



WIRELESS BACKHAUL

CELLULAR REPEATERS/
SIGNAL BOOSTERS

ENTERPRISE/CARRIER-CLASS
WI-FI ACCESS POINTS

SMALL CELLS


BASE STATIONS/DAS

TEST EQUIPMENT/
INSTRUMENTATION

MILITARY COMMUNICATIONS/
GPS



Ultra-LNA™

P/N	Tuning Range (GHz)	Reference Conditions	Gain (dB)	EVB NF (dB)	OP1dB (dBm)	OIP3 (dBm)	Vdd Range (V)	Idd Range (mA)	Internally Matched (50 ohms)	Package (mm)
GRF2051	0.7 - 3.8	1.9 GHz 5.0V; 70mA	19.0	0.37	21.0	36.0	2.7 - 5.0	20 - 100	No	2.0 x 2.0 QFN-12
GRF2052	1.7 - 4.5	2.5 GHz 5.0V; 70mA	19.2	0.50	21.0	38.0	2.7 - 5.0	20 - 100	No	2.0 x 2.0 QFN-12
GRF2070*	0.4 - 1.5	0.9 GHz 5.0V; 75mA	20.8	0.35	20.0	39.5	2.7 - 5.0	20 - 100	No	2.0 x 2.0 DFN-8
GRF2071*	1.4 - 2.7	1.9 GHz 5.0V; 70mA	20.0	0.35	19.0	38.5	2.7 - 5.0	20 - 100	No	2.0 x 2.0 DFN-8
GRF2072*	2.3 - 3.8	2.5 GHz 5.0V; 70mA	19.3	0.50	21.0	38.0	2.7 - 5.0	20 - 100	No	2.0 x 2.0 DFN-8
GRF2073*	3.0 - 6.0	3.6 GHz 5.0V; 70mA	18.9	0.69	18.5	36.5	2.7 - 5.0	20 - 100	No	2.0 x 2.0 DFN-8
GRF2105*	0.4 - 6.0	2.5 GHz 5.0V; 65mA	20.0	0.75	22.0	34.5	2.7 - 5.0	20 - 90	Yes	1.5 x 1.5 DFN-6
GRF2501	4.9 - 6.0	5.5 GHz 3.3V; 15mA	16.0	0.8	7.0	19.0	2.7 - 5.0	12 - 28	Yes	1.5 x 1.5 DFN-6
GRF2541 	4.9 - 6.0	5.5 GHz 3.3V; 15mA	17.5	0.9	7.0	19.0	2.7 - 5.0	12 - 28	Yes	1.5 x 1.5 DFN-6

Note: NF values for internally matched GRF2501/2541 de-embedded

PA / Power-LNA™

P/N	Tuning Range (GHz)	Reference Conditions	Gain (dB)	EVB NF (dB)	OP1dB (dBm)	OIP3 (dBm)	Vdd Range (V)	Idd Range (mA)	Internally Matched (50 ohms)	Package (mm)
GRF3610*	0.05 - 3.8	2.5 GHz 8.0V; 155mA	16.5	0.75	29.0	43.0	4.5 - 8.0	Tied to Vdd	No	SOT-89
GRF5010	0.05 - 6.0	2.5 GHz 8.0V; 130mA	17.5	0.80	28.5	44.0	4.5 - 8.0	50 - 160	No	3.0 x 3.0 QFN-16
GRF5020	0.1 - 6.0	2.5 GHz 10.0V; 170mA	17.0	0.80	30.5	44.0	4.5 - 10.0	50 - 200	No	3.0 x 3.0 QFN-16
GRF5040	0.1 - 3.8	1.9 GHz 10.0V; 220mA	18.5	0.82	31.0	46.0	4.5 - 10.0	100 - 250	No	3.0 x 3.0 QFN-16
GRF5109*	0.4 - 1.5	0.9 GHz 5.0V; 170mA	17.9	1.2	28.3	45.0	2.7 - 5.0	50 - 200	No	3.0 x 3.0 QFN-16
GRF5110*	1.5 - 2.7	1.9 GHz 5.0V; 170mA	14.8	1.3	28.8	45.0	2.7 - 5.0	50 - 200	No	3.0 x 3.0 QFN-16
GRF5115*	0.1 - 2.7	1.9 GHz 5.0V; 300mA	14.4	1.3	32.5	45.7	2.7 - 5.0	200 - 400	No	3.0 x 3.0 QFN-16
GRF5220*	0.1 - 2.7	1.9 GHz 10.0V; 200mA	18.5	1.2	33.0	44.0	4.5 - 10.0	80 - 250	No	3.0 x 3.0 QFN-16
GRF5511*	1.5 - 6.0	5.5 GHz 8.0V; 160 mA	16.0	2.6	29.5	48.0	4.5 - 10.0	50 - 200	No	3.0 x 3.0 QFN-16
GRF5512*	2.5 - 6.0	5.5 GHz 5.0V; 75mA	15.4	1.5	26.8	38.0	2.7 - 6.0	50 - 125	No	3.0 x 3.0 QFN-16




GUERRILLA BLOC™ TECHNOLOGY

Fully integrated ultra-low noise amplifier, driver and PA modules

High Linearity Gain Blocks to C/X Band

P/N	Tuning Range (GHz)	Reference Conditions	Gain (dB)	EVB NF (dB)	OP1dB (dBm)	OIP3 (dBm)	Vdd Range (V)	Idd Range (mA)	Internally Matched (50 ohms)	Package (mm)
GRF3012*	0.05 - 3.8	0.9 GHz 5.0V; 85mA	15.2	1.9	22.0	39.0	3.0 - 9.0	Tied to Vdd	Yes	SOT-89
GRF3013*	0.05 - 5.0	1.9 GHz 8.0V; 140mA	17.2	2.0	27.0	42.0	3.0 - 9.0	Tied to Vdd	Yes	SOT-89
GRF3014*	0.05 - 3.8	0.9 GHz 8.0V; 190mA	15.4	3.3	27.4	41.5	3.0 - 9.0	Tied to Vdd	Yes	SOT-89
GRF3015*	0.05 - 5.0	1.9 GHz 5.0V; 85mA	17.9	1.2	22.7	39.0	3.0 - 9.0	Tied to Vdd	Yes	SOT-89
GRF2012*	0.05 - 5.0	0.9 GHz 5.0V; 90mA	15.2	1.9	22.7	40.0	3.0 - 9.0	30 - 120	Yes	1.5 x 1.5 DFN-6
GRF2013*	0.05 - 8.0	1.9 GHz 5.0V; 90mA	18.8	1.4	23.5	40.0	3.0 - 9.0	40 - 120	Yes	1.5 x 1.5 DFN-6
GRF2014*	0.05 - 3.8	0.9 GHz 8.0V; 165mA	15.9	3.3	28.0	42.8	3.0 - 9.0	50 - 180	Yes	1.5 x 1.5 DFN-6
GRF2003	0.05 - 11.0	6.0 GHz 5.0V; 55mA	12.0	3.8	14.5	28.0	3.0 - 5.0	40 - 80	Yes	1.5 x 1.5 DFN-6
GRF2004	0.05 - 10.0	8.0 GHz 5.0V; 100mA	12.0	1.7	13.0	28.0	3.0 - 5.0	60 - 120	Yes	1.5 x 1.5 DFN-6
GRF3042	Near DC - 13.0	8.0 GHz 45mA	12.5	2.2	14.5	24.5	>= 7.0	35 - 60	Yes	1.5 x 1.5 DFN-6
GRF3044	Near DC - 11.0	8.0 GHz 100mA	12.7	1.8	16.5	27.0	>= 7.0	60 - 120	Yes	1.5 x 1.5 DFN-6

Broadband LNA / Linear Drivers

P/N	Tuning Range (GHz)	Reference Conditions	Gain (dB)	EVB NF (dB)	OP1dB (dBm)	OIP3 (dBm)	Vdd Range (V)	Idd Range (mA)	Internally Matched (50 ohms)	Package (mm)
GRF2505	1.7 - 6.0	5.5 GHz 5.0V; 40mA	13.0	1.0	20.5	35.0	1.8 - 5.0	20 - 60	Yes	1.5 x 1.5 DFN-6
GRF2710	8.0 - 13.0	11.0 GHz 5.0V; 40mA	14.0	2.1	13.0	21.0	4.5 - 8.0	15 - 35	Yes	1.5 x 1.5 DFN-6
GRF3502*	0.1 - 3.8	2.5 GHz 5.0V; 70mA	14.0	0.85	23.5	36.0	3.0 - 5.0	Tied to Vdd	Yes	SOT-89
GRF3503*	0.1 - 2.7	1.9 GHz 5.0V; 100mA	14.0	0.75	25.0	40.5	3.0 - 5.0	Tied to Vdd	Yes	SOT-89
GRF3505*	0.1 - 2.7	1.9 GHz 5.0V; 160mA	15.0	0.75	27.5	41.0	3.0 - 5.0	Tied to Vdd	No	SOT-89
GRF4002	0.1 - 3.8	2.5 GHz 5.0V; 70mA	15.0	0.85	23.5	36.5	1.8 - 5.0	20 - 80	Yes	1.5 x 1.5 DFN-6
GRF4003	0.1 - 3.8	2.5 GHz 5.0V; 95mA	12.5	0.85	25.0	41.0	1.8 - 5.0	30 - 120	Yes	1.5 x 1.5 DFN-6
GRF4004	0.1 - 3.8	2.5 GHz 5.0V; 135mA	12.5	0.85	26.5	43.0	1.8 - 5.0	30 - 150	No	1.5 x 1.5 DFN-6
GRF4005	0.1 - 3.8	2.5 GHz 5.0V; 170mA	13.0	0.85	27.5	43.0	1.8 - 5.0	50 - 200	No	1.5 x 1.5 DFN-6
GRF4042 	0.4 - 2.7	1.9 GHz 5.0V; 70mA	15.5	1.0	22.0	36.0	1.8 - 5.0	20 - 80	Yes	2.0 x 2.0 QFN-12



Guerrilla Armor™ / Bypass Mode

* Samples / EVB available Q3 2016



Making Better Networks

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