



Brilliance in RF Microwave

Product Selection Guide **2018 vol. 2**

ISO 9001: 2008
ISO 14001: 2004

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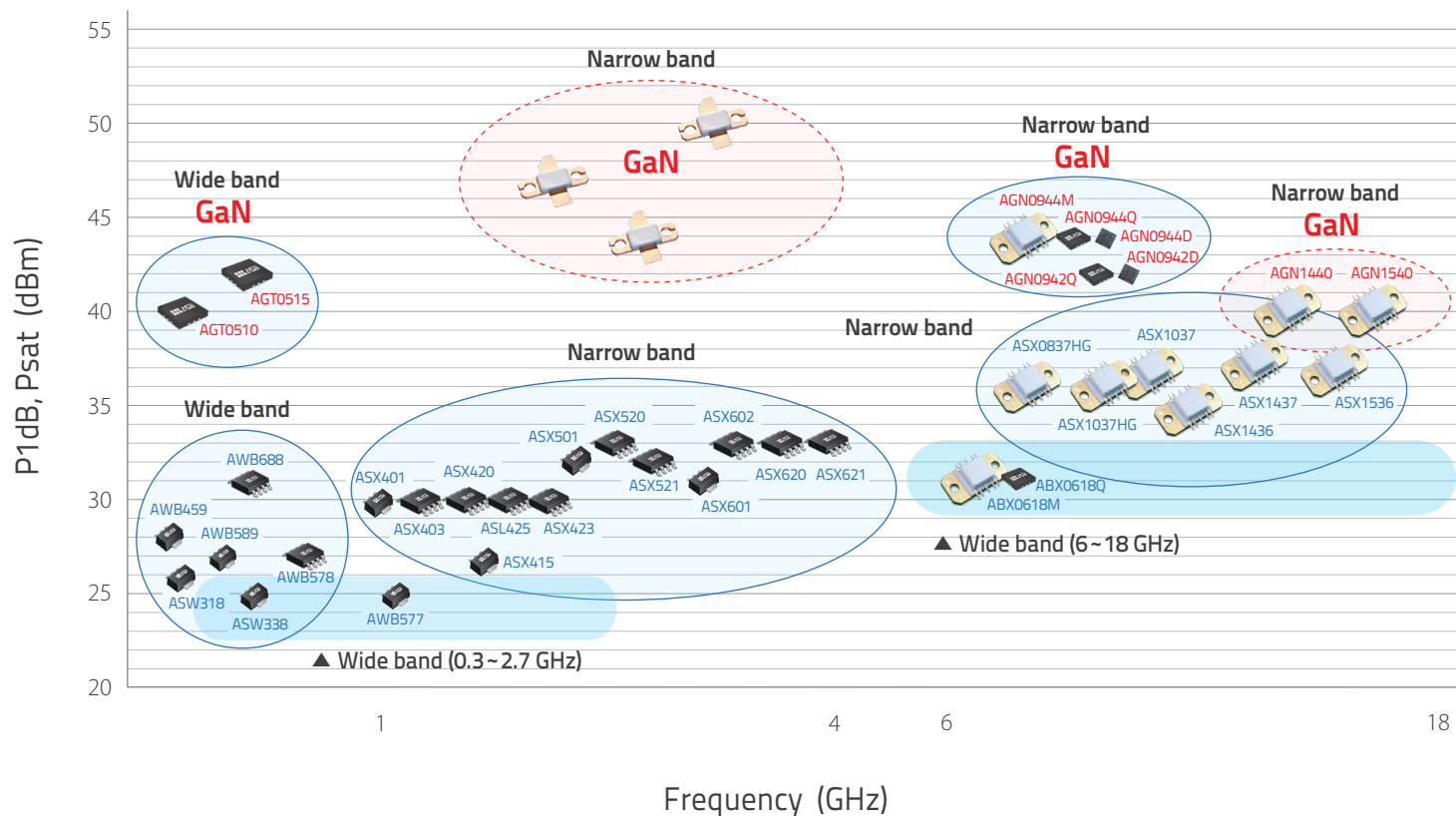


Wireless
Broadcast
Satellite
Military

GaAs, GaN Power Amplifier Portfolio



— Current Products
 - - - To be released

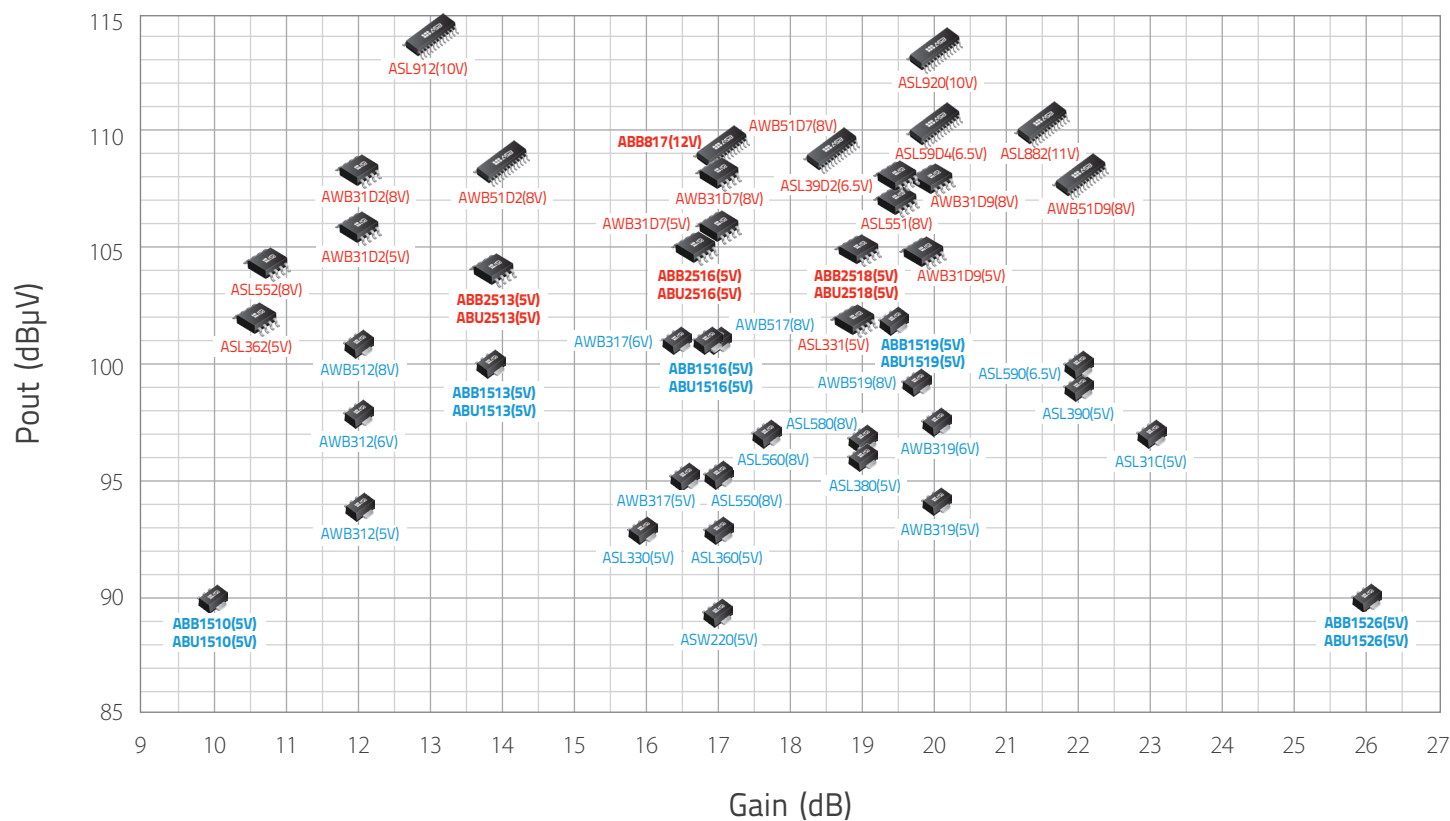


GaAs CATV Amplifier Portfolio



Output Power at CSO & CTB > 60 dBc, CENELEC-42 ch

Blue: Single
Red: Push-pull



CATV High Power Amplifier, 50~1200 MHz



AGN922 GaN Power Doubler

24 V, Outstanding High Power Linearity

- Gain 23 dB
 - Current 480 mA
 - Pout 111 dBμV
- @ BER < 1E-9, 121 ch flat, 256 QAM

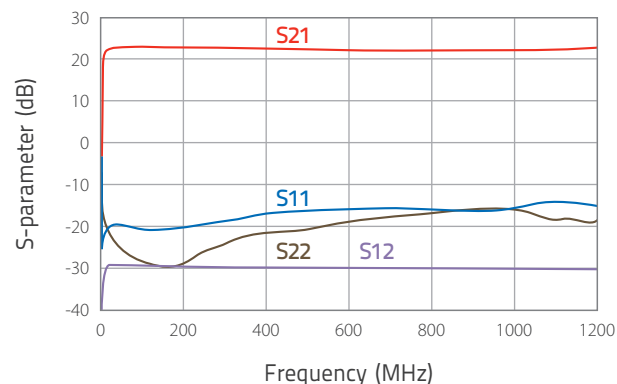
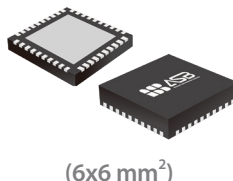
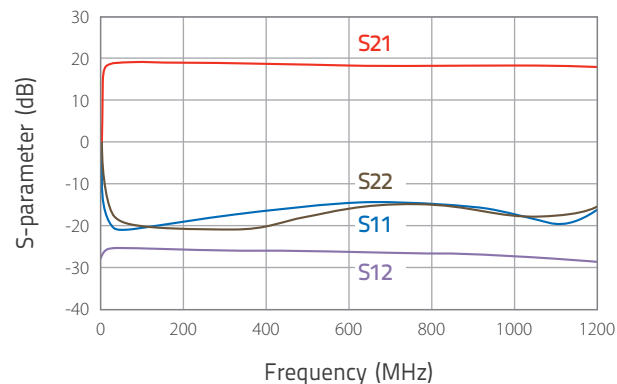


ABB817 GaAs Push-pull

12 V, High Linearity

- Gain 17 dB
 - Current 370 mA
 - Pout 109 dBμV
- @ BER < 1E-9, 138 ch 12 dB slope, 256 QAM



CATV Amplifier MMIC, 50~1200 MHz



ABB15xx
ABU15xx

(Single)



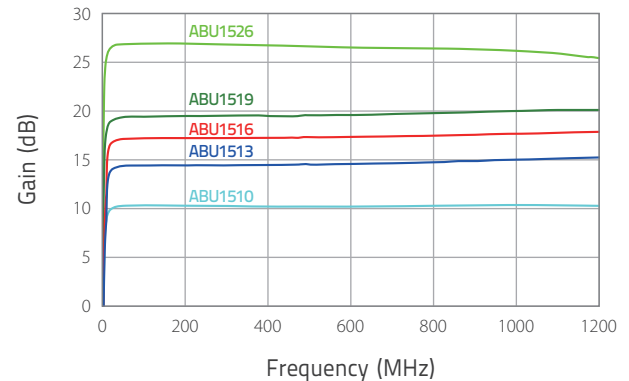
ABB25xx
ABU25xx

(Push-pull)



High Linearity (*World Best*)

- 5 V / 120 mA, Gain 13, 16, 19 dB
Pout 100~102 dBμV @ CENELEC-42 ch flat (Single)
- 5 V / 280 mA, Gain 13, 16, 18 dB
Pout 104~105 dBμV @ CENELEC-42 ch flat (Push-pull)



High Gain, Low Gain

- 5 V / 90 mA, Gain 26 dB (ABB1526 / ABU1526)
- 5 V / 100 mA, Gain 10 dB (ABB1510 / ABU1510)
- Pout 90 dBμV @ CENELEC-42 ch flat

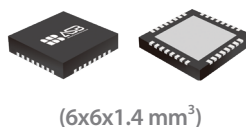
Key Feature

ABB Series	- Simple off-chip circuit (w/o feedback) - FWD (50~1200 MHz)
ABU Series	- Gain slope adjustable (w/ feedback) - FWD (50~1200 MHz) REV (5~300 MHz)

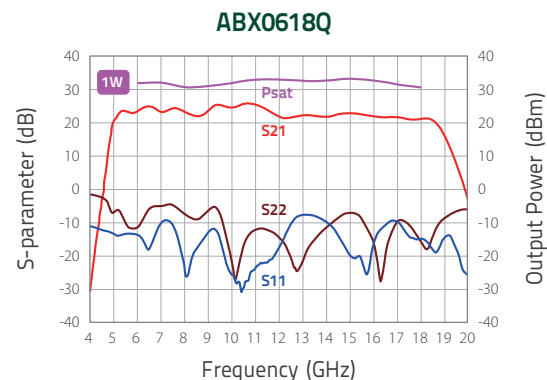
GaAs 1W Ultra-wideband (6~18 GHz) MMIC



- Internally Matched
- QFN Package



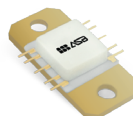
Part No.	Frequency (GHz)	Gain (dB)	Psat (dBm)	OIP3 (dBm)	PAE (%) @ Psat	S11 (dB)	S22 (dB)	Vd (V)	Idq (mA)
ABX0618Q	6~18	23	31	36	22	-7	-4	7	700



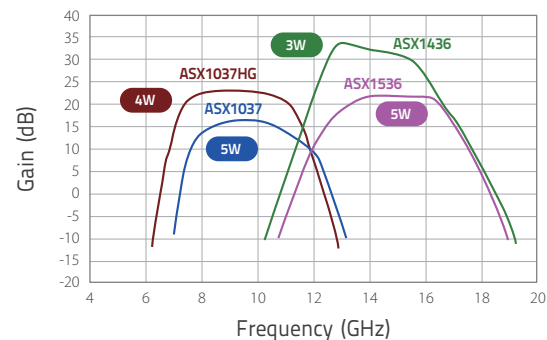
GaAs 1/3/5W X/Ku-band MMIC



- Internally Matched
- Metal-ceramic Flange



Part No.	Frequency (GHz)	Gain (dB)	Psat (dBm)	OIP3 (dBm)	PAE (%) @ Psat	S11 (dB)	S22 (dB)	Vd (V)	Idq (mA)
ASX0837HG	7.5~8.5	22	36	42	35	-14	-14	7	1300
ASX1037	8.5~10.5	15	37	42	38	-10	-12	7	1300
ASX1037HG	8.5~10.5	22	36	42	39	-14	-14	7	1300
ASX1436	13.5~14.5	32	35	42	28	-10	-15	7	1300
ASX1437	13.5~14.5	21	37	42	32	-9	-9	7	1300
ASX1536	13.5~16	22	37	42	30	-9	-9	7	1300



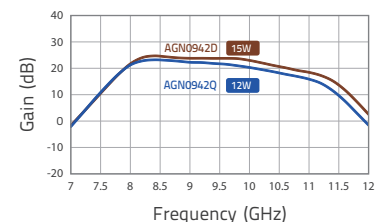
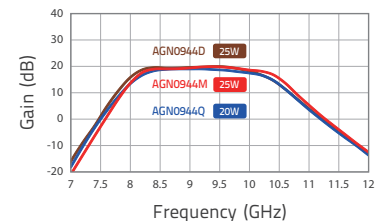
GaN 15/20/25W X-band Radar MMIC



- Internally Matched
- Die, Metal-ceramic Flange, QFN



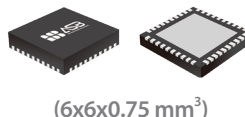
Part No.	Frequency (GHz)	Gain (dB)	Psat (dBm)	PAE (%) @ Psat	S11 (dB)	S22 (dB)	Vd (V)	Idq (mA)	Package
AGN0944D	8.5~10	19	44	38	-10	-10	24	300	Die
AGN0944M	8.5~10	19	44	35	-8	-8	24	300	10-lead Flange
AGN0944Q	8.5~10	18	43	32	-12	-12	24	300	QFN 6x6 mm ²
AGN0942D	8.5~10	23	42	39	-10	-10	24	200	Die
AGN0942Q	8.5~10	20	41	35	-10	-10	24	200	QFN 6x6 mm ²



GaN 10/15W VHF/UHF/SDR Transistor

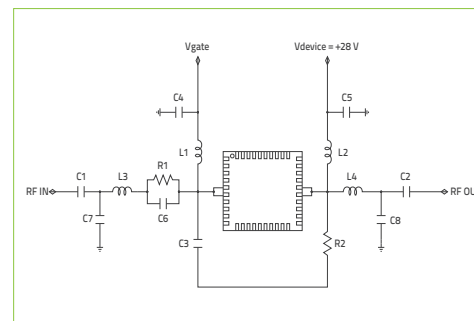


- 10W (AGT0510), 15W (AGT0515)
- Efficiency 63%



(6x6x0.75 mm³)

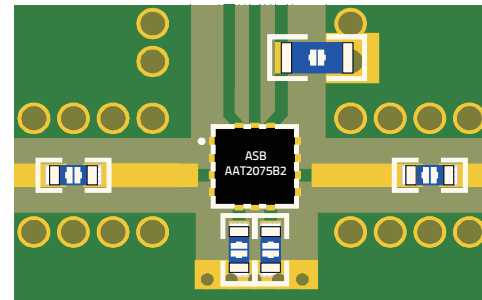
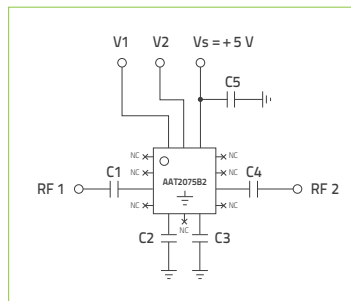
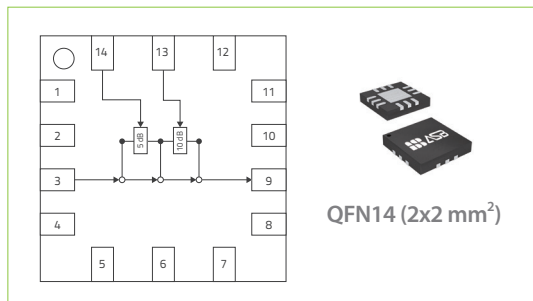
Part No.	Frequency (MHz)	Gain (dB)	S11 (dB)	P3dB (W)	Drain Efficiency (%) @ P3dB	Vd (V)	Idq (mA)
AGT0510	30	21.0	-19	10.0	66	28	60
	250	19.7	-10	10.4	63		
	500	18.4	-13	10.7	55		
AGT0515	30	20.4	-20	10.5	67	28	55
	250	19.4	-13	13.6	62		
	500	18.3	-14	20.8	63		



75 Ω 2-bit Digital Attenuator, DC~2700 MHz



Overshoot-safe Transient
Cost-effective



Part No.	ATTN (dB)	LSB (dB)	IL (dB) @ MHz					Attenuation Accuracy (dB) @ MHz	
			50	500	1200	2000	2700	DC~1200	DC~2700
AAT2073B2	0, 3, 6, 9	3	0.3	0.6	0.7	0.8	2.1	$\pm(0.15+3\%)$	$\pm(0.5+10\%)$
AAT2074B2	0, 4, 8, 12	4	0.4	0.6	0.7	1.0	2.1	$\pm(0.15+3\%)$	$\pm(0.7+10\%)$
AAT2075B2	0, 5, 10, 15	5	0.3	0.4	0.5	0.3	0.9	$\pm(0.15+3\%)$	$\pm(0.5+10\%)$
AAT2076B2	0, 6, 12, 18	6	0.3	0.6	0.7	-	-	$\pm(0.15+5\%)$	-
AAT2077B2	0, 7, 14, 21	7	0.4	0.6	0.7	-	-	$\pm(0.5+10\%)$	-

■ Typical Performance (AAT2075B2)

