

SJM Prewell MMIC Application Guide for Communication Market(v19)

LNA / 低噪声放大管

Category	Part Number	Frequency MHz	Gain dB	P1dB dBm	OIP3 dBm	NF dB	Vcc V	Vd V	Id mA	Package Type
LNA	PL08	900	20.2	17.9	32.4	0.81	3	3	45	SOT-363
		1900	14.9	17.7	35.5	0.89				
		2600	11.9	18.1	34.8	1.10				
	PL07A	900	20.2	18.0	32.8	0.69	3	3	45	DFN2*2 8L
		1900	14.6	17.3	33.0	0.86				
		2600	11.5	18.1	34.8	1.16				
	PL03S (Power S/D)	1900	23.1	17.8	33.7	0.46	5	5	80	DFN2*2 8L
		2600	20.4	20.5	32.7	0.73				
		3500	18.9	19.4	32.0	1.00				

IF Gain Block / 中频放大管

Category	Part Number	Frequency	Gain	P1dB	OIP3	NF	Vcc	Vd	Id	Package
		MHz	dB	dBm	dBm	dB	V	V	mA	Type
IF MMIC	PW11A	70	19.7	23.5	44.0	4.4	5	5	80	SOT-89
		250	19.5	24.2	41.6	4.5				
	PW113	70	22.3	20.1	39.3	3.6	5	4.7	88	SOT-89
		250	22.1	20.2	39.0	3.6				
	PW118	70	28.7	18.9	36.3	2.5	5	4.2	76	SOT-89
		250	28.0	19.0	35.2	2.8				
		70	29.2	20.9	40.3	2.8		4.6	115	
		250	28.4	21.2	38.3	2.8				
	PW119	70	22.1	19.2	39.5	2.6	5	4.25	87	SOT-89
		250	21.8	19.3	37.5	2.8				
		70	22.3	20.6	42.1	2.9		4.65	115	
		250	22.0	20.5	39.5	2.9				

Gain Block / 增益放大管

Category	Part Number	Frequency	Gain	P1dB	OIP3	NF	Vcc	Vd	Id	Package
		MHz	dB	dBm	dBm	dB	V	V	mA	Type
GainBlock MMIC 	PG615	900	22.3	19.0	33.6	3.1	5	5	69	SOT-89
		1900	21.5	17.8	31.8	3.4				
		2600	20.4	17.1	30.3	3.5				
		3600	20.0	17.7	28.1	4.3				
	PG631	900	20.4	19.2	35.2	3.8	5	5	68	SOT-89
		1900	18.6	19.1	32.6	4.1				
		2600	17.0	18.1	31.5	4.4				
	PG671	900	15.8	18.8	36.2	4.8	5	5	64	SOT-89
		1900	15.0	18.6	33.3	5.1				
		2600	13.9	17.8	31.9	5.4				
		3600	14.2	17.1	28.6	5.7				
	PG771	900	17.1	19.4	36.9	4.5	5	5	75	SOT-89
		1900	16.1	18.2	33.7	4.8				
		2600	14.9	18.4	32.3	5.1				
		3600	14.9	17.9	29.3	5.5				
	PG751	900	23.2	17.5	33.2	0.8	3.3	3.3	59	SOT-89
		2100	20.4	17.0	33.6	1.0				
		3500	18.3	16.8	33.1	1.1				
		4200	18.1	14.8	28.3	1.3				
		900	23.6	20.2	36.4	0.9	5	5	91	
		2100	20.8	19.7	37.3	1.1				
		3500	18.7	19.5	37.1	1.2				
		4200	18.6	17.4	36.7	1.5				
	PG753 	900	23.3	17.6	32.9	0.8	3.3	3.3	57	DFN2*2 8L
		2100	21.0	17.7	32.3	0.9				
		3500	18.6	17.4	31.7	1.1				
		4250	18.1	15.4	30.7	1.3				
		4750	17.7	16.3	30.8	1.6	5	5	90	
		5800	17.7	13.6	28.1	1.8				
		900	23.8	20.2	36.1	0.9				
		2100	21.5	20.2	35.4	0.9				
		3500	19.1	19.7	35.1	1.2				
		4250	18.6	18.0	34.7	1.4				
		4750	18.2	18.8	36.7	1.6				
		5800	18.2	16.4	36.2	2.0				

Driver / 推动放大管

Category	Part Number	Frequency MHz	Gain dB	P1dB dBm	OIP3 dBm	NF dB	Vcc V	Vd V	Id mA	Package Type
Driver MMIC	PNH16	70	24.7	24.3	42.2	4.5	5	5	84	SOT-89
		900	20.0	23.8	44.1	4.6				
		1900	15.9	24.7	39.3	3.4				
		2600	13.5	24.3	40.1	3.7				

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IF Gain Block / 中频放大管

Category	Part Number	Frequency	Gain	P1dB	OIP3	NF	Vcc	Vd	Id	Package
		MHz	dB	dBm	dBm	dB	V	V	mA	Type
IF MMIC (3.3V)	PNW511	70	28.2	14.6	31.4	2.5	3.3	3.3	50	SOT-363
		250	27.5	14.3	31.1	2.4				
		75	20.5	14.3	34.3	3.6				
	PNW534	300	20.4	14.5	32.6	3.7	3.3	3.3	61	SOT-363
		70	21.3	18.5	36.0	2.1				
		250	20.9	18.1	36.0	2.1				
	PNW566	70	21.3	19.2	36.5	2.1	2.8	2.8	70	SOT-363
		250	20.9	18.1	36.0	2.1				
		250	21.0	18.6	36.5	2.0				

Gain Block / 增益放大管

Category	Part Number	Frequency	Gain	P1dB	OIP3	NF	Vcc	Vd	Id	Package
		MHz	dB	dBm	dBm	dB	V	V	mA	Type
GainBlock MMIC (3.3V)	PNW236	900	22.0	20.5	29.5	1.8	3.3	3.3	35	SOT-363
		1900	17.5	21.2	35.0	2.0				
		2600	15.5	20.1	35.0	2.1				
	PNW255	900	19.2	20.2	28.6	2.6	3.3	3.3	37	SOT-363
		1900	14.8	20.8	30.5	2.6				
		2600	12.4	20.1	31.5	3.1				
	PNW465	900	19.7	20.2	26.5	2.7	3.3	3.3	50	SOT-363
		1900	16.5	21.5	33.6	2.6				
		2600	13.6	21.1	33.6	3.8				
	PNW534	900	20.2	14.0	30.8	4.3	3.3	3.3	61	SOT-363
		1900	19.3	14.0	26.8	4.1				
		2600	18.5	13.3	25.1	4.0				
	PNW566	850	18.2	19.7	36.3	1.9	3	3	85	SOT-363
		1850	14.5	19.8	34.0	2.5				
		2140	13.7	20.3	35.0	2.6				
		2600	11.8	20.8	34.0	2.6				
	NEW PNW351	900	23.5	14.0	31.5	3.2	3.3	3.3	47	SOT-363
		1900	21.5	14.8	32.5	3.3				
		2600	20.5	14.8	30.5	3.7				
		3500	19.5	13.4	28.5	3.7				
	NEW PNW353	3700	19.5	13.2	26.5	3.9	3.3	3.3	63	SOT-363
		900	21.2	18.9	35.4	1.0				
		1900	19.7	18.3	33.9	1.1				
		2600	18.4	18.0	33.6	1.3				
	NEW PNW355	3500	17.2	17.1	36.2	1.4	3.3	3.3	52	SOT-363
		4200	17.2	14.8	34.1	2.1				
		800	23.2	17.8	32.0	0.8				
		2100	19.9	17.4	32.7	1.0				
		3500	17.7	17.9	33.7	1.2				
		4300	17.1	17.1	32.3	1.3	3.3	3.3	52	SOT-363
		4800	18.0	14.4	26.9	1.6				

Mixer / 混频器

Category	Part Number	RF Freq.	IF Freq.	SSB CL	Input IP3	Input P1dB	Vcc	Vd	Id	Package
		MHz	MHz	dB	dBm	dBm	V	V	mA	Type
Mixer	NEW PM485	1700 ~ 1800	50 ~ 500	7.6	32.3	22.0	3.3	3.3	35	MSOP8
		1900 ~ 2000		7.4	32.5	20.7				
		2100 ~ 2200		8.1	32.4	20.0				
		2300 ~ 2400		9.3	31.6	19.2				
		2500 ~ 2600		11.6	33.3	22.6				

Divider / Splitter / 分配器

Insertion Loss is less 3dB split.

Category	Part Number	Frequency	Insertion Loss	Isolation	Amplitude Balance	Phase Balance	Package	
		MHz	dB	dB	dB	deg	Type	
Divider	PD09A	700	0.83	-18.0	0.00	0.03	SOT-26	
		800	0.88	-26.5	0.00	0.12		
		900	0.99	-20.1	0.01	0.01		
	PD18A	1900	0.62	-26.2	0.04	0.05	SOT-26	
		2100	0.77	-20.5	0.02	0.13		
		2300	0.97	-15.9	0.01	0.56		
	PD26A	2300	0.79	-22.1	0.02	0.26	SOT-26	
		2600	0.84	-22.1	0.01	0.43		
		3000	1.07	-16.0	0.02	0.75		
	NEW PD35A	3500	0.54	-33.0	0.05	0.60	SOT-26	
		3800	0.55	-21.5	0.05	0.70		
		4200	0.63	-15.0	0.08	0.90		
Power Splitter	PBS10A	5 ~ 500	0.40	-28.0	0.11	1.00	SMD Base	
		500 ~ 1000	0.70	-20.0	0.09	2.40		
	PBS30A	50 ~ 1500	0.50	-28.0	0.10	0.40	SMD Base	
		1500 ~ 3000	0.80	-13.0	0.50	4.90		

Transformer / 巴伦

Insertion Loss is less 3dB split.

Category	Part	Frequency	Insertion Loss	Amplitude Unbalance	Phase Unbalance	Part	Frequency	Insertion Loss	Amplitude Unbalance	Phase Unbalance
		MHz	dB	dB	deg		MHz	dB	dB	deg
Balun	PBI11C	0.4 ~ 250	0.8	0.1	3.6	PB1T1A	5 ~ 250	1.5	0.4	1.3
		250~500	2.0	0.7	8.3		250~500		2.0	3.7
		5 ~ 1000	0.3	0.9	2.2		5 ~ 250		0.04	0.4
	PBR11S	1000 ~ 3000	2.4	1.1	9.5	PB4T1A	250~500	1.3	0.16	3.8