



Guerrilla RF 1.5 mm DFN-6 Portfolio

LNA/driver, bypass amplifier and gain block solutions using common layout

Guerrilla RF's growing portfolio of ultra-small DFN-6 amplifiers gives designers a wide range of choices for gain, linearity, NF, bypass and failsafe bypass capability all with a single layout. These devices can operate from a wide range of Vdd and Iddq levels thus enabling optimal flexibility/efficiency for a variety of applications.

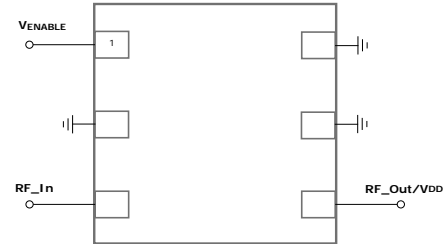


Table 1: Gain Blocks: Flexible bias; Internally matched

Device	Ref Condition (MHz/V/mA)	Gain (dB)	NF (dB)	OP1dB (dBm)	OIP3 (dBm)	Tuning Range (MHz)	Status	Comment
GRF2012	900/5.0/90	15.0	1.9	22.5	40.0	50 - 5000	Production	Broadband linearity; Low noise
GRF2013	1900/5.0/90	18.5	1.3	22.5	38.5	50 - 8000	Production	Broadband linearity; Low noise
GRF2014	900/5.0/150	16.0	3.3	24.0	43.5	50 - 3800	Production	Broadband high linearity

Table 2: LNA/Drivers: Flexible bias; Minimal matching

Device	Ref Condition (MHz/V/mA)	Gain (dB)	NF (dB)	OP1dB (dBm)	OIP3 (dBm)	Tuning Range (MHz)	Status	Comment
GRF2100	900/3.3/6	19.5	0.80	12.6	17.8	100 - 3800	Production	Ultra-low current; High gain; Low noise
GRF2133	1900/5.0/60	28.4	0.65	21.8	30.0	100 - 2700	Production	High gain; Low noise; Internally matched
GRF2505	5500/5.0/45	12.8	1.2	20.3	34.7	4000 - 6000	Production	Linear; Low noise; Internally matched
GRF4001	2500/5.0/45	16.0	1.0	19.5	31.0	100 - 5000	Production	Linear; Low noise; Internally matched
GRF4002	2500/5.0/70	15.0	0.85	23.5	36.5	100 - 3800	Production	Linear; Low noise; Internally matched
GRF4003	2500/5.0/95	12.5	0.85	25.0	41.0	100 - 3800	Production	Linear; Low noise; Internally matched
GRF4004	2500/5.0/135	12.5	0.95	26.7	42.3	100 - 3800	Production	High linearity, Low noise
GRF4005	2500/5.0/170	12.8	0.90	27.5	42.0	100 - 3800	Production	High linearity, Low noise
GRF4014	2500/5.0/65	17.0	0.73	24.8	38.0	100 - 3800	Sampling now	High linearity, Low noise

Table 3: LNA/Driver: Flexible bias; Low-loss bypass

Device	Ref Condition (MHz/V/mA)	Gain (dB)	NF (dB)	OP1dB (dBm)	OIP3 (dBm)	Tuning Range (MHz)	Status	Comment
GRF2140	2450/3.3/18	16.3	1.1	10.0	23.5	100 - 3800	Sampling now	Single control; Bypass loss: 1.5 dB
GRF4142	1900/5.0/50	16.0	0.95	21.5	34.0	50 - 8000	Sampling now	Single control; Bypass loss: 1.5 dB
GRF4152	1900/5.0/50	15.0	0.85	14.5	24.0	50 - 4000	Sampling Q3 2017	Single control; Failsafe bypass loss: 1.5 dB