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SMALL CELLS

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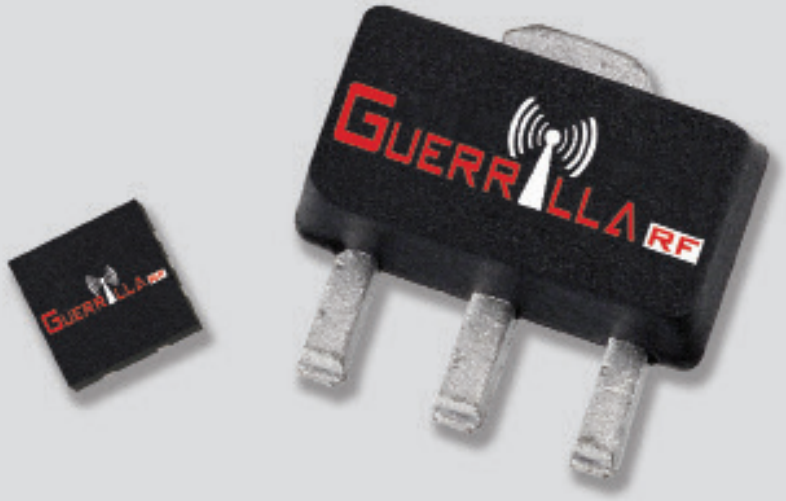

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Making Better Networks

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

Guerrilla RF's high performance RF and Microwave IC products enable greater coverage areas and higher data rates for wireless networks. Focused on a wide variety of infrastructure and general market applications, our unique products utilize our patented Guerrilla Armor technology, world class IC design talents, and cutting edge device technologies to deliver best in class performance. Our team of industry veterans are committed to providing detailed, custom applications support through all stages of your product design process from initial prototyping through mass production. Please see the Guerrilla RF website for all the latest product information at: www.guerrilla-rf.com

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