPDT	DC~20	2.5	38.0	24.0	0/+4~-+5	20	QFN24	Samples
NEW BR9575LDZ	Absorption, SPDT	DC~20	2.0	40.0	25.0	0/+4~-+5	20	Die	Samples
BR9576FPJ	Absorption, SP4T	DC~20	3.0	37.0	22.0	0/+4~-+5	30	QFN24	Samples
NEW BR9576LDZ	Absorption, SP4T	DC~20	2.5	40.0	22.0	0/+4~-+5	30	Die	Samples



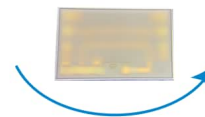
Limiters



Part Number	Features	Freq. (GHz)	IL (dB)	Response Time (ns)	Limiting Level (dBm)	Max Input Power (dBm)	Package Type	Product Lifecycle
BR93011DAJ	Low Limiting Level	DC~3	0.39@1GHz	2.4	13.0	30.0	DFN8	Production
BR9301DA	Low Limiting Level	0.01~1	0.36@500MHz	2.4	12.0	30.0	DFN8	BR93011DAJ is recommended
BR93011LD	Low Limiting Level	DC~3	0.39@1GHz	2.4	13.0	30.0	Die	Production
HOT BR9309FPJ	50W, Broadband	DC~4	0.3@2GHz	3.2	14.5	47.0	QFN24	Production
HOT BR9309LD	50W, Broadband	DC~4	0.3@2GHz	3.2	14.5	47.0	Die	Production
BR9306FVJ	5W, Low Insertion Loss, Broadband	DC~4	0.07@3GHz	3.3	15.0	37.0	DFN2	Production
BR9306LDL	5W, Low Insertion Loss, Broadband	DC~4	0.07@3GHz	3.3	15.0	37.0	Die	Production
BR9307FPJ	10W, Broadband	DC~4	0.3@2GHz	3.7	14.5	40.0	QFN24	Production
BR9307LD	10W, Broadband	DC~4	0.3@2GHz	3.7	14.5	40.0	Die	Production
BR9308FPJ	5W, Broadband	DC~6	0.27@3GHz	3.2	15.0	37.0	QFN24	Production
BR9308LDZ	5W, Broadband	DC~18	0.17@4GHz	11.7	15.0	37.0	Die	Production
HOT BR9732FPJ	200W, Broadband	1~3	0.45@2GHz	3.5	13.0	53.0	QFN24	Production
HOT BR9733FPJ	100W, Broadband	4~6	0.65	-	12.8	50.0	QFN24	Production
BR9734FDJ	20W, Broadband	8~12	0.6	-	12.5	43.0	QFN16	Production
BR9734LDL	20W, Broadband	8~12	0.6	-	12.5	43.0	Die	Production
BR9735LDZ	10W, Broadband	6~18	0.55	-	12.0	40.0	Die	Production
HOT BR9737FDJ	10W, Low Insertion Loss, Broadband	DC~12	0.23@6GHz	2	14.8	40.0	QFN16	Production
NEW BR9737LDZ	10W, Low Insertion Loss, Broadband	DC~20	0.24@10GHz	-	15.0	40.0	Die	Production
NEW BR9736LDZ	5W, Broadband	32~40	1.5	-	13.0	37.0	Die	Samples
NEW BR9738LDZ	10W, Low Limiting Level	18~32	0.6@26GHz	-	12.0	40.0	Die	Samples
NEW BR9739LDZ	5W, Broadband	15~40	0.72@30GHz	-	16@15GHz	37.0	Die	Samples



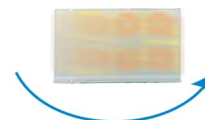
Couplers



Part Number	Features	Freq. (GHz)	IL (dB)	Return Loss (dB)	Coupling (dB)	Coupling Flatness (dB)	Iso. (dB)	Max Input Power (dBm)	Package Type	Product Lifecycle
BR9671LDZ	Coupling20dB, Broadband	6~18	0.2	-19.2	20.0	±2.0	-38.0	40.0	Die	Production
BR9672LDZ	Coupling15dB, Broadband	18~50	0.6	-27.2	15.0	±1.5	-43.4	40.0	Die	Production
BR9673LDZ	Coupling19dB	2~6	0.4	-18.0	19.0	±2.0	-40.0	40.0	Die	Production
BR9674LDZ	Coupling15dB	2~6	0.5	-14.8	15.0	±2.0	-34.4	40.0	Die	Production
BRC3001LD	Coupling20dB	0.8~2	0.42	-14.0	20.0	±3.0	-23.0	47.0	Die	Samples
BRC3003LD	Coupling20dB	2~6	0.25	-20.0	20.0	±2.0	-35.0	50.0	Die	Samples
BRC2001LD	Coupling15dB	6~18	0.25	-18.0	15.0	±1.5	-21.0	50.0	Die	Samples
BRC2002LD	Coupling15dB	8~12	0.2	-17.5	15.0	±0.65	-27.3	50.0	Die	Samples
BRC3004LD	Coupling25dB	12~20	0.15	-15.0	25.0	±2.4	-25.0	50.0	Die	Samples
BRC3005LD	Coupling20dB	14~18	0.2	-15.0	20.0	±1.5	-30.0	50.0	Die	Samples
BRC2003LD	Coupling15dB	14~18	0.2	-15.0	15.0	±2.0	-23.0	50.0	Die	Samples



Power Dividers



Part Number	Features	Freq. (GHz)	IL (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Insertion Loss Flatness (dB)	Iso. (dB)	Max Input Power (dBm)	Package Type	Product Lifecycle
BR9352LDZ	Two-Way Power Division	0.5~2	0.9	-15.0	-16.8	±0.35	-21.2	40.0	Die	Production
BR9353LDZ	Two-Way Power Division	2~6	0.4	-21.2	-19.1	±0.1	-25.5	40.0	Die	Production
BR9354LDZ	Two-Way Power Division	6~18	0.7	-20.9	-23.5	±0.3	-26.1	40.0	Die	Production
BR9355LDZ	Two-Way Power Division	2~18	1.0	-13.5	-14.3	±0.5	-27.3	40.0	Die	Production
BR9356LDZ	Two-Way Power Division	1~2	0.4	-19.9	-20.1	±0.15	-26.8	37.0	Die	Production
BRD3002LD	Three-Way Power Division	DC~2	0.7	-15.0	-33.0	±0.35	-18.0	45.0	Die	Samples
BRD2002LD	Two-Way Power Division	0.5~3	0.7	-13.0	-13.0	±0.15	-12.0	46.0	Die	Samples
BRD2003LD	Two-Way Power Division	0.8~2	0.6	-18.0	-32.0	±0.15	-17.2	46.0	Die	Samples
BRD2005LD	Two-Way Power Division	1~9	0.4	-15.0	-18.0	±0.12	-20.0	46.0	Die	Samples
BRD2004LD	Two-Way Power Division	2~6	0.6	-18.0	-18.0	±0.15	-20.0	46.0	Die	Samples
BRD3001LD	Three-Way Power Division	2~6	0.6	-20.0	-30.0	±0.2	-20.0	45.0	Die	Samples
BRD2006LD	Two-Way Power Division	6~18	0.6	-15.0	-15.0	±0.25	-23.0	46.0	Die	Samples

Filters



Part Number	Features	Freq. (GHz)	IL (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stopband Attenuation (dB)	Max Input Power (dBm)	Package Type	Product Lifecycle
BR9751LDZ	Low-Pass Filter	DC~1.5	0.96@1.5GHz	-29.8	-28.4	≥22.9dB@2.3GHz ≥42.1dB@2.6GHz	30.0	Die	Production
BR9752LDZ	Low-Pass Filter	DC~3.5	1.6@3.5GHz	-27.6	-27.3	≥36.9dB@5.5GHz ≥41.1dB@6~18GHz	30.0	Die	Production
BR9753LDZ	Low-Pass Filter	DC~1	0.86@1GHz	-24.2	-24.8	≥26.7dB@1.9GHz ≥50.4dB@2.2GHz	30.0	Die	Production
BR9754LDZ	Low-Pass Filter	DC~17	1.9@17GHz	-29.0	-22.9	≥40.7dB@20.5GHz ≥40.6dB@21.3GHz	30.0	Die	Production
BR9755LDZ	Low-Pass Filter	DC~19	1.7@19GHz	-17.4	-19.2	≥33.7dB@25.2GHz ≥33.0dB@26.6GHz	30.0	Die	Production
BR9756LDZ	Low-Pass Filter	DC~24	2.1@24GHz	-15.6	-15.6	≥27.0dB@29GHz ≥38.7dB@30GHz	30.0	Die	Production
BR9758LDZ	Band-Pass Filter	0.9~1.5	1.4@1.2GHz	-22.0	-22.4	≥-25.8dB@520MHz, ≥-25.0dB@2.05GHz ≥-43.1dB@430MHz, ≥-36.0@2.15GHz	30.0	Die	Production
BRF3012LD	High-Pass Filter	0.8~5	1.8@0.85GHz	-18.0	-18.0	-35@550MHz	40.0	Die	Samples
BR9757LDZ	High-Pass Filter	1~18	1.9@1GHz	-20.0	-20.0	-33@650MHz -44@550MHz	30.0	Die	Samples
BRF3011LD	High-Pass Filter	6~30	2.3@6GHz	-12.0	-12.0	-38@1.5GHz -50@3.4GHz	40.0	Die	Samples
BR9761LDZ	High-Pass Filter	12~40	2.4@12GHz	-19.0	-19.0	-28@10GHz	30.0	Die	Samples
BRF5004LD	Band-Pass Filter	2~4	1.3@3GHz	-20.0	-25.0	-65@1.3GHz -29@5GHz	40.0	Die	Samples
BRF5003LD	Band-Pass Filter	2.7~3.5	2.9@3.1GHz	-13.0	-10.0	-45.7@2GHz -39.4@4.5GHz	40.0	Die	Samples
BRF5002LD	Band-Pass Filter	4~6	1.5@5GHz	-13.0	-13.0	-54.3@3GHz -40.8@7.5GHz	40.0	Die	Samples
BRF5001LD	Band-Pass Filter	6~18	1.5@12GHz	-15.0	-15.0	-37@4.4GHz, -23@4.8GHz -33@20.2GHz, -34@21.3GHz	40.0	Die	Samples

Power Load

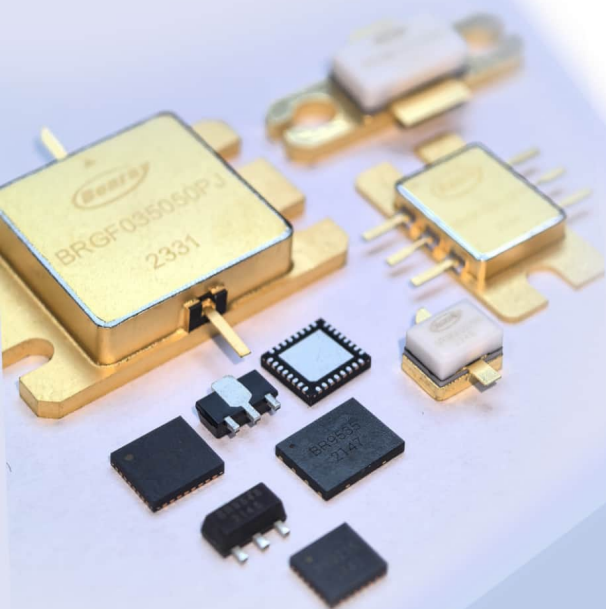


Part Number	Features	Freq. (GHz)	Impedance (Ω)	Output Return Loss (dB)	Max Input Power (dBm)	Package Type	Product Lifecycle
BRU2001LD	DC~6G 8W Power Load	DC~6	50	-20.0	39.0	Die	Samples

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Leading Technology for Superior Transmission Solutions

Specializing in RF power devices featuring Ultra broadband, high PAE, and high linearity. We offer deeply customized transmission link solutions and full-process technical services, widely used in radar, data links, satellite communications, and more. Leveraging our in-house foundry line and proprietary processes, we achieve product autonomy and performance optimization, helping customers establish dual competitive advantages in both performance and cost within their market segments.



Internally Matched Power Amplifiers

- High output power, high PAE
- Complete RF link solutions available

GaN MMIC Power Amplifiers

- High power, high PAE
- Available in bare die, plastic packaging, and metal packaging

GaAs MMIC Power Amplifiers

- High power, high PAE
- Plastic package, easy to use

GaN Transistors

- Over 300 mature solutions
- High reliability, high cost performance, versatile applications

GaN Switches

- Ultra-Broadband coverage, high power handling, low insertion loss
- Plastic package, easy to use

Driver Amplifiers

- Power range: 0.25W to 4W
- Versatile applications, high linearity

Broadband, High-Gain Driver Amplifiers | BR9216/17/18/19



- Frequency coverage across S, C, and X bands, output power 1~2.5W
- Broadband, high gain, compact size, high reliability
- Used in radar, data links, etc.

GaN MMIC Power Amplifiers | BR9701/02/03

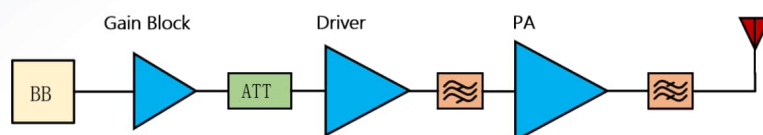


- Frequency coverage across S and C bands, output power 10~25W
- Ultra broadband, high PAE, high reliability
- Used in broadband communications, data links, radar, etc.

Internally Matched Power Amplifiers | BRGF026030/052050/060050



- Frequency coverage across S and C bands, output power 30~50W
- Compact metal packaging, high PAE, high reliability
- Used in transmitter systems for data links, satellite communications, radar, telemetry, etc.



Full-Link Solutions Available



GaN Transistors

» All power transistors support a 48V operating voltage, enabling higher output power



Part Number	Features	Freq. (GHz)	Psat (W)	Gain (dB)	PAE (%)	Vd (V)	Product Lifecycle	Package Type	Size (mm)	Pictures
HOT BRGM060006FPJ	Compact, High PAE	DC~6	6	20.5	67.0	28	Production	QFN24	4*4*0.8	
BRGM060006PGD	Multi-application, High PAE	DC~6	6	20.5	66.1	28	Production	PG	14*4.1*3.05	
BR9274FL	Pre-matched, Ultra Broadband	0.01~2.8	10	19.1	50.4	28	Production	QFN32	5*5*0.8	
BRGM060015PD	Multi-application, High PAE	DC~6	15	18.4	47.5	28	Production	PD	5.1*4.1*3.05	
HOT BRGM060015PG	Flange Package Type, High PAE	DC~6	15	18.4	47.5	28	Production	PG	14*4.1*3.05	
BRGM060025PD	Multi-application, High PAE	DC~6	25	17.3	62.4	28	Production	PD	5.1*4.1*3.05	
HOT BRGM060025PG	Flange Package Type, High PAE	DC~6	25	17.3	62.4	28	Production	PG	14*4.1*3.05	
BRGM060025PGG	Flange Package Type, High PAE	DC~6	25	17.3	62.4	28	Production	PG	14*4.1*3.05	
HOT BRGM040050PC	Multi-application, High PAE	DC~4	50	19.2	57.1	28	Production	PC	20.3*5.8*3.88	
BRGP040050PC	Pre-matched, Ultra Broadband	DC~4	50	15.7	52.7	28	Production	PC	20.3*5.8*3.88	
BRGP040070PFD	Two-channel, Ultra Broadband	DC~4	70	15.1	48.6	28	Production	PF	29*5.8*3.88	
HOT BRGM032080PC	Multi-application, High PAE	DC~3.2	80	18.0	51.4	28	Production	PC	20.3*5.8*3.88	
BRGP038080PC	Pre-matched, Ultra Broadband	DC~3.8	80	17.8	53.6	28	Production	PC	20.3*5.8*3.88	
HOT BRGP035110PC	Pre-matched, Ultra Broadband	DC~3.5	110	15.6	49.1	28	Production	PC	20.3*5.8*3.88	
BRGM032120PF	Two-channel, High PAE	DC~3.2	120	18.6	57.1	28	Production	PF	29*5.8*3.88	
BRGM030150PF	Two-channel, High PAE	DC~3	150	18.6	50.8	28	Production	PF	29*5.8*3.88	
BRGP025250PND	Two-channel, Ultra Broadband	DC~2.5	250	16.4	61.0	28	Production	PN	34*9.8*4.7	



GaN Switches



Part Number	Features	Freq. (GHz)	IL (dB)	Iso. (dB)	IP1dB (dBm)	IIP3 (dBm)	Control Voltage (V)	Switching Time (ns)	Package Type	Product Lifecycle
BR9148FP	50W, SPDT	DC~4	0.3	40.0	47.0	-	0/-40	50	QFN24	Production

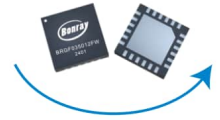


GaN MMIC Power Amplifiers



Part Number	Features	Freq. (GHz)	Psat (W)	Power Gain (dB)	PAE (%)	Vd (V)	Product Lifecycle	Package Type	Size (mm)	Pictures
BRGF060010PHG	Broadband	2~6	10	17.0	49.1	28	Production	PH	18*8.7*2.34	
BRGF060010LD	Broadband	2~6	10	18.2	44.5	28	Production	Die	3.40*1.80	-
BRGF060020LD	Broadband	2~6	20	17.0	32.1	28	Production	Die	3.40*4.00	-
HOT BRGF035012FWJ	Compact, High PAE	2.5~4	12	21.0	50.4	28	Production	QFN24	5*5*0.8	
BRGF035012LDL	Compact, High PAE	2.5~4	12	21.0	50.4	28	Production	Die	2.90*1.85	-
NEW BR9701FWJ	Compact, High PAE	2.6~4.2	18	21.5	51.4	28	Production	QFN24	5*5*0.8	
NEW BR9701PHG	High Gain, High PAE	2.6~4.2	20	22.7	52.4	28	Production	PH	18*8.7*2.34	
HOT BR9702PHG	High Gain, High PAE	3.7~6	15	20.2	43.7	28	Production	PH	18*8.7*2.34	
NEW BR9703PHG	High Gain, High PAE	3.5~6	25	21.2	49.2	28	Production	PH	18*8.7*2.34	
BR9705FWJ	Compact, High Gain	8.5~10.5	3	22.0	35.0	28	Production	QFN24	5*5*0.8	
NEW BR9705LDL	High Gain, High PAE	8.5~10.5	3	29.0	45.0	28	Production	Die	2.10*1.30	-
NEW BR9706LDL	High Gain, High PAE	8.5~10.5	8	31.0	48.0	28	Production	Die	2.45*1.30	-
NEW BR9707LDL	High Gain, High PAE	8.5~10.5	15	28.0	51.0	28	Production	Die	2.50*1.90	-
NEW BR9708LDL	High Gain, High PAE	10.5~13	10	23.0	41.0	28	Production	Die	2.45*1.90	-
NEW BR9709LDL	High Gain, High PAE	13.75~15.5	6	27.0	41.0	28	Production	Die	2.10*1.30	-
NEW BR9711LDL	High Gain, High PAE	13.75~15.5	10	26.0	41.0	28	Production	Die	2.45*1.90	-
NEW BR9713LDZ	High Gain, High PAE	14~18	12	25.0	42.0	28	Production	Die	2.30*1.90	-
NEW BR9716PUG	High Gain, High PAE	8.5~10.5	15	26.0	40.0	28	Production	PU	17.78*8.33*2.8	
BR9721FWJ	Compact, High Gain	1.9~2.7	6	25.0	52.0	28	Samples	QFN24	5*5*0.8	
BR9722FWJ	Compact, High Gain	1.9~2.7	12	25.0	52.0	28	Samples	QFN24	5*5*0.8	
BR9723FWJ	Compact, High Gain	2.7~4.4	6	22.0	50.0	28	Samples	QFN24	5*5*0.8	
BR9724FWJ	Compact, High Gain	3.7~6	8	22.0	50.0	28	Samples	QFN24	5*5*0.8	
BR9725FWJ	Compact, High Gain	5.8~8.5	6	21.0	46.0	28	Samples	QFN24	5*5*0.8	
BR9726PUG	High Gain, High PAE	5.8~8.5	15	20.0	43.0	28	Samples	PU	17.78*8.33*2.8	
BR9706FWJ	Compact, High Gain	8.5~10.5	8	31.0	48.0	28	Pre-release	QFN24	5*5*0.8	
BR9707FWJ	Compact, High Gain	8.5~10.5	14	29.0	43.0	28	Pre-release	QFN24	5*5*0.8	

GaAs MMIC Power Amplifiers



Part Number	Features	Freq. (GHz)	Psat (W)	Power Gain (dB)	PAE (%)	Vd (V)	Product Lifecycle	Package Type	Size (mm)	Pictures
HOT BR9777FCJ	Broadband, High Power	4.6~7.4	5	25.9	35.2	5	Production	QFN16	5*5*0.75	
BR9778FCJ	Broadband, High Power	7.2~8.5	5	23.0	35.0	5	Pre-release	QFN16	5*5*0.75	
BR9779FCJ	Broadband, High Power	8.5~10.5	5	23.0	35.0	5	Pre-release	QFN16	5*5*0.75	



Internally Matched Power Amplifiers

Part Number	Features	Freq. (GHz)	Psat (W)	Power Gain (dB)	PAE (%)	Vd (V)	Product Lifecycle	Package Type	Size (mm)	Pictures
BRGF010010FLJ	Compact, High PAE	0.01~1	10	15.6	59.9	28	Production	QFN32	5*5*0.8	
BRGF010010PHG	Ultra Broadband, High PAE	0.01~1	10	16.1	60.6	28	Production	PH	18*8.7*2.34	
HOT BRGF027010FLJ	Compact, High PAE	0.03~2.7	10	12.7	45.9	28	Production	QFN32	5*5*0.8	
HOT BRGF027010PHG	Ultra Broadband, High PAE	0.03~2.7	10	14.2	54.5	28	Production	PH	18*8.7*2.34	
BRGF013100PJG	High PAE	1.15~1.35	100	15.8	60.0	28	Production	PJ	24*17.4*4.5	
BRGF017100PJG	High PAE	1.3~1.7	100	13.5	54.0	28	Production	PJ	24*17.4*4.5	
NEW BRGF018055PPG	High PAE	1.3~1.8	50	15.0	55.0	28	Production	PP	24*17.4*4.5	
BRGF016030PHG	High PAE	1.6~1.65	28	15.0	74.2	28	Production	PH	18*8.7*2.34	
BRGF016030PPG	High Gain, High PAE	1.6~1.65	30	34.6	70.1	28	Production	PP	24*17.4*4.5	
NEW BRGF017030PPG	High Gain, High PAE	1.65~1.75	30	29.9	65.0	28	Production	PP	24*17.4*4.5	
HOT BRGF021050PJG	High PAE	1.9~2.2	60	14.0	61.5	28	Production	PJ	24*17.4*4.5	
BRGF024025PHG	High PAE	1.9~2.4	30	13.9	59.5	28	Production	PH	18*8.7*2.34	
BRGF024015PTG	High PAE	1.9~2.6	15	15.6	68.6	28	Production	PT	21*12.9*4.7	
HOT BRGF024050PJG	High PAE	2~2.4	50	15.0	62.9	28	Production	PJ	24*17.4*4.5	



Internally Matched Power Amplifiers

Part Number	Features	Freq. (GHz)	Psat (W)	Power Gain (dB)	PAE (%)	Vd (V)	Product Lifecycle	Package Type	Size (mm)	Pictures
BRGF026030PPG	Broadband, High Gain, High PAE	2~2.6	30	29.2	64.3	28	Production	PP	24*17.4*4.5	
BRGF031300PJG	High Power, High PAE	2.7~2.9	300	14.0	56.0	50	Production	PJ	24*17.4*4.5	
BRGF035025PHG	High PAE	2.7~3.5	30	13.3	59.2	28	Production	PH	18*8.7*2.34	
NEW BRGF035030PTG	High Gain, High PAE	2.7~3.5	30	25.0	60.0	28	Production	PT	21*12.9*4.7	
BRGF035050PJG	High PAE	2.7~3.5	50	11.8	55.7	28	Production	PJ	24*17.4*4.5	
BRGF042050PJG	High PAE	3.5~4.2	50	11.9	51.7	28	Production	PJ	24*17.4*4.5	
NEW BRGF052050PJG	High PAE	4~5.2	50	12.7	53.3	28	Production	PJ	24*17.4*4.5	
NEW BRGF052100PJG	High PAE	4.3~5.2	100	12.9	54.9	28	Production	PJ	24*17.4*4.5	
NEW BRGF060050PJG	High PAE	4.6~6	50	11.0	52.4	28	Production	PJ	24*17.4*4.5	
BRGF020050PPG	Broadband, High PAE	0.8~2	50	14.0	52.0	28	Samples	PP	24*17.4*4.5	
BRGF060100PJG	High PAE	5~6	100	10.0	48.0	28	Samples	PJ	24*17.4*4.5	
BRGF074100PJG	High PAE	6.9~7.4	80	10.0	50.0	28	Samples	PJ	24*17.4*4.5	
BRGF060035PQG	Ultra Broadband	0.6~6	35	9.0	40.0	28	Pre-release	PQ	24.2*21.7*4.8	

Driver Amplifiers » Internally Matched Series



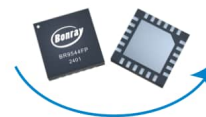
Part Number	Features	Freq. (GHz)	Gain (dB)	OP1dB (dBm)	OIP3 (dBm)	NF (dB)	Vs (V)	Is (mA)	Package Type	Size (mm)	Product Lifecycle
HOT BR9548TA	Low Noise, High Linearity	0.001~1	22.1	27.7	42.0	1.35	8	220	SOT89	4.5*4.1*1.5	Production
NEW BR9547FPJ	Low Noise, High Linearity	0.001~2	20.2	31.6	49.5	2.0	12	270	QFN24	4*4*0.8	Production
BR9547LDL	Low Noise, High Linearity	0.001~2	20.2	31.6	49.5	2.0	12	270	Die	0.80*1.50	Production
HOT BR9322TA	Low Noise, High Linearity	0.03~2	22.3	28.1	41.8	1.1	8	230	SOT89	4.5*4.1*1.5	Production
BR9536TA	Ultra Broadband, High Linearity	0.03~2	15.1	26.3	45.3	3.6	9	177	SOT89	4.5*4.1*1.5	Production
BR9536LDL	Ultra Broadband, High Linearity	0.03~2	15.1	26.3	45.3	3.6	9	177	Die	1.30*0.90	Production
HOT BR9535DA	Ultra Broadband, High Linearity	0.03~2.7	17.4	30.2	49.4	3.1	11	339	DFN8L	6*4.9*0.9	Production
HOT BR9535LDL	Ultra Broadband, High Linearity	0.03~2.7	17.4	30.2	49.4	3.1	11	339	Die	1.30*1.20	Production
BR9321TA	Ultra Broadband, High Linearity	0.03~6	13.5	26.9	38.8	4.2	9	175	SOT89	4.5*4.1*1.5	Production
BR9321LDL	Ultra Broadband, High Linearity	0.03~6	13.5	26.9	38.8	4.2	9	175	Die	1.20*0.90	Production



Driver Amplifiers » Internally Matched Series



	Part Number	Features	Freq. (GHz)	Gain (dB)	OP1dB (dBm)	OIP3 (dBm)	NF (dB)	Vs (V)	Is (mA)	Package Type	Size (mm)	Product Lifecycle
NEW	BR9323FDJ	Ultra Broadband, High Gain	0.1~6	18.1	26.5	39.8	-	8	145	QFN16	3*3*0.75	Production
	BR9323LDL	Ultra Broadband, High Gain	0.1~6	18.1	26.5	39.8	-	8	145	Die	1.00*0.80	Production
NEW	BR9324FPJ	Broadband, High Gain	0.5~3	22.8	27.0	35.7	-	5	130	QFN24	4*4*0.8	Production
NEW	BR9324LDL	Broadband, High Gain	0.5~3	22.8	27.0	35.7	-	5	130	Die	1.00*2.40	Production
HOT	BR9211FE	Broadband, High Gain	1.1~1.9	28.7	30.1	41.6	5.7	5	253	QFN20	4*4*1	Production
HOT	BR9212FE	Broadband, High Gain	1.4~3.4	25.0	30.2	38.6	5.4	5	249	QFN20	4*4*1	Production
	BR9213FPJ	Broadband, High Gain	1.8~6.4	25.3	26.8	-	-	5	144	QFN24	4*4*0.8	Production
	BR9213LDL	Broadband, High Gain	1.8~6.4	25.3	26.8	-	-	5	144	Die	2.40*1.80	Production
HOT	BR9216FAJ	Broadband, High Gain	2.5~4.2	22.2	34.8	42.9	-	8	740	QFN20	5*5	Production
HOT	BR9216LDL	Broadband, High Gain	2.5~4.2	22.8	34.3	42.7	-	8	740	Die	2.80*2.50	Production
HOT	BR9214FPJ	Broadband, High Gain	4~6	26.2	30.2	-	-	5	162	QFN24	4*4*0.8	Production
	BR9214LDL	Broadband, High Gain	4~6	26.2	30.2	-	-	5	162	Die	2.40*1.80	Production
	BR9215FPJ	Broadband, High Gain	3.5~8.5	23.6	27.0	-	-	5	178	QFN24	4*4*0.8	Production
	BR9215LDL	Broadband, High Gain	3.5~8.5	23.6	27.0	-	-	5	178	Die	2.80*2.00	Production
HOT	BR9217FAJ	Broadband, High Gain	3.5~6	22.0	33.9	40.0	-	8	700	QFN20	5*5	Production
HOT	BR9771FWJ	Broadband, High Power	5.5~8.5	29.4	36.6	40.0	-	8	1000	QFN24	5*5*0.8	Production
	BR9771LDL	Broadband, High Power	5.5~8.5	29.0	36.0	-	-	8	1000	Die	2.80*2.20	Production
	BR9772FPJ	Broadband, High Gain	6~18	22.9	28.5	30.4	-	6	450	QFN24	4*4*0.8	Production
	BR9772LDL	Broadband, High Gain	6~18	23.0	28.0	-	-	6	500	Die	2.40*1.10	Production
NEW	BR9218FAJ	Broadband, High Gain	5.8~10	28.3	29.7	-	-	6	520	QFN20	5*5*0.75	Production
	BR9218LDL	Broadband, High Gain	5.8~10	28.0	30.0	-	-	6	520	Die	2.80*1.50	Production
	BR9219PUG	Broadband, High Gain	7~13.5	23.2	32.4	-	-	6	1000	PU	17.8*8.3	Production
	BR9219LDL	Broadband, High Gain	7~13.5	23.2	32.4	-	-	6	1000	Die	2.80*2.00	Production
	BR9773FPJ	Broadband, High UBW	13.75~15.5	22.7	32.0	-	-	8	350	QFN24	4*4*0.8	Production
	BR9773LDL	Broadband, High UBW	13.75~15.5	25.0	30.0	-	-	8	350	Die	2.40*1.10	Production
	BR9775FDJ	Broadband, High Gain	7~10.7	25.0	25.0	-	-	5	100	QFN16	3*3*0.8	Pre-release



Driver Amplifiers » Externally Matched Series

Part Number	Features	Freq. (GHz)	Gain (dB)	OP1dB (dBm)	OIP3 (dBm)	NF (dB)	Vs (V)	Is (mA)	Package Type	Size (mm)	Product Lifecycle
BR9541TAJ	Multi-application, High Linearity	0.4~5	13.1	24.2	41.1	-	5	89	SOT89	4.5*4.1*1.5	Production
BR9542TAJ	Multi-application, High Linearity	0.4~5	11.5	28.3	40.0	-	5	89	SOT89	4.5*4.1*1.5	Production
BR9542LDL	Multi-application, High Linearity	0.4~5	11.5	28.3	40.0	-	5	89	Die	1.00*0.80	Production
HOT BR9543TA	Multi-application, High Linearity	0.4~4	17.4	30.1	44.6	-	5	245	SOT89	4.5*4.1*1.5	Production
BR9543LD	Multi-application, High Linearity	0.4~4	17.4	30.1	44.6	-	5	245	Die	0.81*1.20	Production
HOT BR9544FP	Multi-application, High Linearity	0.05~3	18.5	32.8	45.0	4.9	5	446	QFN24	4*4*0.8	Production
BR9545TA	Multi-application, High Linearity	0.05~1.5	17.7	31.9	42.2	-	5	251	SOT89	4.5*4.1*1.5	Production
BR9546FPJ	High Power,, High Gain	1.5~2.4	35.7	36.2	45.0	-	5	99	QFN24	4*4*0.8	Production

Frequency Source & Timing Products >>>

Precision Timing for Diverse Applications

Specializing in the development of high-precision clocks, VCOs, and frequency synthesizers. Our products feature low phase noise, fast locking, low power dissipation, and high cost performance. We deliver high-performance timing and frequency chips, and through deep technical collaboration, provide competitive solutions tailored for communications, analog transmission, shielding systems, and more. With rapid response and efficient delivery, we empower customers to address diverse system requirements and accelerate time-to-market.

- PLL with Integrated VCO
- VCO
- Prescalers
- Direct Digital Synthesis(DDS)
- Fanout Buffers
- SPI
- RF SOC



PLL with Integrated VCO | BR9069FLJ

- Output frequency range: 47MHz~6GHz
- Low power dissipation, versatile applications
- High cost performance, easy to use



MMIC VCO | BR9184FL

- Output frequency range: 13.0GHz~14.9GHz
- Broadband, high output power, low phase noise
- High reliability, easy to use



PLL with Integrated VCO

Part Number	Features	Freq. (GHz)	Pout (dBm)	Phase Noise(10kHz offset @1.62GHz) (dBc/Hz)	Phase Noise(100kHz offset@1.62GHz) (dBc/Hz)	VDD (V)	IDD (mA)	Package Type	Product Lifecycle
HOT BR9177FL	Fast Locking, Fractional PLL	0.025~3.24	2	-102	-97	3.3	125	QFN32	Production
BR9177LDL	Fast Locking, Fractional PLL	0.025~3.24	2	-102	-97	3.3	125	Die	Production
BR9068FPJ	Low Power PLL	0.025~3.24	0	-90	-103	1.8/2.5	47@1.8V 15@2.5V	QFN24	Production
HOT BR9069FLJ	Fractional PLL	0.047~6	1	-101	-100	3.3/1.2	55@3.3V 65@1.2V	QFN32	Production

Prescalers

Part Number	Features	Freq. (GHz)	Input Signal Swing (mV)	Frequency Dividing Ratio	VDD (V)	IDD (mA)	Package Type	Product Lifecycle
BR9071	Programmable Prescaler	0.1~1.1	400~1000	10, 20, 40, 80	5	4	CSOP08	Samples

Direct Digital Synthesis (DDS)

Part Number	Features	Freq. (GHz)	DAC Resolution (bit)	Integral Nonlinearity (LSB)	Differential Nonlinearity (LSB)	VDD (V)	Power (mW)	Package Type	Product Lifecycle
BR9818	Programmable Prescaler	0.1Hz~12.5MHz	10	±1.0	±0.5	2.3~5.5	20	CSOP10	Samples

Fanout Buffers

Part Number	Features	Max Operation Frequency (GHz)	Propagation Delay (ps)	Output Swing (mV)	RMS Phase Jitter (fsRMS)	Vcc (V)	Icc (mA)	Package Type	Product Lifecycle
BR9293	1:4 LVPECL	4.1	300	800	150	3.3	177	QFN16	Samples

SPI

Part Number	Features	Data Rate (MHZ)	Output High Voltage (V)	Output Low Voltage (V)	Response Time (ns)	Package Type	Product Lifecycle
BR9341LD	6bit, S/P Convert	10	Vdd-0.5	0.8	-	Die	Samples
BR9342LD	7bit, S/P Convert	10	Vdd-0.5	0.8	-	Die	Samples



VCO

Part Number	Features	Output Frequency (RFOUT) (GHz)	Output Power (RFOUT) (dBm)	Output Frequency (RFout/2) (GHz)	Output Frequency (RFout/4) (GHz)	Phase Noise (dBc/Hz)	Power (mA)	Package Type	Product Lifecycle
BR9184FL	MMIC VCO	13~14.9	≥4	6.5~7.45	3.25~3.725	≤-103	≤300	QFN32	Production



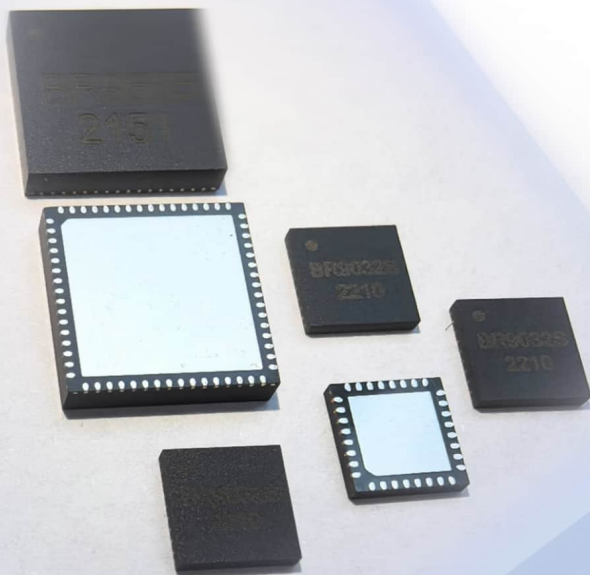
RF SOC

Part Number	Features	Freq. (GHz)	RX Sensitivity (dBm)	FM Demodulator Output Amplitude (Vp-p)	VDD (V)	IDD (mA)	Package Type	Product Lifecycle
HOT BR9016FTJ	1GHz~6GHz FM Receiver	1~6	-95	1	3.3/1.2	120/99	QFN40	Production

Integrated Products >>>

Integrated Solutions for System Innovation

Our product portfolio includes multi-function SiP and SoC devices. Leveraging our deep expertise in chip development, package design, and board-level debugging, combined with an extensive in-house bare die library, we provide professional customized solutions tailored to meet diverse customer requirements.



Board-Level Debugging Expertise

- Rapidly understanding customer requirements to develop application-specific design solutions, link budgets, and component selection

Chip Design Capability

- Fast and efficient development of custom bare die to meet specific performance requirements, enhancing product competitiveness and uniqueness

Bare Die Library

- Extensive in-house developed bare die library enabling rapid SiP customization based on customer requirements, reducing dedicated chip development cycles

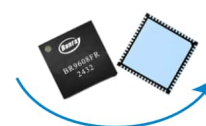
High-Reliability Packaging Line

- High-standard plastic packaging assembly and test line with QFN/DFN multi-chip molding capability, supporting customized package design per customer requirements



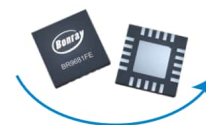
Variable Gain Amplifiers

Part Number	Features	Freq. (GHz)	Gain Control Range (dB)	Step (dB)	OIP3 (dBm)	NF (dB)	Vs (V)	Is (mA)	Package Type	Product Lifecycle
BR9032FL	6bit , Parallel Control	0.03~1	13.5~45.0	0.5	33.0	1.8	5	126	QFN32	Production
BR9032S	6bit , Serial Control	0.03~1	13.5~45.0	0.5	34.2	1.8	5	130	QFN32	Production
BR9606FP	6bit , Parallel Control	0.5~4.2	-11.5~20.0	0.5	36.1@2GHz	1.9@2GHz	5	144	QFN24	Production
BR9607FM	6bit, Parallel Dual-Channel	0.175~1.15	-12.0~19.5	0.5	33.1	3.6	5	75	QFN48	Samples



Limiting Amplifiers

Part Number	Features	Freq. (GHz)	Gain (dB)	Dynamic Range (dB)	OIP3 (dBm)	NF (dB)	Limiting Output (dBm)	Vs (V)	Is (mA)	Package Type	Product Lifecycle
BR9608FR	High Input Dynamic Range	0.08~1.15	39.3±0.6	37.0	27.7	5.3	≤12.3	5	150	QFN64	Production



Bi-Directional Amplifiers

Part Number	Features	Freq. (GHz)	Gain (dB)	OP1dB (dBm)	OIP3 (dBm)	NF (dB)	Vs (V)	Is (mA)	Package Type	Product Lifecycle
BR9681FEJ	High OP1dB	10~15	22.0±0.5	20.2	31.2	2.7	5	112	QFN20	Production
BR9681LDL	High OP1dB	10~15	22.0±0.5	20.2	31.2	2.7	5	112	Die	Production

Bare Die Products >>>

Core Solutions, Empowering Microsystem Design

To address the stringent demands for miniaturization, high integration, and low parasitic loss in RF front-end systems, we introduce our Bare Die Product Series. This series covers core devices across the entire RF front-end chain, including Low Noise Amplifiers, Gain Block/Amplifiers, RF Switches, Digitally Controlled Attenuators, Limiters, Mixers, Phase Shifters, Driver Amplifiers, and Power Amplifiers. Featuring miniaturization, high performance, and high reliability, these products meet the requirements of high-precision micro-assembly. We offer customized full-link solutions to enable system designs with higher frequency, better performance, and smaller form factors for applications in radar, low-altitude economy, satellite communications, and more.

- Frequency coverage from DC to Millimeter-wave
- Full product spectrum, superior performance, high reliability
- Qualified for high-precision micro-assembly, providing full-link solutions
- Ideal for radar, low-altitude economy, satellite communications, and other fields

Low Noise Amplifiers | BR9383/BR9915/16/17

- Frequency coverage across Ku, K, and Ka bands
- High flatness, high P1dB, low power dissipation
- Suitable for power-sensitive applications such as satellite communications and phased-array radar

Gain Block/Amplifiers | BR9642/47

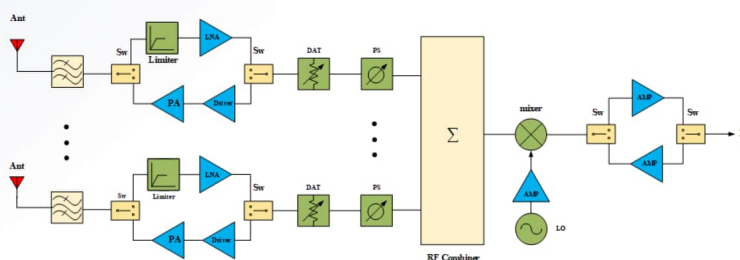
- Frequency coverage across Ku, K, and Ka bands
- High gain flatness, positive gain slope, low power dissipation
- Suitable for radar systems, satellite communications, and other applications

RF Switches | BR9575LDZ

- Frequency coverage from DC to 20GHz
- Absorption, SPDT, high isolation
- Suitable for satellite communications, radar, communications infrastructure, and related fields

GaN MMIC Power Amplifiers | BR9707/13

- Frequency coverage across X and Ku bands, output power 10~12W
- High gain, high PAE
- Used in satellite communications, data links, radar, and other fields



Full-Link Solutions Available

Low Noise Amplifiers

Part Number	Features	Freq. (GHz)	Gain (dB)	OP1dB (dBm)	OIP3 (dBm)	NF (dB)	Vs (V)	Is (mA)	Die Size (mm)	Product Lifecycle
BR9534LD	Low Power Dissipation	0.001~4	22.5	14.9	21.9	2.0	3.3	37	0.65*0.55	Production
BR9112LD	High Linearity	0.001~4	22.7	23.2	35.9	1.2	5	130	0.98*1.23	Production
BR9115LD	High Gain	0.001~4	31.7	15.1	25.3	1.2	5	67	0.83*0.875	Production
BR9555LD	Ultra Low Noise, High Linearity	0.03~1	27.8	23.9	38.6	0.7	5	117	1.10*0.70	Production
BR9562LDL	High Linearity	0.03~1	20.5±0.4	22.4	37.5	1.2	5	92	1.10*0.80	Production
BR9533LD	Ultra Low Noise, Low Power Dissipation	0.03~2	18.7	19.3	18.3	0.6	5	14	0.85*0.70	Production
BR9518LD	Low Power Dissipation, High IP1dB	0.03~2.5	19.2±0.1	21.4	27.6	1.2	5	22	0.85*0.80	Production
BR91221LDL	Low Power Dissipation	0.03~4	17.9	12.5	23.3	1.4	2.7	19	0.60*0.65	Production
BR9549LDL	High Linearity	0.03~4	19.4	22.7	36.5	1.2	5	81	1.10*0.80	Production
BR91241LD	Low Power Dissipation, High IP1dB	0.03~4	14.7±2.0	19.9	30.5	1.4	5	45	0.70*0.75	Production
BR9554LD	High Linearity, High IP1dB	0.03~4	15.4±0.2	20.9	36.6	2.2	5	95	1.10*0.80	Production
BR9371LD	Low Power Mode, Ultra Low Noise	0.03~4	22.3±2.0	23.1	29.8	0.7	5	43/21	0.80*0.86	Production
BR9392LDZ	Shutdown	0.03~4.5	16.7	20.5	36.8	0.8	5	77	0.80*0.80	Production
BR9394LDZ	Shutdown	0.03~4.5	22.3±0.7	21.8	34.0	0.9	5	80	0.80*0.80	Production
BR9395LDZ	Shutdown, High Gain	0.03~4.5	28.6±1.8	17.7	32.3	1.0	5	89	0.80*1.10	Production
BR9372LDZ	Low Power Mode, High Gain	0.03~4.5	30.5±1.0	19.2	30.6	0.8	5	95/75	1.25*0.86	Production
BR9617LD	High Linearity	0.02~8	23.2±1.5	20.1	36.3	1.1	5	87	0.80*0.90	Production
BR9511LDL	Shutdown, Ultra Low Noise	0.6~4.2	20.8	19.1	35.5	0.6	5	67	0.85*0.95	Production
BR9927LDZ	High Gain	0.8~2.5	35.9±0.8	19.0	34.8	0.5	5	58	1.30*0.90	Production
BR9919LDL	Ultra Low Noise, High Linearity	0.8~3	22.0	18.0	37.0	0.4	5	82	0.70*0.65	Production
BR9335LD	Ultra Low Noise, High IP1dB	1~1.7	13.5	20.9	37.0	0.6	5	60	0.70*0.85	Production
BR9373LDZ	Low Power Mode, High Gain	2~8	26.0±0.4	17.8	30.1	1.0	5	86/56	1.40*0.85	Production
BR9375LDZ	Low Power Mode	4~8	22.3±0.4	18.1	29.5	1.2	5	68/45	1.10*0.85	Production
BR9376LDZ	Low Power Mode, Positive Gain Slope	6~13	21.5±1.0	17.1	24.6	1.4	5	66/41	1.30*0.85	Production
BR9377LDZ	Low Power Mode, High Gain	8~12	25.2±0.4	16.0	27.8	1.6	5	73/48	1.10*0.85	Production
BR9912LDL	High Gain	9~15	27.3±1.3	16.2	31.0	0.8	5/3.3	62/34	1.50*0.90	Production
BR9913LDL	High Linearity	8~15	20.4±0.5	18.0	31.5	1.1	5/3.3	68/39	1.40*0.90	Production
BR9914LDL	High IP1dB	10.5~14.5	12.5±0.3	17.3	30.1	1.3	5/3.3	80/46	1.50*0.90	Production
BR9915LDL	Low Power Dissipation	17~21.2	22.5±0.5	13.7	25.5	1.3	5/3.3	47/26	1.50*0.90	Production



Low Noise Amplifiers

Part Number	Features	Freq. (GHz)	Gain (dB)	OP1dB (dBm)	OIP3 (dBm)	NF (dB)	Vs (V)	Is (mA)	Die Size (mm)	Product Lifecycle
BR9916LDL	Low Power Dissipation	17~21.2	18.5±0.5	10.8	23.4	1.3	5/3.3	24/13	1.50*0.90	Production
BR9917LDL	High IP1dB	17~21.2	11.0±0.2	18.0	27.6	1.9	5/3.3	69/37	1.50*0.90	Production
BR9384LDZ	Ultra Broadband	0.05~20	22.4	11.5	23.4	1.7	5	60	1.50*1.00	Samples
BR9615LD	Low Power Dissipation, Ultra Broadband	0.1~20	17.0±1.3	13.9	24.2	1.2	5	48	3.10*1.30	Samples
BR9616LD	High Linearity	1~9	22.3±0.3	20.5	33.1	1.2	5	85	1.60*1.20	Samples
BR9614LD	Ultra Broadband	2~20	16.1±1.5	18.0	28.1	1.7	5	70	3.10*1.30	Samples
BR9618LD	High Gain, Positive Gain Slope	6~18	26.9±2.0	17.7	29.4	1.4	5	71	1.60*0.90	Samples
BR9379LDZ	Low Power Dissipation	6~18	19.6±0.4	9.8	24.1	1.5	5	27	1.50*1.10	Samples
BR9382LDL	Low Power Dissipation, Positive Gain Slope	6~18	23.0±1.5	14.0	26.0	1.5	5	39	1.60*0.90	Samples
BR9381LDZ	High Gain	6~20	28.4±0.4	13.7	28.6	1.1	5	53	1.50*1.10	Samples
BR9619LD	Ultra Broadband	18~26	21.0±0.4	15.8	20.0	1.8	5	55	1.60*0.90	Samples
BR9383LDL	High Gain, Positive Gain Slope	18~32	25.5±1.0	13.0	25.0	1.7	5	67	1.80*1.00	Samples



Gain Block Amplifiers

Part Number	Features	Freq. (GHz)	Gain (dB)	OP1dB (dBm)	OIP3 (dBm)	NF (dB)	Vs (V)	Is (mA)	Die Size (mm)	Product Lifecycle
BR9613LD	Low Power Dissipation, High Gain Flatness	0.03~4	14.1±1.9	15.3	29.6	1.9	5	42	0.65*0.65	Production
BR9522LD	High Linearity, High Gain Flatness	0.03~4	21.2±1.7	19.9	38.6	2.2	5	81	0.95*0.95	Production
BR9034LDL	Low Power Dissipation, High Gain Flatness	0.03~8	18.0±1.7	14.0	26.1	4.2	5	45	0.40*0.55	Production
BR9035LDL	Low Power Dissipation	0.03~8	21.7	11.0	24.4	3.9	5	38	0.40*0.40	Production
BR9641LDZ	Low Power Mode, High Gain Flatness	0.02~8	17.2±1.0	19.5	29.3	3.14	5	97/62	0.95*0.85	Production
BR9642LDZ	High Gain Flatness	6~12	16.0±0.8	17.1	29.1	1.4	5	54	1.10*0.85	Production
BR9643LDZ	Low Power Dissipation, High Gain Flatness	2~20	14.4±1.1	16.6	25.4	2.1	5	48	2.70*1.50	Production
BR9644LDZ	Low Power Dissipation, High Gain Flatness	2~20	19.8±0.8	12.1	24.7	2.8	5	40	1.50*1.35	Production
BR9648LDZ	High Gain Flatness, Low Power Dissipation	12~40	11.0±1.0	11.0	23.0	3.0	5	40	1.25*1.70	Samples
BR9647LDZ	High Gain Flatness	13~32	10.5±0.5	17.0	28.0	2.0	5	54	1.50*1.50	Samples
BR9646LDZ	High Gain Flatness	18~40	17.0±0.5	15.0	26.0	2.3	5	68	1.50*1.00	Samples
BR9398LDZ	High Gain Flatness, Low Power Dissipation	18~40	10.0±0.5	12.5	25.0	2.6	5	38	1.30*1.25	Samples

Low Phase Noise Amplifiers

Part Number	Features	Freq. (GHz)	Gain (dB)	OP1dB (dBm)	OIP3 (dBm)	Excess Phase Noise (10KHz Freq Offset) (dBc/Hz)	NF (dB)	Vs (V)	Is (mA)	Die Size (mm)	Product Lifecycle
BR9192LD	High Linearity	0.03~1	20.2	20.8	41.0	-165	3.1	5	92	0.78*0.78	Production
BR9108LD	High OP1dB	0.03~4	19.7	21.1	30.9	-165	4.0	5	72	0.65*0.70	Production

RF Switches

Part Number	Features	Freq. (GHz)	IL (dB)	Iso. (dB)	IP1dB (dBm)	Control Voltage (V)	Switching Time (ns)	Die Size (mm)	Product Lifecycle
BR9508LD	Reflective, SPDT	DC~3	0.3	32.3	38.2	0/+3~-+8	30	0.85*0.65	Production
BR9147LD	Absorption, SPDT	0.01~6	0.6	52.0	34.0	0/+3~-+5	130	1.00*1.30	Production
BR9509LD	Absorption, SP4T	0.01~4	1.0	50.0	28.3	0/+3~-+5	100	1.00*1.20	Production
BR9575LDZ	Absorption, SPDT	DC~20	2.0	40.0	25.0	0/+4~-+5	20	2.00*1.00	Samples
BR9576LDZ	Absorption, SP4T	DC~20	2.5	40.0	22.0	0/+4~-+5	30	2.00*1.50	Samples

Digitally Controlled Attenuators

Part Number	Features	Freq. (GHz)	IL (dB)	Peak Attenuation (dB)	Step (dB)	Vs (V)	Is (mA)	Die Size (mm)	Product Lifecycle
BR9153LD	6bit, Parallel Control	DC~8	1.3	31.5	0.5	5	2	1.60*1.20	Production
BR9361LDZ	7bit, Serial and Parallel Control	0.01~8	1.2	31.75	0.25	5	3	1.90*1.20	Production
BR9364LDZ	6bit, Parallel Control	DC~20	3.0	31.5	0.5	-5	5	2.35*1.50	Samples

Fixed Attenuators

Part Number	Features	Freq. (GHz)	Step (dB)	Return Loss (dB)	Attenuation (dB)	Maximum Attenuation Flatness (dB)	Max Input Power (dBm)	Die Size (mm)	Product Lifecycle
BR7052-2/3/4/6/8/10/20	Fixed Attenuation	DC~40	-	-	2/3/4/6/8/10/20	±0.2	33.0	0.61*0.755	Production
BR9661LDZ-0.5/1/2/3/5/6/7/8/9/10/15/20	Fixed Attenuation	DC~40	-	-22.0	0.5/1/2/3/4/5/6/7/8/9/10/15/20	±0.4	27.0	0.50*0.50	Production
BR9662LDZ	Fixed Multi-Position Attenuation	DC~40	-	-30.0	0/3/5	±0.3	27.0	0.65*1.10	Production
BR9663LDZ	Fixed Multi-Position Attenuation	DC~40	-	-23.0	0/2/4	±0.2	27.0	0.65*1.10	Production
BR9664LDL	Fixed Stepped Attenuation	DC~20	0.5	-25.0	0~3.5	±0.2	27.0	0.65*0.65	Production
BR9665LDL	Fixed Stepped Attenuation	DC~20	0.25	-25.0	1.0~2.75	±0.35	27.0	0.65*0.65	Production
BRT2001LD~BRT2011LD	Fixed Attenuation	DC~40	-	-15.0	0/3	±0.2	43.0	0.80*0.75	Samples
		DC~40	-	-15.0	1/2/4/5/6/8	±0.25	43.0	0.75*0.65	Samples
		DC~40	-	-15.0	10/15/20	±0.5	41.0	0.80*0.75	Samples

Equalizers

Part Number	Features	Freq. (GHz)	IL (dB)	Equalization (dB)	VSWR (: 1)	Die Size (mm)	Product Lifecycle
BR9313LD	2dB Equalization	0.5~3	0.5	2.0	1.2	0.75*1.20	Production
BR9314LD	3dB Equalization	0.5~3	0.5	3.0	1.1	0.75*1.20	Production
BR9315LD	4dB Equalization	0.5~3	0.5	4.0	1.2	0.75*1.20	Production
BR9312LDL	5dB Equalization	DC~6	0.8	5.0	1.1	0.75*1.20	Production
BR9318LD	3dB Equalization	2~18	0.5	3.0	1.5	0.75*0.75	Production
BR9319LD	6dB Equalization	2~18	0.5	6.0	1.5	0.75*0.75	Production
BRE2002LD	4dB Equalization	10.7~12.7	1.1	4.0	1.5	0.90*0.70	Samples
BRE2001LD	4dB Equalization	17.7~21.2	1.3	4.0	1.5	0.80*0.55	Samples
BRE2003LD	4dB Equalization	27.5~31	2.0	4.0	1.5	0.90*0.60	Samples

Limiters

Part Number	Features	Freq. (GHz)	IL (dB)	Response Time (ns)	Limiting Level (dBm)	Max Input Power (dBm)	Die Size (mm)	Product Lifecycle
BR93011LD	Low Limiting Level	DC~3	0.39@1GHz	2.4	13.0	30.0	1.00*0.90	Production
BR9309LD	50W, Broadband	DC~4	0.3@2GHz	3.2	14.5	47.0	0.90*0.75	Production
BR9306LDL	5W, Low Insertion Loss, Broadband	DC~4	0.07@3GHz	3.3	15.0	37.0	0.90*0.50	Production
BR9307LD	10W, Broadband	DC~4	0.3@2GHz	3.7	14.5	40.0	1.20*0.50	Production
BR9308LDZ	5W, Broadband	DC~18	0.17@4GHz	11.7	15.0	37.0	1.80*0.75	Production
BR9734LDL	20W, Broadband	8~12	0.6	-	12.5	43.0	1.10*0.85	Production
BR9735LDZ	10W, Broadband	6~18	0.55	-	12.0	40.0	0.85*0.50	Production
BR9737LDZ	10W, Low Insertion Loss, Broadband	DC~20	0.24@10GHz	-	15.0	40.0	0.85*0.50	Production
BR9739LDZ	5W, Broadband	15~40	0.72@30GHz	-	16@15GHz	37.0	0.85*0.50	Samples
BR9736LDZ	5W, Broadband	32~40	1.5	-	13.0	37.0	0.85*0.50	Samples
BR9738LDZ	10W, Low Limiting Level	18~32	0.6@26GHz	-	12.0	40.0	0.85*0.50	Samples

Mixers

Part Number	Features	RF Freq. (GHz)	IF Freq. (GHz)	LO Freq. (GHz)	CL (dB)	IP1dB (dBm)	IIP3 (dBm)	LO Power (dBm)	Die Size (mm)	Product Lifecycle
BR9133LDL	High Linearity, Integrated LO Buffer	1.0~3.5	DC~0.5	1.0~3.5	7.5	18.0	26.0	-2/0/2	1.25*1.30	Production
BR9134LD	Double Balanced Mixer	1.5~4.5	DC~1.5	1.5~4.5	7.5	12.1	19.0	11/13/15	1.60*1.30	Production
BR9132LD	Double Balanced Mixer	3~8	DC~3	3~8	7.1	11.3	17.8	11/13/15	0.70*0.95	Production
BR9136LD	Double Balanced Mixer	10~20	DC~6	10~20	7.6	13.8	20.9	13/15	0.80*1.20	Production

Phase Shifters

Part Number	Features	Freq. (GHz)	IL (dB)	IRL (dB)	Step (°)	Precision (°)	Amplitude (dB)	Die Size (mm)	Product Lifecycle
BR9595LDZ	6 bit, Parallel Control	1.6~2.3	3.8	14.9	5.625	1.9	±0.7	1.90*2.50	Production
BR9591LDZ	6 bit, Parallel Control	5~6	6.0	15.0	5.625	2.2	±0.8	2.00*2.00	Samples
BR9592LDZ	6 bit, Parallel Control	8~12	10.0	10.0	5.625	2.5	±0.6	2.00*2.00	Samples
BR9593LDZ	6 bit, Parallel Control	14~18	9.0	10.0	5.625	3.0	±1.1	2.00*2.00	Samples

Couplers

Part Number	Features	Freq. (GHz)	IL (dB)	Return Loss (dB)	Coupling (dB)	Coupling Flatness (dB)	Iso. (dB)	Max Input Power (dBm)	Die Size (mm)	Product Lifecycle
BR9671LDZ	Coupling20dB, Broadband	6~18	0.2	-19.2	20.0	±2.0	-38.0	40.0	2.20*0.90	Production
BR9672LDZ	Coupling15dB, Broadband	18~50	0.6	-27.2	15.0	±1.5	-43.4	40.0	1.20*0.75	Production
BR9673LDZ	Coupling19dB	2~6	0.4	-18.0	19.0	±2.0	-40.0	40.0	3.00*1.20	Production
BR9674LDZ	Coupling15dB	2~6	0.5	-14.8	15.0	±2.0	-34.4	40.0	3.20*1.10	Production
BRC3001LD	Coupling20dB	0.8~2	0.42	-14.0	20.0	±3.0	-23.0	47.0	1.55*0.75	Samples
BRC3003LD	Coupling20dB	2~6	0.25	-20.0	20.0	±2.0	-35.0	50.0	3.00*2.00	Samples
BRC2001LD	Coupling15dB	6~18	0.25	-18.0	15.0	±1.5	-21.0	50.0	1.70*1.20	Samples
BRC2002LD	Coupling15dB	8~12	0.2	-17.5	15.0	±0.65	-27.3	50.0	1.90*1.35	Samples
BRC3004LD	Coupling25dB	12~20	0.15	-15.0	25.0	±2.4	-25.0	50.0	2.80*0.85	Samples
BRC3005LD	Coupling20dB	14~18	0.2	-15.0	20.0	±1.5	-30.0	50.0	1.75*0.90	Samples
BRC2003LD	Coupling15dB	14~18	0.2	-15.0	15.0	±2.0	-23.0	50.0	1.75*0.85	Samples

Power Dividers

Part Number	Features	Freq. (GHz)	IL (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Insertion Loss Flatness (dB)	Iso. (dB)	Max Input Power (dBm)	Die Size (mm)	Product Lifecycle
BR9352LDZ	Two-Way Power Division	0.5~2	0.9	-15.0	-16.8	±0.35	-21.2	40.0	1.90*1.20	Production
BR9353LDZ	Two-Way Power Division	2~6	0.4	-21.2	-19.1	±0.1	-25.5	40.0	1.20*0.90	Production
BR9354LDZ	Two-Way Power Division	6~18	0.7	-20.9	-23.5	±0.3	-26.1	40.0	1.30*1.10	Production
BR9355LDZ	Two-Way Power Division	2~18	1.0	-13.5	-14.3	±0.5	-27.3	40.0	2.10*2.20	Production
BR9356LDZ	Two-Way Power Division	1~2	0.4	-19.9	-20.1	±0.15	-26.8	37.0	1.20*1.10	Production
BRD3002LD	Three-Way Power Division	DC~2	0.7	-15.0	-33.0	±0.35	-18.0	45.0	2.40*1.70	Samples
BRD2002LD	Two-Way Power Division	0.5~3	0.7	-13.0	-13.0	±0.15	-12.0	46.0	2.30*3.10	Samples
BRD2003LD	Two-Way Power Division	0.8~2	0.6	-18.0	-32.0	±0.15	-17.2	46.0	2.50*1.40	Samples
BRD2005LD	Two-Way Power Division	1~9	0.4	-15.0	-18.0	±0.12	-20.0	46.0	2.50*2.60	Samples
BRD2004LD	Two-Way Power Division	2~6	0.6	-18.0	-18.0	±0.15	-20.0	46.0	1.25*0.95	Samples
BRD3001LD	Three-Way Power Division	2~6	0.6	-20.0	-30.0	±0.2	-20.0	45.0	1.60*1.25	Samples
BRD2006LD	Two-Way Power Division	6~18	0.6	-15.0	-15.0	±0.25	-23.0	46.0	2.40*2.50	Samples

GaN MMIC Power Amplifiers

Part Number	Features	Freq. (GHz)	Psat (W)	Power Gain (dB)	PAE (%)	Vd (V)	Die Size (mm)	Product Lifecycle
BRGF060010LD	Broadband	2~6	10	18.2	44.5	28	3.40*1.80	Production
BRGF060020LD	Broadband	2~6	20	17.0	32.1	28	3.40*4.00	Production
BRGF035012LDL	Compact, High PAE	2.5~4	12	21.0	50.4	28	2.90*1.85	Production
BR9705LDL	High Gain, High PAE	8.5~10.5	3	29.0	45.0	28	2.10*1.30	Production
BR9706LDL	High Gain, High PAE	8.5~10.5	8	31.0	48.0	28	2.45*1.30	Production
BR9707LDL	High Gain, High PAE	8.5~10.5	15	28.0	51.0	28	2.50*1.90	Production
BR9708LDL	High Gain, High PAE	10.5~13	10	23.0	41.0	28	2.45*1.90	Production
BR9709LDL	High Gain, High PAE	13.75~15.5	6	27.0	41.0	28	2.10*1.30	Production
BR9711LDL	High Gain, High PAE	13.75~15.5	10	26.0	41.0	28	2.45*1.90	Production
BR9713LDZ	High Gain, High PAE	14~18	12	25.0	42.0	28	2.30*1.90	Production

Filters

Part Number	Features	Freq. (GHz)	IL (dB)	Input Return Loss (dB)	Output Return Loss (dB)	Stopband Attenuation (dB)	Max Input Power (dBm)	Die Size (mm)	Product Lifecycle
BR9751LDZ	Low-Pass Filter	DC~1.5	0.96@1.5GHz	-29.8	-28.4	≥22.9dB@2.3GHz ≥42.1dB@2.6GHz	30.0	1.40*0.80	Production
BR9752LDZ	Low-Pass Filter	DC~3.5	1.6@3.5GHz	-27.6	-27.3	≥36.9dB@5.5GHz ≥41.1dB@6~18GHz	30.0	1.60*0.60	Production
BR9753LDZ	Low-Pass Filter	DC~1	0.86@1GHz	-24.2	-24.8	≥26.7dB@1.9GHz ≥50.4dB@2.2GHz	30.0	1.65*0.90	Production
BR9754LDZ	Low-Pass Filter	DC~17	1.9@17GHz	-29.0	-22.9	≥40.7dB@20.5GHz ≥40.6dB@21.3GHz	30.0	1.20*0.80	Production
BR9755LDZ	Low-Pass Filter	DC~19	1.7@19GHz	-17.4	-19.2	≥33.7dB@25.2GHz ≥33.0dB@26.6GHz	30.0	1.20*0.75	Production
BR9756LDZ	Low-Pass Filter	DC~24	2.1@24GHz	-15.6	-15.6	≥27.0dB@29GHz ≥38.7dB@30GHz	30.0	1.00*0.90	Production
BR9758LDZ	Band-Pass Filter	0.9~1.5	1.4@1.2GHz	-22.0	-22.4	≥-25.8dB@520MHz, ≥-25.0dB@2.05GHz ≥-43.1dB@430MHz, ≥-36.0@2.15GHz	30.0	2.50*1.20	Production
BRF3012LD	High-Pass Filter	0.8~5	1.8@0.85GHz	-18.0	-18.0	-35@550MHz	40.0	2.60*1.10	Samples
BR9757LDZ	High-Pass Filter	1~18	1.9@1GHz	-20.0	-20.0	-33@650MHz -44@550MHz	30.0	1.40*0.90	Samples
BRF3011LD	High-Pass Filter	6~30	2.3@6GHz	-12.0	-12.0	-38@1.5GHz -50@3.4GHz	40.0	1.00*0.80	Samples
BR9761LDZ	High-Pass Filter	12~40	2.4@12GHz	-19.0	-19.0	-28@10GHz	30.0	1.00*0.90	Samples
BRF5004LD	Band-Pass Filter	2~4	1.3@3GHz	-20.0	-25.0	-65@1.3GHz -29@5GHz	40.0	2.20*1.00	Samples
BRF5003LD	Band-Pass Filter	2.7~3.5	2.9@3.1GHz	-13.0	-10.0	-45.7@2GHz -39.4@4.5GHz	40.0	1.20*1.95	Samples
BRF5002LD	Band-Pass Filter	4~6	1.5@5GHz	-13.0	-13.0	-54.3@3GHz -40.8@7.5GHz	40.0	1.90*0.90	Samples
BRF5001LD	Band-Pass Filter	6~18	1.5@12GHz	-15.0	-15.0	-37@4.4GHz, -23@4.8GHz -33@20.2GHz, -34@21.3GHz	40.0	2.40*1.05	Samples

Power Load

Part Number	Features	Freq. (GHz)	Impedance (Ω)	Output Return Loss (dB)	Max Input Power (dBm)	Die Size (mm)	Product Lifecycle
BRU2001LD	DC~6G 8W Power Load	DC~6	50	-20.0	39.0	1.70*1.10	Samples

Bi-Directional Amplifiers

Part Number	Features	Freq. (GHz)	Gain (dB)	OP1dB (dBm)	OIP3 (dBm)	NF (dB)	Vs (V)	Is (mA)	Die Size (mm)	Product Lifecycle
BR9681LDL	High OP1dB	10~15	22.0±0.5	20.2	31.2	2.7	5	112	1.65*1.10	Production

Driver Amplifiers

Part Number	Features	Freq. (GHz)	Gain (dB)	OP1dB (dBm)	OIP3 (dBm)	NF (dB)	Vs (V)	Is (mA)	Die Size (mm)	Product Lifecycle
BR9547LDL	Ultra Broadband, High Linearity	0.001~2	20.2	31.6	49.5	2.0	12	270	0.80*1.50	Production
BR9536LDL	Ultra Broadband, High Linearity	0.03~2	15.1	26.3	45.3	3.6	9	177	1.30*0.90	Production
BR9535LDL	Ultra Broadband, High Linearity	0.03~2.7	17.4	30.2	49.4	3.1	11	339	1.30*1.20	Production
BR9321LDL	Ultra Broadband, High Linearity	0.03~6	13.5	26.9	38.8	4.2	9	175	1.20*0.90	Production
BR9323LDL	Ultra Broadband, High Gain	0.1~6	18.1	26.5	39.8	-	8	145	1.00*0.80	Production
BR9543LD	Multi-application, High Linearity	0.4~4	17.4	30.1	44.6	-	5	245	0.81*1.20	Production
BR9542LDL	Multi-application, High Linearity	0.4~5	11.5	28.3	40.0	-	5	89	1.00*0.80	Production
BR9324LDL	Broadband, High Gain	0.5~3	22.8	27.0	35.7	-	5	130	1.00*2.40	Production
BR9213LDL	Broadband, High Gain	1.8~6.4	25.3	26.8	-	-	5	144	2.40*1.80	Production
BR9216LDL	Broadband, High Gain	2.5~4.2	22.8	34.3	42.7	-	8	740	2.80*2.50	Production
BR9214LDL	Broadband, High Gain	4~6	26.2	30.2	-	-	5	162	2.40*1.80	Production
BR9215LDL	Broadband, High Gain	3.5~8.5	23.6	27.0	-	-	5	178	2.80*2.00	Production
BR9771LDL	Broadband, High Power	5.5~8.5	29.0	36.0	-	-	8	1000	2.80*2.20	Production
BR9772LDL	Broadband, High Gain	6~18	23.0	28.0	-	-	6	500	2.40*1.10	Production
BR9218LDL	Broadband, High Gain	5.8~10	28.0	30.0	-	-	6	520	2.80*1.50	Production
BR9219LDL	Broadband, High Gain	7~13.5	23.2	32.4	-	-	6	1000	2.80*2.00	Production
BR9773LDL	Broadband, High UBW	13.75~15.5	25.0	30.0	-	-	8	350	2.40*1.10	Production

PLL with Integrated VCO

Part Number	Features	Freq. (GHz)	Pout (dBm)	Phase Noise(10kHz offset @1.62GHz) (dBc/Hz)	Phase Noise(100kHz offset@1.62GHz) (dBc/Hz)	VDD (V)	IDD (mA)	Die Size (mm)	Product Lifecycle
BR9177LDL	Fast Locking, Fractional PLL	0.025~3.24	2	-102	-97	3.3	125	3.10*3.10	Production

SPI

Part Number	Features	Data Rate (MHZ)	Output High Voltage (V)	Output Low Voltage (V)	Response Time (ns)	Die Size (mm)	Product Lifecycle
BR9341LD	6bit, S/P Convert	10	Vdd-0.5	0.8	-	1.18*0.90	Samples
BR9342LD	7bit, S/P Convert	10	Vdd-0.5	0.8	-	1.29*0.90	Samples

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