

## Narrow Band High Power Amplifiers

### FEATURES:

- ❖ Coverage From 0.1 to 45.0 GHz
- ❖ Up to 200 Watt Output Power (at 1dB Compression Point)
- ❖ Single Bias (+15VDC & +28VDC) Power Supply
- ❖ Compact/Rugged Thin-Film Construction
- ❖ Economically Priced



### DESCRIPTION:

### CNP Series

Cernex manufactures a complete line of solid-state power amplifiers for various applications such as line of sight, point to point, and point to multipoint microwave and millimeter-wave radio transmitters. These full-band amplifiers are available with more than 200W output power. Cernex's solid-state power amplifiers are a cost effective solution for TWT's driver amplifiers. The CNP series uses substantially less input power than TWT, and has more gain thus reducing AM/PM problems due to the lower output needed from the up-converters.

### SPECIFICATIONS:

Model Number	Frequency Range (GHz)	Gain (dB) Min. ***	SS Flatness (+/-dB) Max.	NF (dB) Max.	P1dB (dBm) Min.	IP3 (dBm) Typ.	VSWR In/Out Max.	Current @12 VDC (A) Typ.	Case Type
CNPU1U11046	0.136-0.174	10	0.75	10	46	56	-10(Min)	*	4.7 x 2.2 x 0.6
CNPU2U25049	0.230-0.280	50	1.0	10	49	58	2:1	10 **	6.4 x 3.4 x 1.1
CNPU2U44444	0.2-0.4	44	2.0	10	44	52	*	4.5(Max) **	6.4 x 3.4 x 1.1
CNPU2U43746	0.2-0.4	37	1.0	10	46	54	2:1	9.0(Max) **	6.4 x 3.4 x 1.1
CNPU2U45047	0.2-0.4	50	1.5	10	47.5	58	2:1	10 **	6.4 x 3.4 x 1.1
CNPU2U35453	0.29-0.32	54	1.0	15	53	*	-10(Max)	10(Max) **	9.8 x 6.4 x 1.0
CNPU3U34643	0.3-0.35	46	2.0	10	43	52	*	4.0 **	6.4 x 3.4 x 1.1
CNPU4U42353	0.4-0.45	23	1.0	15	53	57	2:1(Min)	10(Max) **	9.8 x 6.4 x 1.0
CNPU4U54441	0.4-0.52	44	1.0	10	41.5	50	2:1	4.0(Max) **	6.0 x 3.0 x 1.0
CNPU4U44644	0.4-0.485	46	0.5	10	44	*	1.5:1	1.6	*
CNPU4U45047	0.42-0.475	50	1.5	10	47.5	58	2:1	10 **	6.4 x 3.4 x 1.1
CNPU4U55453	0.4-0.5	54	1.0	15	53	*	-10(Max)	10(Max) **	9.8 x 6.4 x 1.0
CNPU4U85051	0.47-0.806	50	1.0Typ	10	51.5(typ)	61	2:1	18 (Max) **	250 x 160 x 25mm#
CNPU4U81637J	0.47-0.86	16	2.0	10	37	42	2:1	1.5	4.7 x 3.14 x 0.98
CNPU4U82040J	0.47-0.86	20	2.0	10	40	45	2:1	3	5.9 x 3.14 x 0.98
CNPU4U82747J	0.47-0.86	27	2.0	10	47	52	2:1	15	5.9 x 5.9 x 0.98
CNPU6U85454	0.65-0.806	54	1.0	9	54.5(typ)	63	2:1	25 **	10 x 7.3 x 1.1
CNPU8014443P	0.8-1.0	44	1.5	*	43	50	2:1(In)(Max)	5(Max)**	6 x 3 x 1.1
CNPU8014540P	0.8-1.0	45	1.0	*	40	50	2:1(In)(Max)	3.5(Max) 13V	5.2 x 2.5 x 0.8



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CNPU8014644	0.8-1.0	46	0.75	10	44	*	1.5:1	3.0 **	6.4 x 3.4 x 1.0
CNPU8014846P	0.8-1.0	48	1.25	*	46	54	2:1(In)(Max)	12(Max)**	6.55 x4 x1.1
CNPU8015044P	0.8-1.0	50	1.0	*	44	55	2:1(In)(Max)	8(Max) 13V	6.55 x4 x1.1
CNPU8015351	0.8-1.0	53	1.0	*	51.5	*	2:1	19.5(Max) **	15.8x8.1x1.4
CNPU8013836	0.8-1.2	38	1.5	10	36	45	2:1	1.2 **	6.0 x 3.0 x 1.0
CNPU8U84933H	0.82-0.83	49	1.5	8.0	33	*	1.4	2**	7.8 x 5.5 x 1.02
CNPU8U84933H	0.87-0.88	49	1.5	8.0	33	*	1.4	2**	7.8 x 5.5 x 1.02
CNPU8U84935H	0.87-0.88	49	1.5	8.0	35	*	1.4	2.5**	7.8 x 5.5 x 1.02
CNPU8U84939H	0.87-0.88	49	1.5	8.0	39	*	1.4	3**	7.8 x 5.5 x 1.02
CNPU8U94933H	0.88-0.91	49	1.5	8.0	33	*	1.4	2**	7.8 x 5.5 x 1.02
CNPU9013033	0.90-1.10	30	0.50	7.0	33	43	2:1	1.5	LN6
CNPU9013537	0.90-1.10	35	0.75	7.0	37	47	2:1	2.5	SN8 ▲
CNPU9014040	0.90-1.10	40	1.00	7.0	40	50	2:1	5.0	DN10
CNPU9014543	0.90-1.10	45	1.50	7.0	43	53	2:1	10.0	*
CNPU9U94933H	0.93-0.96	49	1.5	8.0	33	*	1.4	2**	7.8 x 5.5 x 1.02
CNPU9U94935H	0.93-0.96	49	1.5	8.0	35	*	1.4	2.5**	7.8 x 5.5 x 1.02
CNPU9U94939H	0.93-0.96	49	1.5	8.0	39	*	1.4	3**	7.8 x 5.5 x 1.02
CNPU9014539P	0.96-1.21	45	1.0	*	39	49	2:1(In)(Max)	3(Max) 13V	6.25 x2.3 x0.9
CNP01013951	1.03-1.09	39	1.0	*	51.5	*	2:1	*	6.4 x 3.4 x 1.1
CNP010130333	1.10-1.30	30	0.50	7.0	33	43	2:1	1.5	LN6
CNP010135373	1.10-1.30	35	0.75	7.0	37	47	2:1	2.5	SN8 ▲
CNP010140403	1.10-1.30	40	1.00	7.0	40	50	2:1	5.0	SN8
CNP010145433	1.10-1.30	45	1.50	7.0	43	53	2:1	10.0	DN14
CNP010130334	1.20-1.40	30	0.50	7.0	33	43	2:1	1.5	LN6
CNP010135374	1.20-1.40	35	0.75	7.0	37	47	2:1	2.5	SN8 ▲
CNP010140404	1.20-1.40	40	1.00	7.0	40	50	2:1	5.0	SN8
CNP010145434	1.20-1.40	45	1.50	7.0	43	53	2:1	10.0	DN14
CNP01014339P	1.20-1.60	43	1.0	*	39	49	2:1(In)(Max)	3(Max) 13V	6.25 x2.3 x0.83
CNP010130335	1.30-1.50	30	0.50	7.0	33	43	2:1	1.5	LN6
CNP010135375	1.30-1.50	35	0.75	7.0	37	47	2:1	2.5	SN8 ▲
CNP010140405	1.30-1.50	40	1.00	7.0	40	50	2:1	5.0	SN8
CNP010145435	1.30-1.50	45	1.50	7.0	43	53	2:1	10.0	DN14
CNP01014646	1.35-1.45	46	1.0	10	46	56	2:1	18(Max) **	7.0 x 6.3 x 1.1
CNP01011850	1.35-1.85	18	1.0	10	50	60	2:1	32**	*
CNP010130336	1.40-1.60	30	0.50	7.0	33	43	2:1	1.5	LN6
CNP010135376	1.40-1.60	35	0.75	7.0	37	47	2:1	2.5	SN8 ▲
CNP010140406	1.40-1.60	40	1.00	7.0	40	50	2:1	5.0	SN8
CNP010145436	1.40-1.60	45	1.50	7.0	43	53	2:1	10.0	DN14
CNP010130337	1.50-1.70	30	0.50	7.0	33	43	2:1	1.5	LN6
CNP010135377	1.50-1.70	35	0.75	7.0	37	47	2:1	2.5	SN8 ▲
CNP010140407	1.50-1.70	40	1.00	7.0	40	50	2:1	5.0	SN8



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CNP010145437	1.50-1.70	45	1.50	7.0	43	53	2:1	10.0	*
CNP010130338	1.60-1.80	30	0.50	7.0	33	43	2:1	1.5	LN6
CNP010135378	1.60-1.80	35	0.75	7.0	37	47	2:1	2.5	SN8▲
CNP010140408	1.60-1.80	40	1.00	7.0	40	50	2:1	5.0	SN8
CNP010145438	1.60-1.80	45	1.50	7.0	43	53	2:1	10.0	DN14
CNP010130339	1.70-1.90	30	0.50	7.0	33	43	2:1	1.5	LN6
CNP010135379	1.70-1.90	35	0.75	7.0	37	47	2:1	2.5	SN8▲
CNP010140409	1.70-1.90	40	1.00	7.0	40	50	2:1	5.0	SN8
CNP010145439	1.70-1.90	45	1.50	7.0	43	53	2:1	10.0	DN14
CNP01025351	1.70-2.50	53	2.0	*	46	*	1.5	41.6(Max) **	150x150x20m
CNP01015251	1.75-1.85	52	1.0	10	51.5	60	2:1	45(Max) **	8.7 x 7.5 x 1.2
CNP01023033	1.80-2.00	30	0.50	7.0	33	43	2:1	1.5	LN6
CNP01023537	1.80-2.00	35	0.75	7.0	37	47	2:1	2.5	SN8▲
CNP01024040	1.80-2.00	40	1.00	7.0	40	50	2:1	5.0	SN8
CNP01024540P	1.80-2.00	45	1.00	*	40	50	2:1(In)(Max)	3(Max) 13V	6 x 2.75 x 0.83
CNP01024543	1.80-2.00	45	1.50	7.0	43	53	2:1	10.0	DN14
CNP01024546P	1.80-2.00	45	1.00	*	46	55	2:1(In)(Max)	8(Max) 13V	6.55 x 4 x 1.1
CNP01025046P	1.80-2.00	50	1.00	*	46	57	2:1(In)(Max)	10(Max) 13V	6.55 x 4 x 1.1
CNP01025147P	1.80-2.00	51	1.00	*	47	58	2:1(In)(Max)	15(Max) 13V	9 x 6.4 x 1.1
CNP01025350P	1.80-2.00	53	1.00	*	50	59	2:1(In)(Max)	32(Max) 13V	12.8 x 7.6 x 1.1
CNP01024444	1.80-2.20	44	1.00	10	44	51	2:1	7.0	5.7 x 2.7 x 1.0
CNP01024846	1.80-2.20	48	1.50	10	46.5	57	2:1	9.0(Max) **	6.4 x 3.4 x 1.0
CNP01011450	1.85-1.95	14	1.00	*	50	*	1.5	13.0**	150x150x20m
CNP010230331	1.90-2.10	30	0.50	7.0	33	43	2:1	1.5	LN6
CNP010235371	1.90-2.10	35	0.75	7.0	37	47	2:1	2.5	SN8▲
CNP010240401	1.90-2.10	40	1.00	7.0	40	50	2:1	5.0	SN8
CNP010245431	1.90-2.10	45	1.50	7.0	43	53	2:1	10.0	DN14
CNP01014933H	1.92-1.98	49	1.5	8.0	33	*	1.4	2**	7.48 x 3.54 x 1.02
CNP020230332	2.00-2.20	30	0.50	7.0	33	43	2:1	1.5	LN6
CNP020235372	2.00-2.20	35	0.75	7.0	37	47	2:1	2.5	SN8▲
CNP020240402	2.00-2.20	40	1.00	7.0	40	50	2:1	5.0	SN8
CNP020245432	2.00-2.20	45	1.50	7.0	43	53	2:1	10.0	DN14
CNP02022833	2.00-2.30	28	0.5	7.0	33	38	1.8:1	1.2(Max)	LN5
CNP02025251	2.02-2.12	52	1.0	10	51.5	60	2:1	45	8.7 x 7.5 x 1.2
CNP020230333	2.10-2.30	30	0.50	7.0	33	43	2:1	1.5	LN6
CNP020235373	2.10-2.30	35	0.75	7.0	37	47	2:1	2.5	SN8▲
CNP020240403	2.10-2.30	40	1.00	7.0	40	50	2:1	5.0	SN8
CNP020245433	2.10-2.30	45	1.50	7.0	43	53	2:1	10.0	DN14



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CNP02024933H	2.11-2.17	49	1.5	8.0	33	*	1.4	2**	6.73x3.62x1.0 6
CNP020230334	2.20-2.40	30	0.50	7.0	33	43	2:1	1.5	LN6
CNP020235374	2.20-2.40	35	0.75	7.0	37	47	2:1	2.5	SN8▲
CNP020240404	2.20-2.40	40	1.00	7.0	40	50	2:1	5.0	SN8
CNP020245434	2.20-2.40	45	1.50	7.0	43	53	2:1	10.0	DN14
CNP02025044	2.20-2.40	50	1.5	10	44.5	57	2:1	15**	*
CNP02023047	2.20-2.50	30	1.0	10	47.5	57	2:1	23	*
CNP02023844	2.20-2.50	38	1.0	10	44.5	57	2:1	15	6.4 X 3.4 X 1.0
CNP020230335	2.30-2.50	30	0.50	7.0	33	43	2:1	1.5	LN6
CNP020235375	2.30-2.50	35	0.75	7.0	37	47	2:1	2.5	SN8▲
CNP020240405	2.30-2.50	40	1.00	7.0	40	50	2:1	5.0	SN8
CNP020245435	2.30-2.50	45	1.50	7.0	43	53	2:1	10.0	DN14
CNP02024846P	2.30-2.50	48	0.75	*	46	56	2:1(In)(Max)	12(Max) 13V	6.6 x4 x1.1
CNP02023431P	2.40-2.50	34	0.75	*	31	42	2:1(In)(Max)	0.8(Max) 13V	3 x2.2 x0.6
CNP02023836P	2.40-2.50	38	0.75	*	36	46	2:1(In)(Max)	1.8(Max) 13V	4 x2.8 x0.8
CNP02024139P	2.40-2.50	41	0.75	*	39	49	2:1(In)(Max)	3.5(Max) 13V	4 x2.8 x0.8
CNP02023850	2.40-2.50	38	0.50	8.0	50	60	1.5:1	15	14.2x8.6x2.5
CNP020230336	2.40-2.60	30	0.50	7.0	33	43	2:1	1.5	LN6
CNP020235376	2.40-2.60	35	0.75	7.0	37	47	2:1	2.5	SN8▲
CNP020240406	2.40-2.60	40	1.00	7.0	40	50	2:1	5.0	SN8
CNP020245436	2.40-2.60	45	1.50	7.0	43	53	2:1	10.0	DN14
CNP020230337	2.50-2.70	30	0.50	7.0	33	43	2:1	1.5	LN6
CNP020235377	2.50-2.70	35	0.75	7.0	37	47	2:1	2.5	SN8▲
CNP020240407	2.50-2.70	40	1.00	7.0	40	50	2:1	5.0	SN8
CNP020245437	2.50-2.70	45	1.50	7.0	43	53	2:1	10.0	*
CNP02025045	2.50-2.70	50	1.5	7.0	45	55	2:1	15.0	*
CNP02025047	2.50-2.70	50	1.5	7.0	47	57	2:1	25	*
CNP020230338	2.60-2.80	30	0.50	7.0	33	43	2:1	1.5	LN6
CNP020235378	2.60-2.80	35	0.75	7.0	37	47	2:1	2.5	SN8▲
CNP020240408	2.60-2.80	40	1.00	7.0	40	50	2:1	5.0	SN8
CNP020245438	2.60-2.80	45	1.50	7.0	43	53	2:1	10.0	DN14
CNP020230339	2.70-2.90	30	0.50	7.0	33	43	2:1	1.5	LN6
CNP02023533	2.70-2.90	35	0.75	6.0	33	43	2:1	1.2	LN7
CNP020235379	2.70-2.90	35	0.75	7.0	37	47	2:1	2.5	SN8▲
CNP02024038	2.70-2.90	40	1	4.0	38		2:1	2.85	*
CNP020240409	2.70-2.90	40	1.00	7.0	40	50	2:1	5.0	SN8
CNP020245439	2.70-2.90	45	1.50	7.0	43	53	2:1	10.0	DN14
CNP02033033	2.80-3.00	30	0.50	7.0	33	43	2:1	1.5	LN6
CNP02033537	2.80-3.00	35	0.75	7.0	37	47	2:1	2.5	SN8▲
CNP02034040	2.80-3.00	40	1.00	7.0	40	50	2:1	5.0	SN8



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CNP02034543	2.80-3.00	45	1.50	7.0	43	53	2:1	10.0	DN14
CNP020330331	2.90-3.10	30	0.50	7.0	33	43	2:1	1.5	LN6
CNP020335371	2.90-3.10	35	0.75	7.0	37	47	2:1	2.5	SN8▲
CNP020340401	2.90-3.10	40	1.00	7.0	40	50	2:1	5.0	SN8
CNP020345431	2.90-3.10	45	1.50	7.0	43	53	2:1	10.0	DN14
CNP030330332	3.00-3.20	30	0.50	7.0	33	43	2:1	1.5	LN6
CNP030335372	3.00-3.20	35	0.75	7.0	37	47	2:1	2.5	SN8▲
CNP030340402	3.00-3.20	40	1.00	7.0	40	50	2:1	5.0	SN8
CNP030345432	3.00-3.20	45	1.50	7.0	43	53	2:1	10.0	DN14
CNP030330333	3.10-3.30	30	0.50	7.0	33	43	2:1	1.5	LN6
CNP030335373	3.10-3.30	35	0.75	7.0	37	47	2:1	2.5	SN8▲
CNP030340403	3.10-3.30	40	1.00	7.0	40	50	2:1	5.0	SN8
CNP030345433	3.10-3.30	45	1.50	7.0	43	53	2:1	10.0	DN14
CNP030350453	3.10-3.30	50	1.5	7.0	45	55	2:1	15.0	*
CNP030350473	3.10-3.30	50	1.5	7.0	47	57	2:1	25	*
CNP030330333	3.10-3.50	30	0.75	7.0	33	43	2:1	1.5	LN6
CNP03033536	3.10-3.50	35	1.00	7.0	36	46	2:1	2.5	SN8▲
CNP03033537	3.10-3.50	35	1.00	7.0	37	47	2:1	2.5	SN8▲
CNP03034039	3.10-3.50	40	1.00	7.0	39	49	2:1	5.0	SN8
CNP03034040	3.10-3.50	40	1.00	7.0	40	50	2:1	5.0	SN8
CNP03034543	3.10-3.50	45	1.00	7.0	43	53	2:1	10.0	DN14
CNP030350455A	3.10-3.50	50	1.50	7.0	45	55	2:1	15.0	*
CNP03035047	3.10-3.50	50	1.50	7.0	47	57	2:1	25	*
CNP030330334	3.20-3.40	30	0.50	7.0	33	43	2:1	1.5	LN6
CNP030335374	3.20-3.40	35	0.75	7.0	37	47	2:1	2.5	SN8▲
CNP030340404	3.20-3.40	40	1.00	7.0	40	50	2:1	5.0	SN8
CNP030345434	3.20-3.40	45	1.50	7.0	43	53	2:1	10.0	DN14
CNP030350454	3.20-3.40	50	1.5	7.0	45	55	2:1	15.0	*
CNP030350474	3.20-3.40	50	1.5	7.0	47	57	2:1	25	*
CNP030330335	3.30-3.50	30	0.50	7.0	33	43	2:1	1.5	LN6
CNP030335375	3.30-3.50	35	0.75	7.0	37	47	2:1	2.5	SN8▲
CNP030340405	3.30-3.50	40	1.00	7.0	40	50	2:1	5.0	SN8
CNP030345435	3.30-3.50	45	1.50	7.0	43	53	2:1	10.0	DN14
CNP030350455	3.30-3.50	50	1.5	7.0	45	55	2:1	15.0	*
CNP030350475	3.30-3.50	50	1.5	7.0	47	57	2:1	25	*
CNP030330336	3.40-3.60	30	0.50	7.0	33	43	2:1	1.5	LN6
CNP030335376	3.40-3.60	35	0.75	7.0	37	47	2:1	2.5	SN8▲
CNP030340406	3.40-3.60	40	1.00	7.0	40	50	2:1	5.0	SN8
CNP030345436	3.40-3.60	45	1.50	7.0	43	53	2:1	10.0	DN14
CNP030350456	3.40-3.60	50	1.50	7.0	45	55	2:1	15.0	*
CNP030350476	3.40-3.60	50	1.50	7.0	47	57	2:1	25	*



## Narrow Band High Power Amplifiers

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CNP03033033	3.40-3.90	30	0.75	7.0	33	43	2:1	1.5	LN6
CNP03033536	3.40-3.90	35	1.00	7.0	36	46	2:1	2.5	SN8▲
CNP03033537	3.40-3.90	35	1.00	7.0	37	47	2:1	2.5	SN8▲
CNP03034039	3.40-3.90	40	1.00	7.0	39	49	2:1	5.0	SN8
CNP03034040	3.40-3.90	40	1.00	7.0	40	50	2:1	5.0	SN8
CNP030345439	3.40-3.90	45	1.00	7.0	43	53	2:1	10.0	DN14
CNP030350459	3.40-3.90	50	1.50	7.0	45	55	2:1	15.0	*
CNP030350499	3.40-3.90	50	1.50	7.0	49	59	2:1	50	*
CNP03033836P	3.50-3.60	38	0.75	*	36	46	2:1(In)(Max)	1.8(Max) 13V	4 x2.8 x0.8
CNP030330337	3.50-3.70	30	0.50	7.0	33	43	2:1	1.5	LN6
CNP030335377	3.50-3.70	35	0.75	7.0	37	47	2:1	2.5	SN8▲
CNP030340407	3.50-3.70	40	1.00	7.0	40	50	2:1	5.0	SN8
CNP030345437	3.50-3.70	45	1.50	7.0	43	53	2:1	10.0	DN14
CNP030350457	3.50-3.70	50	1.50	7.0	45	55	2:1	15.0	*
CNP030350477	3.50-3.70	50	1.50	7.0	47	57	2:1	25	*
CNP030330338	3.60-3.80	30	0.50	7.0	33	43	2:1	1.5	LN6
CNP030335378	3.60-3.80	35	0.75	7.0	37	47	2:1	2.5	SN8▲
CNP030340408	3.60-3.80	40	1.00	7.0	40	50	2:1	5.0	SN8
CNP030345438	3.60-3.80	45	1.50	7.0	43	53	2:1	10.0	DN14
CNP030350458	3.60-3.80	50	1.50	7.0	45	55	2:1	15.0	*
CNP030350478	3.60-3.80	50	1.50	7.0	47	57	2:1	25	*
CNP030350459A	3.70-3.90	50	1.50	7.0	45	55	2:1	15.0	*
CNP030350479	3.70-3.90	50	1.50	7.0	47	57	2:1	25	*
CNP03043333	3.70-4.20	33	0.50	7.0	33	43	2:1	2.0	LN6
CNP03043537	3.70-4.20	35	0.75	7.0	36	46	2:1	3.5	SN8
CNP03043737	3.70-4.20	37	0.75	7.0	37	47	2:1	3.5	SN8
CNP03044040	3.70-4.20	40	1.00	7.0	40	50	2:1	5.5	SN8
CNP03044343	3.70-4.20	43	1.50	7.0	43	53	2:1	11.0	SN12I
CNP03044045	3.70-4.20	40	1.75	7.0	45	55	2:1	15.0	*
CNP03045047	3.70-4.20	50	1.75	7.0	47	57	2:1	25	*
CNP03045049	3.70-4.20	50	1.75	7.0	49	59	2:1	35.0	*
CNP04053333	4.40-5.00	33	0.50	7.0	33	43	2:1	2.0	LN6
CNP04053536	4.40-5.00	35	0.75	7.0	36	46	2:1	3.5	SN8▲
CNP04053737	4.40-5.00	37	0.75	7.0	37	47	2:1	3.5	*
CNP04054040	4.40-5.00	40	1.00	7.0	40	50	2:1	5.5	SN12I
CNP04054343	4.40-5.00	43	1.50	7.0	43	53	2:1	11.0	SN12I
CNP04055045	4.40-5.00	50	1.50	7.0	45	55	2:1	15.0	PNC19
CNP04055047	4.40-5.00	50	1.50	7.0	47	57	2:1	27	PNC19
CNP04055049	4.40-5.00	50	1.50	7.0	49	59	2:1	50	2 of PNC19
CNP05054033	5.30-5.90	40	0.50	7.0	33	43	2:1	2.0	LN6
CNP05053536	5.30-5.90	35	0.75	7.0	36	46	2:1	3.5	SN8▲



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CNP05054537	5.30-5.90	45	0.75	7.0	37	47	2:1	3.5	*
CNP05054840	5.30-5.90	48	1.00	7.0	40	50	2:1	5.5	*
CNP05055143	5.30-5.90	51	1.50	7.0	43	53	2:1	11.0	*
CNP05055045	5.30-5.90	50	1.50	7.0	45	55	2:1	15.0	*
CNP05055047	5.30-5.90	50	1.50	7.0	47	57	2:1	27	*
CNP05055049	5.30-5.90	50	1.50	7.0	49	59	2:1	50	*
CNP05053937	5.40-5.80	39	1	7.0	37		2:1	<a href="#">15V@5.0</a>	SN8
CNP05054540	5.40-5.80	45	1	7.0	40		2:1	15V@5.0	SN12I
CNP05052033	5.40-5.80	20	0.5 Typ		33		2:1	1.5	LN5
CNP05064033	5.90-6.40	40	0.50	7.0	33	43	2:1	2.0	LN6
CNP05063536	5.90-6.40	35	0.75	7.0	36	46	2:1	3.5	SN8▲
CNP05064537	5.90-6.40	45	0.75	7.0	37	47	2:1	3.5	DN8
CNP05064140P	5.90-6.40	41	1.00	*	40	50	2:1(In)(Max)	7(Max) 13V	7.1 x2.8 x1.1
CNP05064840	5.90-6.40	48	1.00	7.0	40	50	2:1	6.5	*
CNP05064743P	5.90-6.40	47	1.00	*	43	54	2:1(In)(Max)	13(Max) 13V	8.4 x2.9 x1.1
CNP05065143	5.90-6.40	51	1.50	7.0	43	53	2:1	12.0	*
CNP05065045	5.90-6.40	50	1.50	7.0	45	55	2:1	15.0	*
CNP05065047	5.90-6.40	50	1.50	7.0	47	57	2:1	27	*
CNP05065049	5.90-6.40	50	1.50	7.0	49	59	2:1	50	*
CNP06074033	6.40-7.20	40	0.50	7.0	33	43	2:1	2.0	LN7▲
CNP06073536	6.40-7.20	35	0.75	7.0	36	46	2:1	3.5	*
CNP06074537	6.40-7.20	45	0.75	7.0	37	47	2:1	3.5	*
CNP06074840	6.40-7.20	48	1.00	7.0	40	50	2:1	6.5	*
CNP06075143	6.40-7.20	51	1.50	7.0	43	53	2:1	12.0	SN12I
CNP06075045	6.40-7.20	50	1.50	7.0	45	55	2:1	15.0	*
CNP06075047	6.40-7.20	50	1.50	7.0	47	57	2:1	20.0	PNC19
CNP06075049	6.40-7.20	50	1.50	7.0	49	59	2:1	35.0	*
CNP070740339	7.14-7.90	40	0.50	7.0	33	43	2:1	2.0	LN7▲
CNP07073536	7.10-7.90	35	0.75	7.0	36	46	2:1	3.5	DN8
CNP07075045	7.10-7.90	50	1.50	7.0	45	55	2:1	15.0	*
CNP07075047	7.10-7.90	50	1.50	7.0	47	57	2:1	27	*
CNP07075049	7.10-7.90	50	1.50	7.0	49	59	2:1	50	*
CNP07083536	7.10-8.50	35	1.0	7.0	36	46	2:1	3.5	*
CNP07083537	7.10-8.50	35	1.0	7.0	37	47	2:1	3.5	DN8
CNP07085040	7.10-8.50	50	1.0	7.0	40	50	2:1	6.5	SN12I
CNP07085045	7.10-8.50	50	1.50	7.0	45	55	2:1	24	PNC17B
CNP07085047	7.10-8.50	50	2	7.0	47	57	2:1	48	2XPNC17B
CNP070740338	7.20-7.80	40	0.50	7.0	33	43	2:1	2.5	LN7▲
CNP07074537	7.20-7.80	45	0.75	7.0	37	47	2:1	3.5	*
CNP07074840	7.20-7.80	48	1.00	7.0	40	50	2:1	6.5	*



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CNP07075143	7.20-7.80	51	1.50	7.0	43	53	2:1	12.0	*
CNP07084033	7.90-8.40	40	0.50	7.0	33	43	2:1	2.5	LN7▲
CNP07084537	7.90-8.40	45	0.75	7.0	37	47	2:1	3.5	*
CNP07084840	7.90-8.40	48	1.00	7.0	40	50	2:1	6.5	SN12I
CNP07085143	7.90-8.40	51	1.50	7.0	43	53	2:1	12.0	QNC17B-2
CNP08094033	8.50-9.60	40	0.50	7.0	33	43	2:1	2.5	SN8▲
CNP08093536	8.50-9.60	35	1.0	7.0	36	46	2:1	3.5	*
CNP08094537	8.50-9.60	45	0.75	7.0	37	47	2:1	3.5	*
CNP08094040	8.50-9.60	40	1.5		40		2:1	8.0	DN10
CNP08094840	8.50-9.60	48	1.00	7.0	40	50	2:1	6.5	SN12I
CNP08095043	8.50-9.60	50	1.5	7.0	43	53	2:1	12.0	QNC13A
CNP08095045	8.50-9.60	50	1.5	7.0	45	55	2:1	25	PNC17A
CNP09094033	9.00-9.50	40	0.50	7.0	33	43	2:1	2.5	SN8▲
CNP09094537	9.00-9.50	45	0.75	7.0	37	47	2:1	3.5	*
CNP09094840	9.00-9.50	48	1.00	7.0	40	50	2:1	6.5	*
CNP09091033	9.30-9.50	10	0.25		33		2:1	0.9	LN4
CNP09094043	9.30-9.50	40	0.5 Typ		43 Typ		2:1 Typ	13	DN4
CNP09093534	9.00-9.60	35	1		34.77		2:1	2.0	MKP4
CNP09104033	9.50-10.50	40	0.50	7.0	33	43	2:1	2.5	LN7▲
CNP09103536	9.50-10.50	35	1.0	7.0	36	46	2:1	3.5	*
CNP09104537	9.50-10.50	45	0.75	7.0	37	47	2:1	3.5	*
CNP09104840	9.50-10.50	48	1.00	7.0	40	50	2:1	6.5	*
CNP09105041	9.50-10.50	50	1.5	7.0	41.5	51.5	2:1	12.0	DN14
CNP09105042	9.50-10.50	50	1.5	7.0	42.5	52.5	2:1	15	*
CNP09105044	9.50-10.50	50	1.5	7.0	44	54	2:1	27	PNC19B
CNP09103432	9.80-10.20	34	1.0	7.0	32		2:1	2.0	LN7
CNP10104033	10.50-10.70	40	0.50	7.0	33	43	2:1	2.5	LN7▲
CNP10104537	10.50-10.70	45	0.75	7.0	37	47	2:1	4.2	*
CNP10104840	10.50-10.70	48	1.00	7.0	40	50	2:1	8.0	*
CNP10114033	10.70-11.70	40	0.50	7.0	33	43	2:1	2.5	LN7▲
CNP10114536	10.70-11.70	45	0.75	7.0	36	46	2:1	4.2	*
CNP10113537	10.70-11.70	35	1.0	7.0	37	47	2:1	4.2	*
CNP10114840	10.70-11.70	48	1.00	7.0	40	50	2:1	8.0	*
CNP10115041	10.70-11.70	50	1.5	7.0	41.5	51.5	2:1	12.0	*
CNP10115042	10.70-11.70	50	1.5	7.0	42.5	52.5	2:1	15.0	*
CNP10115044	10.70-11.70	50	1.5	7.0	44.0	54	2:1	25	*
CNP11124033	11.70-12.20	40	0.50	7.0	33	43	2:1	2.5	LN7▲
CNP11124536	11.70-12.20	45	0.75	7.0	36	46	2:1	4.2	*
CNP11124839	11.70-12.20	48	1.00	7.0	39	49	2:1	8.0	*
CNP12124033	12.20-12.70	40	0.50	7.0	33	43	2:1	2.5	SN8▲
CNP12124536	12.20-12.70	45	0.75	7.0	36	46	2:1	4.2	*





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CNP12124839	12.20-12.70	48	1.00	7.0	39	49	2:1	8.0	*
CNP12134033	12.70-13.20	40	0.50	8.0	33	43	2:1	2.5	LN7▲
CNP12134536	12.70-13.20	45	0.75	8.0	36	46	2:1	4.2	*
CNP12134537	12.70-13.20	45	0.75	8.0	37	47	2:1	4.2	*
CNP12134839	12.70-13.20	48	1.00	8.0	39	49	2:1	8.0	*
CNP12134840	12.70-13.20	48	1.00	8.0	40	50	2:1	8.0	*
CNP12135041	12.70-13.20	50	1.50	8.0	41.5	51.5	2:1	12.0	*
CNP12135042	12.70-13.20	50	1.50	8.0	42.5	52.5	2:1	15.0	*
CNP12135044	12.70-13.20	50	1.50	8.0	44	55	2:1	20.0	*
CNP13144033	13.20-14.20	40	0.50	8.0	33	43	2:1	2.5	LN7▲
CNP13144536	13.20-14.20	45	0.75	8.0	36	46	2:1	4.2	*
CNP13144839	13.20-14.20	48	1.00	8.0	39	49	2:1	8.0	*
CNP13143333	13.75-14.5	33	1.00	8.0	33	43	2:1	1.7	LN7▲
CNP13143535	13.75-14.5	35	1.25	8.0	35	45	2:1	3.0	*
CNP13143737	13.75-14.5	37	1.25	8.0	37	47	2:1	4.2	*
CNP13144040	13.75-14.5	40	1.50	8.0	40	50	2:1	8.0	*
CNP13145041	13.75-14.5	50	1.50	8.0	41.5	51.5	2:1	12.0	*
CNP13145042	13.75-14.5	50	1.50	8.0	42.5	52.5	2:1	15.0	*
CNP13145044	13.75-14.5	50	1.50	8.0	44	54	2:1	20.0	*
CNP14144033	14.00-14.50	40	0.50	8.0	33	43	2:1	2.5	LN7▲
CNP14144536	14.00-14.50	45	0.75	8.0	36	46	2:1	4.2	*
CNP14144537	14.00-14.50	45	0.75	8.0	37	47	2:1	4.2	*
CNP14144839	14.00-14.50	48	1.00	8.0	39	49	2:1	8.0	*
CNP14145041	14.00-14.50	50	1.50	8.0	41.5	51.5	2:1	12.0	*
CNP14145042	14.00-14.50	50	1.50	8.0	42.5	52.5	2:1	15.0	*
CNP14145044	14.00-14.50	50	1.50	8.0	44	54	2:1	20.0	*
CNP14154543	14.5-15.00	45	1.0Typ		43		2:1	22	PNC19A-1
CNP14154033	14.50-15.30	40	0.50	8.0	33	43	2:1	2.5	LN7▲
CNP14154536	14.50-15.30	45	0.75	8.0	36	46	2:1	4.2	*
CNP14154837	14.50-15.30	48	1.00	8.0	37	47	2:1	4.5	*
CNP14155039	14.50-15.30	50	1.50	8.0	39	49 typ	2:1	8.0	*
CNP14155041	14.50-15.30	50	1.50	8.0	41.5	51.5 typ	2:1	12.0	*
CNP15154033	15.40-15.90	40	0.50	8.0	33	40	2:1	4.5	SN8▲
CNP15154335	15.40-15.90	43	0.75	8.0	35	42	2:1	4.2	*
CNP15154636	15.40-15.90	46	1.00	8.0	36	43	2:1	4.5	*
CNP16164033	16.00-16.50	40	0.50	8.0	33	40	2:1	2.5	SN8▲
CNP16164335	16.00-16.50	43	0.75	8.0	35	43	2:1	4.2	*
CNP16164636	16.00-16.50	46	1.00	8.0	36	42	2:1	4.5	*



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CNP16174033	16.50-17.50	40	0.50	8.0	33	40	2:1	2.5	SN8▲
CNP16174636	16.50-17.50	46	1.00	8.0	36	42	2:1	5.0	*
CNP17174033	17.10-17.60	40	0.50	8.0	33	40	2:1	2.5	SN8
CNP17174535	17.10-17.60	45	1.00	8.0	35	42	2:1	4.5	DN8
CNP17183041	17.50-18.00	30	1.00	*	41	*	2:1	20.0	QNK10A
CNP17194033	17.70-19.70	40	1.00	10.0	33	40	2:1	2.5	SN8▲
CNP17194535	17.70-19.70	45	1.50	10.0	35	42	2:1	4.5	DN8
CNP18184033	18.10-18.60	40	0.50	10.0	33	40	2:1	2.5	SN8▲
CNP18184636	18.10-18.60	46	1.00	10.0	36	43	2:1	5.0	*
CNP18185038	18.10-18.60	50	1.00	10.0	38	45	2:1	8.0	*
CNP18204033	18.50-20.00	40	1.00	10.0	33	40	2:1	3.0	SN8▲
CNP18204535	18.50-20.00	45	1.00	10.0	35	42	2:1	5.0	DN8
CNP18205037	18.50-20.00	50	1.50	10.0	37	44	2:1	7.0	*
CNP20213033	20.00-21.00	30	2.00	10.0	33	40	2:1	3.0	*
CNP20213535	20.00-21.00	35	2.00	10.0	35	42	2:1	6.0	*
NP21223033	21.00-22.00	30	2.00	10.0	33	40	2:1	3.0	*
CNP21223535	21.00-22.00	35	3.00	10.0	35	42	2:1	6.0	*
CNP22234033	22.00-23.00	40	2.00	10.0	33	40	2:1	3.0	*
CNP22234535	22.00-23.00	45	3.00	10.0	35	42	2:1	6.0	*
CNP23244033	23.00-24.00	40	2.00	10.0	33	40	2:1	3.0	*
CNP23244535	23.00-24.00	45	3.00	10.0	35	42	2:1	6.0	*
CNP24254033	24.00-25.00	40	2.00	10.0	33	40	2:1	3.0	*
CNP24254535	24.00-25.00	45	3.00	10.0	35	42	2:1	6.0	*
CNP25264033	25.00-26.00	40	2.00	10.0	33	40	2:1	3.0	*
CNP25264535	25.00-26.00	45	3.00	10.0	35	42	2:1	6.0	*
CNP25264543	25.20-26.50	45	1.50	10	43P <sub>sat</sub>	50	2:1	50.0	*
CNP26274033	26.00-27.00	40	2.0	10.0	33	40	2:1	3.0	*
CNP26274535	26.00-27.00	45	3.0	10.0	35	42	2:1	6.0	*
CNP26273939	26.50-27.50	39	1.0Typ		39		2:1	16	MKP10A-1
CNP27284033	27.00-28.00	40	2.0	10.0	33	40	2:1	3.0	*
CNP27284535	27.00-28.00	45	3.0	10.0	35	42	2:1	6.0	*
CNP28294033	28.00-29.00	40	2.0	10.0	33	40	2:1	3.0	*
CNP28294535	28.00-29.00	45	3.0	10.0	35	42	2:1	6.0	*
CNP28313033	28.00-31.00	30	3.0	10.0	33	40	2:1	4.0	CP5
CNP28313535	28.00-31.00	35	3.5	10.0	35	42	2:1	6.0	CKP5
CNP28314039	28.00-31.00	40	5.00	10.0	39	46	2:1	22.0	*
CNP29304033	29.00-30.00	40	2.0	10.0	33	40	2:1	3.0	*
CNP29304535	29.00-30.00	45	3.0	10.0	35	42	2:1	6.0	*
CNP29313535	29.00-31.00	35	3.0	10.0	35	42	2:1	6.0	CKP5



## Narrow Band High Power Amplifiers

Model Number	Frequency Range (GHz)	Gain (dB) Min. ***	SS Flatness (+/-dB) Max.	NF (dB) Max.	P1dB (dBm) Min.	IP3 (dBm) Typ.	VSWR In/Out Max.	Current @12 VDC ( A ) Typ.	Case Type
CNP29313537	29.00-31.00	35	4.0	10.0	37	44	2:1	11.0	*
CNP29314037	29.00-31.00	40	4.5	10.0	37	44	2:1	22.0	*
CNP29314041	29.00-31.00	40	2.5	10.0	41Psat	47	2:1	12.0	CKP5
CNP30314033	30.00-31.00	40	2.0	10.0	33	40	2:1	3.0	*
CNP30314535	30.00-31.00	45	3.0	10.0	35	42	2:1	6.0	*
CNP31324033	31.00-32.00	40	2.0	10.0	33	40	2:1	3.0	*
CNP31324535	31.00-32.00	45	3.0	10.0	35	42	2:1	6.0	*
CNP32334033	32.00-33.00	40	2.0	10.0	33	40	2:1	3.0	*
CNP32334535	32.00-33.00	45	3.0	10.0	35	42	2:1	6.0	*
CNP33344033	33.00-34.00	40	2.0	10.0	33	40	2:1	3.0	*
CNP33344535	33.00-34.00	45	3.0	10.0	35	42	2:1	6.0	*
CNP34354033	34.00-35.00	40	2.0	10.0	33	40	2:1	3.0	*
CNP34354535	34.00-35.00	45	3.0	10.0	35	42	2:1	6.0	*
CNP34362535	34.00-36.00	25	0.5		35		2:1	7.0	CKP5
CNP35364033	35.00-36.00	40	2.0	10.0	33	40	2:1	3.0	*
CNP35364535	35.00-36.00	45	3.0	10.0	35	42	2:1	6.0	*
CNP35373636	35.00-37.00	36	1.0	*	36 (Psat)	*	2:1	8.0	CKP5
CNP36374033	36.00-37.00	40	2.0	10.0	33	40	2:1	3.0	*
CNP36374535	36.00-37.00	45	3.0	10.0	35	42	2:1	6.0	*
CNP37384033	37.00-38.00	40	2.0	10.0	33	40	2:1	3.0	*
CNP37384535	37.00-38.00	45	3.0	10.0	35	42	2:1	6.0	*
CNP39404033	39.00-40.00	40	2.0	10.0	33	40	2:1	3.0	*
CNP39404535	39.00-40.00	45	3.0	10.0	35	42	2:1	10.0	*

ALL SPECIFICATIONS ARE GUARANTEED @ 25°C

OTHER FREQUENCY BANDS & HIGHER POWER ARE ALSO AVAILABLE.

\* CONSULT THE FACTORY.

\*\* VDC is 28V.

.▲ SMALLER PACKAGE ARE ALSO AVAILABLE.

H: Monitoring Interface RS-485 (DB9 Female)

# PROTECTIONS:-OVER TEMP PROTECTION

-OPEN LOAD PROTECTION

\*\*\* GAIN WINDOW IS 10dB

CERNEX RESERVE THE RIGHT TO CHANGE THE SPECIFICATIONS WITHOUT NOTICE.