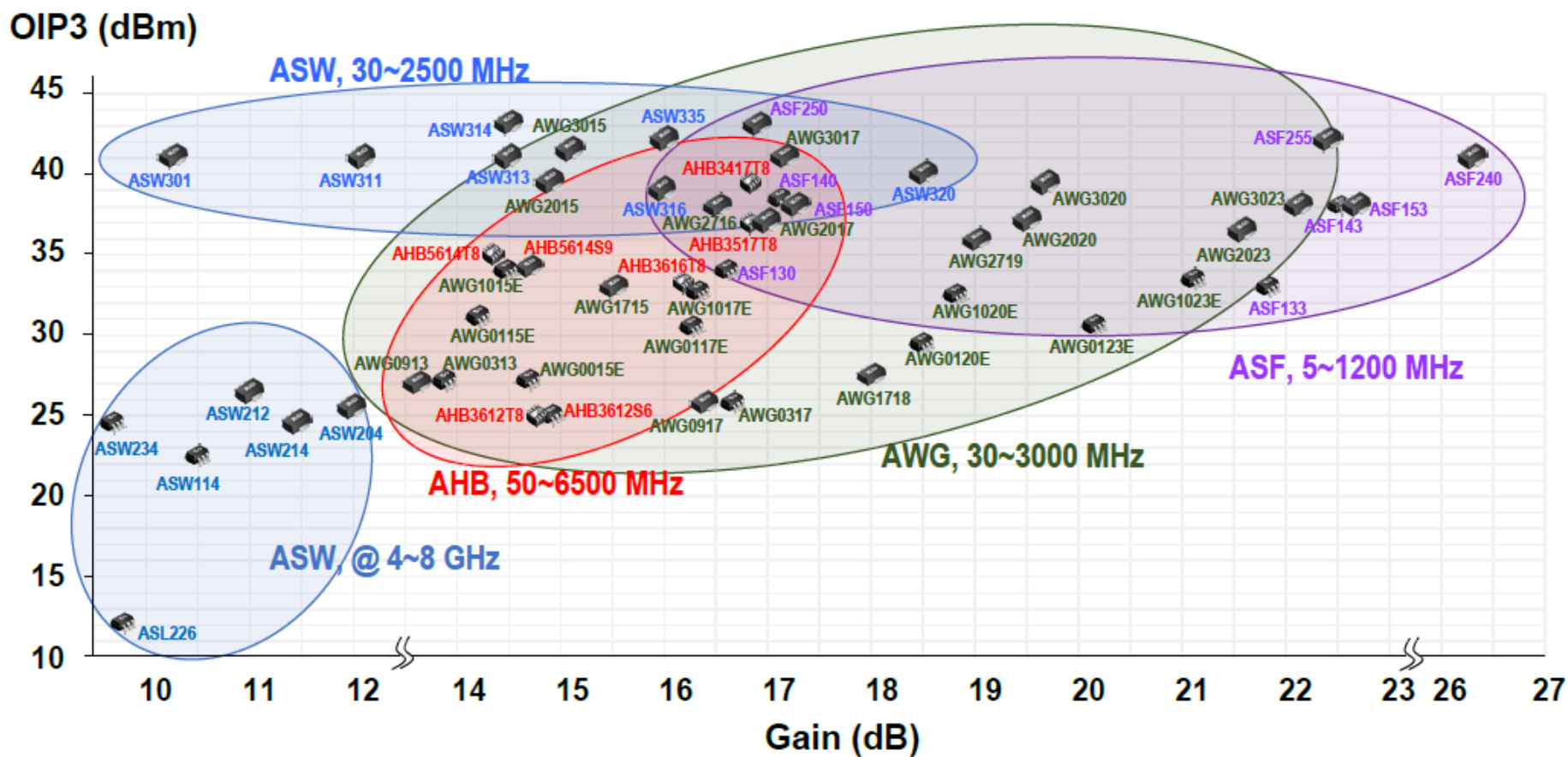


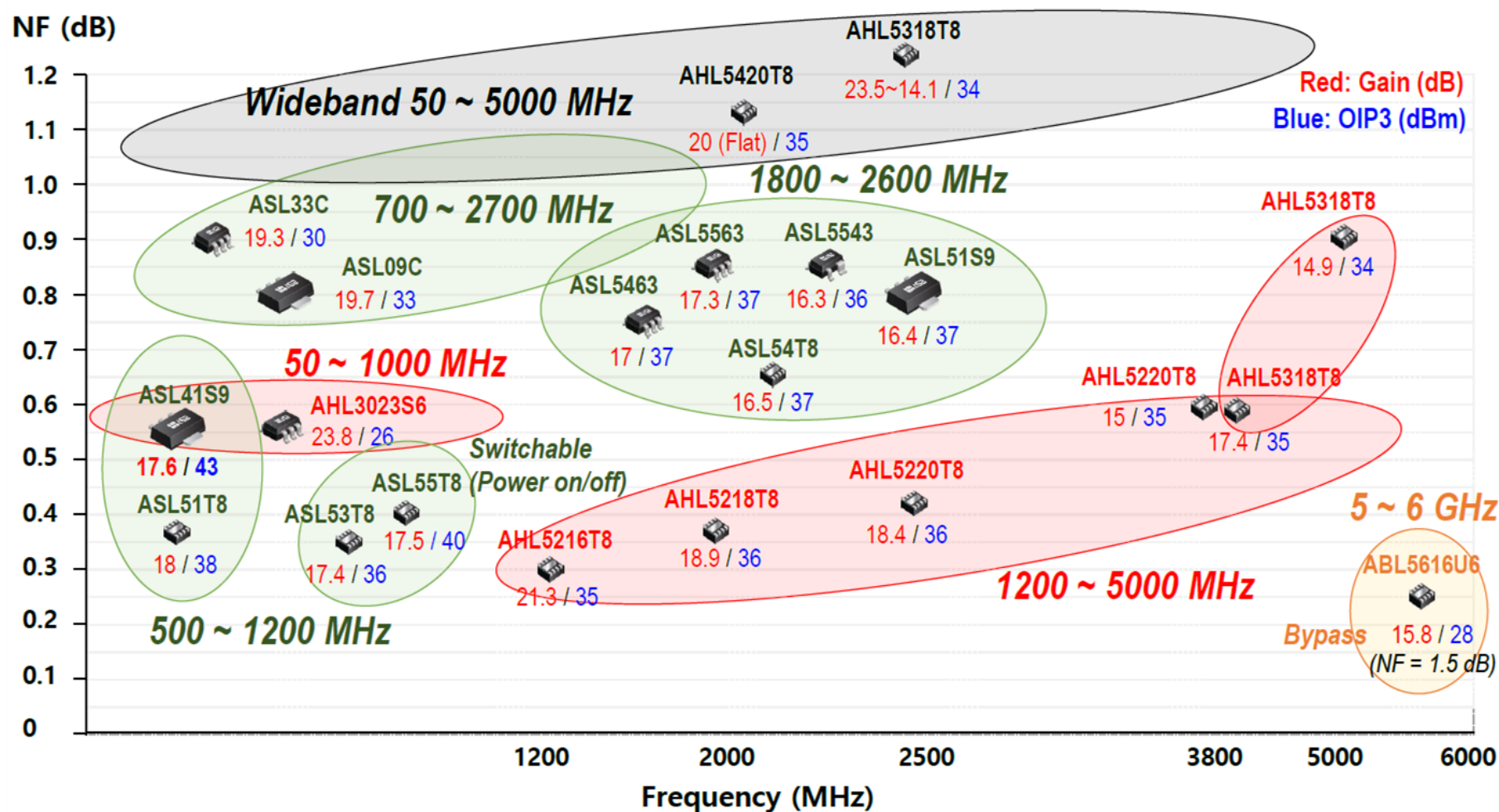
Product Portfolio



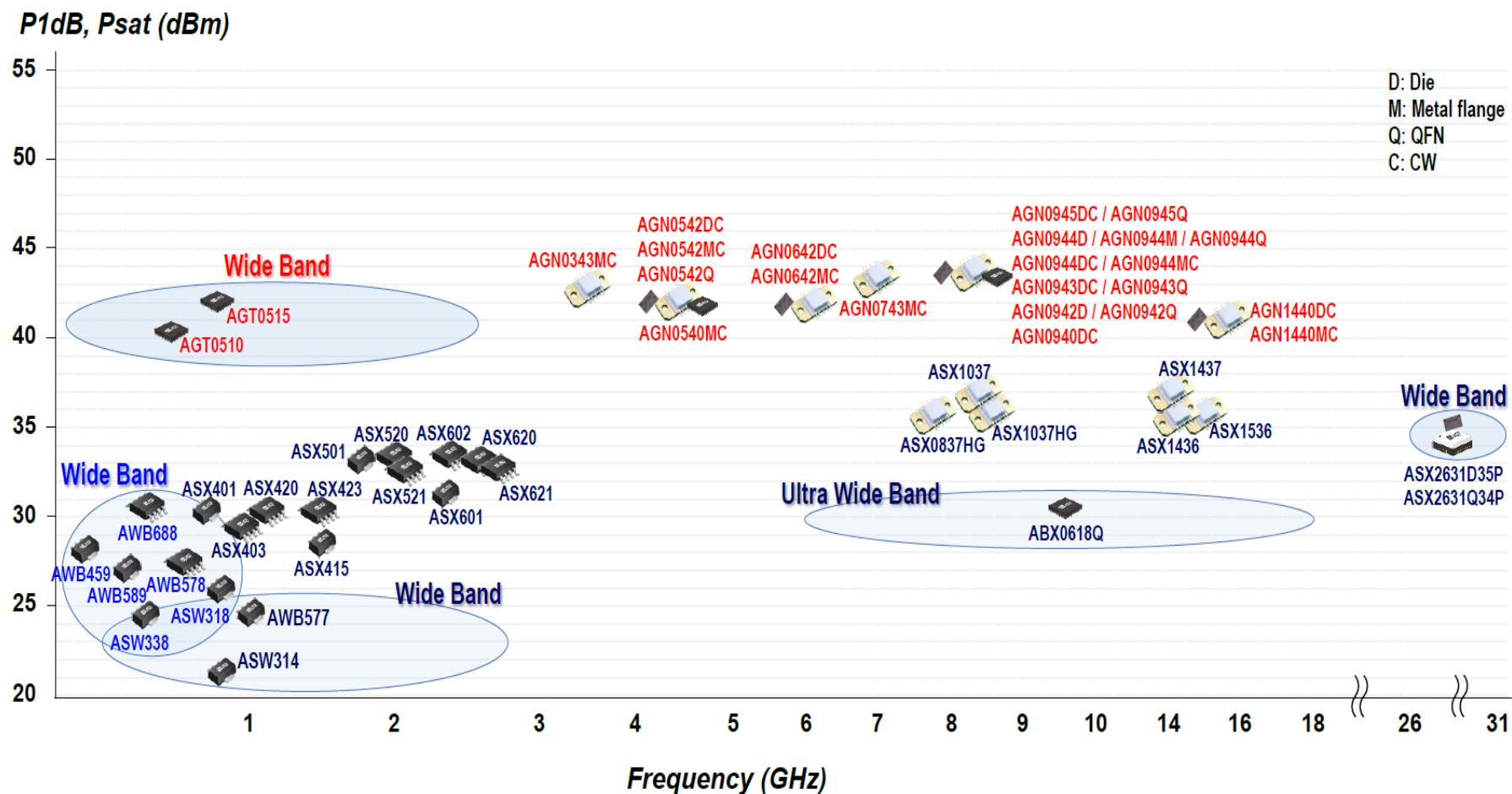
Gain Block Amplifier Portfolio



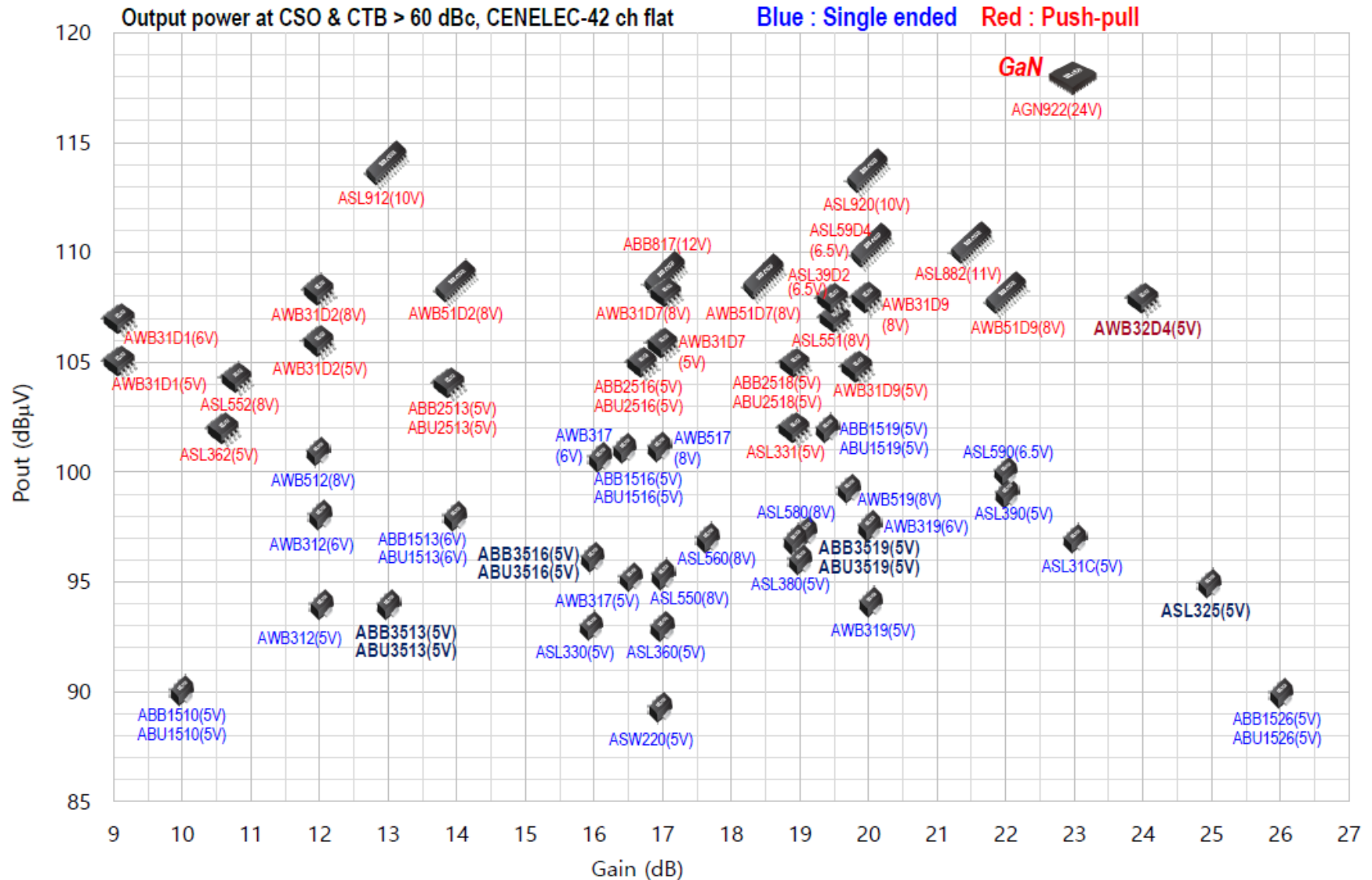
LNAs for Mobile Communication, 50-6000 MHz



GaAs, GaN Power Amplifier Portfolio



GaAs, GaN CATV Amplifier Portfolio



New Product Release



LNA

Lowest NF

Part no.	Freq. (GHz)	Gain (dB)	NF (dB)	OIP3 (dBm)	Vd (V)	Id (mA)
AHL5220T8	3.3-3.8	15	0.57	35	5	65
AHL5318T8	3.3-3.8	18	0.59	34	5	65
	4.5-5.0	15	0.85	34	5	65

Wide-band, Ultra-high Linearity

Part no.	Freq. (GHz)	Gain (dB)	NF (dB)	OIP3 (dBm)	Vd (V)	Id (mA)
AHL3512T8	0.9-5.0	15 @3.5 GHz	0.85 @3.5 GHz	39	3.3	75

Wide-band, Ultra-flat Gain

Part no.	Freq. (GHz)	Gain (dB)	NF (dB)	OIP3 (dBm)	Vd (V)	Id (mA)
AHL5420T8	0.05-3.5	20±0.1	1.10	34	5	80
AHL5422T8	0.05-3.5	22±0.2	0.80	33	5	80

Bypass, HBM Class 1C

Part no.	Freq. (GHz)	Gain (dB)	NF (dB)	IL (dB)	Vd (V)	Id (mA)
ABL4419T8	3.3-4.0	19	0.89	2	4.2	55
ABL4616T8	4.4-6.0	16	1.11	2	4.2	55
ABL5714T8	4.9-7.0	14	1.35	3	5.0	28

† T8 means TDFN8 (2x2)

Gain Block

Ultra-flat Gain

Part no.	Freq. (GHz)	Gain (dB)	OIP3 (dBm)	P1dB (dBm)	Vd (V)	Id (mA)
AHB5614T8	0.05-6.0	14	34	18	5.0	80
AHB3417T8	0.05-3.8	17	36	18	3.3	53
AHB3517T8	0.05-5.0	17	34	17	3.3	53
AHB3616T8	0.05-5.8	16	32	17	3.3	53

High Linearity

Part no.	Freq. (GHz)	Gain (dB)	OIP3 (dBm)	P1dB (dBm)	Vd (V)	Id (mA)
AHB7411	2.3-4.2	11	39	22	7.5	130
AHB9411	3.3-4.2	11	39	23	9.0	143

† In SOT89

GaN HPA

Part no.	Freq. (GHz)	Psat (dBm)	Mode	Gain (dB)	Vd (V)	Id (mA)
AGN0343MC	3.2-4.2	43	CW	30	24	400
AGN0540MC	4.2-5.2	41	CW	30	24	200
AGN0542DC/MC	4.4-5.6	43	CW	31	24	300
AGN0542Q	4.4-5.6	43	Pulse	29	24	400

† DC = Die, MC = Metal Flange, Q = QFN (6x6)



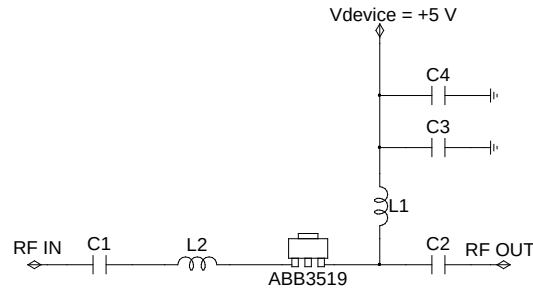
CATV, DOCSIS 4.0



Single-ended Gain Block Family

ABB35xx (700-1800 MHz)

(xx = 13, 16, 19): Gain 13, 16, 19 dB @ 5 V, 100 mA

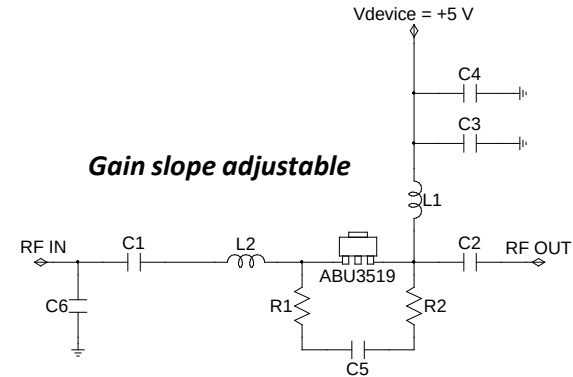


AHL181xx (250-1800 MHz)

Part no.	Gain (dB)	NF (dB)	OIP3 (dBm)	P1dB (dBm)	Vd (V)	Id (mA)
AHL18111	11	3.0	37	19	6	82
AHL18114	14	2.3	40	19	5	88
AHL18119	19	1.1	37	19	5	77

ABU35xx (250-1800 MHz)

(xx = 13, 16, 19): Gain 13, 16, 19 dB @ 5 V, 100 mA



AHL182xx (50-1800 MHz)

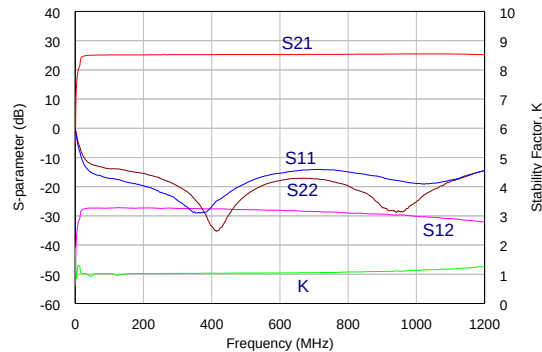
Part no.	Gain (dB)	NF (dB)	OIP3 (dBm)	P1dB (dBm)	Vd (V)	Id (mA)
AHL18214	14	3.0	37	22	8	110
AHL18217	17	2.2	38	22	8	110
AHL18220	20	1.8	38	22	8	110

† Same application circuit as that of ABU35XX

DOCSIS 3.1

Single-ended, High Gain Low Noise (50-1200 MHz)

Part no.	Gain (dB)	NF (dB)	OIP3 (dBm)	P1dB (dBm)	Vd (V)	Id (mA)	Package
ASL325	25	1.0	38	22	5	106	SOT89



Push-pull (50-1200 MHz)

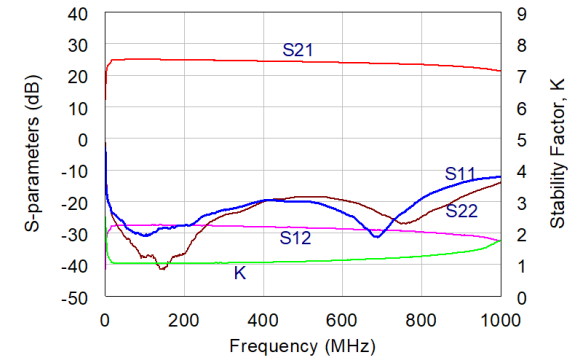
Part no.	Gain (dB)	OIP3 (dBm)	P1dB (dBm)	Vd (V)	Id (mA)	Package
AWB814	14	48	32	12	530	QFN
AWB819	19	47	32	12	530	QFN
AWB914	14	47	32	12	630	QFN
AWB919	19	47	33	12	630	QFN

† QFN (5x5)

DOCSIS 4.0

Push-pull, High Gain Low Noise (5-700 MHz)

Part no.	Gain (dB)	NF (dB)	OIP3 (dBm)	P1dB (dBm)	Vd (V)	Id (mA)	Package
AWB32D4	24	1.2	41	25	5	270	SOIC8



Push-pull (50-1800 MHz)

Part no.	Gain (dB)	OIP3 (dBm)	P1dB (dBm)	Vd (V)	Id (mA)	Package
AWB614	14	45	28	8	430	SOIC8
AWB617	17	46	29	8	430	SOIC8
AWB619	19	46	29	8	430	SOIC8
AWB714	14	45	30	12	430	QFN
AWB717	17	46	29	12	430	QFN
AWB719	19	45	30	12	430	QFN

† QFN (5x5)



VSAT-BUC, Radar



C-band

5.0-7.0 GHz, GaN

AGN0642DC/MC

Psat 42.5 dBm (CW),
Gain 28 dB

X-band

7.7-10.7 GHz, GaN

AGN0940DC: Psat 41 dBm (Pulse), 38 dBm (CW), Gain 25 dB

AGN0942D/Q: Psat 41.5 dBm (Pulse), Gain 25 dB

AGN0943DC/Q: Psat 43 dBm (Pulse), Gain 25 dB

8.5-10.0 GHz, GaN

AGN0944DC: Psat 44 dBm (Pulse), 43.5 dBm (CW), Gain 20 dB

AGN0944MC: Psat 44 dBm (Pulse), 42.0 dBm (CW), Gain 19 dB

AGN0944D/Q/M: Psat 44 dBm (Pulse), Gain 22 dB

8.5-10.5 GHz, GaAs & GaN

ASX1037HG: Psat 36 dBm (CW), Gain 22 dB

AGN0945DC: Psat 45.5 dBm (Pulse), Gain 20 dB

AGN0945Q: Psat 45 dBm (Pulse), Gain 19 dB

Ku-band

13.5-14.5 GHz, GaAs

ASX1437: Psat 37 dBm (CW), Gain 21 dB

13.0-16.5 GHz, GaN

AGN1440DC/MC: Psat 41 dBm (CW), Gain 23 dB

C-, X-band

5.8-8.5 GHz, GaN

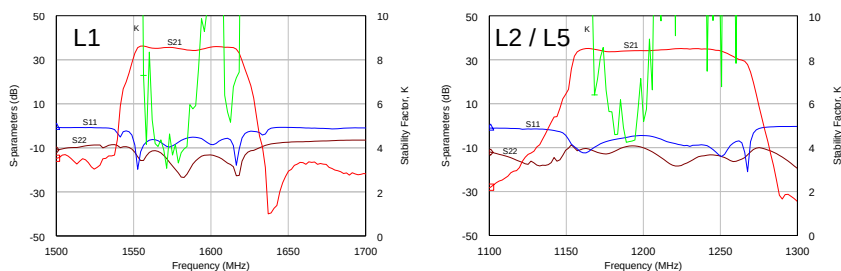
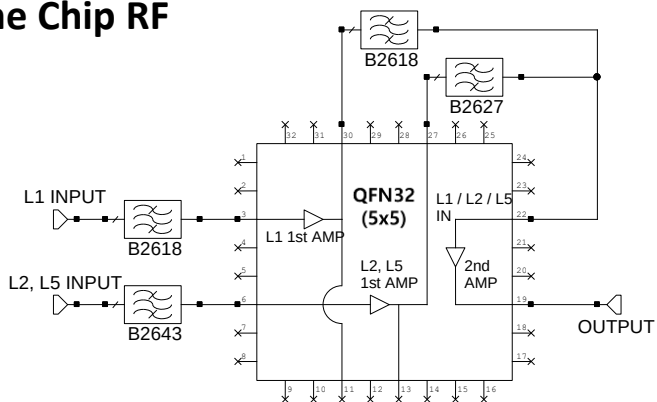
AGN0743MC: Psat 43.5 dBm (CW), Gain 22 dB

† D = Die, Q = QFN, M = Metal Flange



Ultra-low NF, High Linearity (1.1-1.7 GHz)

One Chip RF



Part no.	Freq.	Gain (dB)	NF (dB)	OIP3 (dBm)	P1dB (dBm)	Vd (V)	Id (mA)	HBM
ASL335C	L1	35	2.7	19	7	3.3	45	1C
	L2 / L5		2.6	23	11			

Note: Data measured at SMA to SMA on whole evaluation board.

Lowest NF

Part no.	Gain (dB)	NF (dB)	OIP3 (dBm)	P1dB (dBm)	Vd (V)	Id (mA)	HBM	Package
AXL2316	18	0.45	22	18	3.3	10	1A	TDFN8
	20	0.29	30	17		30		
AXL2326	18	0.40	24	18	3.3	10	1C	TDFN8
	21	0.33	29	17		30		

HBM Class 2

Part no.	Gain (dB)	NF (dB)	OIP3 (dBm)	P1dB (dBm)	Vd (V)	Id (mA)	Package
ASL117C	19	0.44	27	16	3.3	11	TDFN8

Cost-effective, Ultra-flat Gain

Part no.	Gain (dB)	NF (dB)	OIP3 (dBm)	P1dB (dBm)	Vd (V)	Id (mA)	HBM	Package
ASL122	21±0.1	0.90	22	9	3.3	10	1B	SOT363
	22±0.1	0.80	24	9		15		