

Narrowband High Power Amplifiers (GaN)

FEATURES:

- ❖ Coverage From 0.02 to 18.0 GHz (Octave/Multi-octave)
- ❖ Up To 200 Watt Output Power (@Psat)
- ❖ Single Bias Power Supply
- ❖ Compact Thin-Film and Package Construction
- ❖ Economically Priced

APPLICATIONS:

- ❖ General High Power Laboratory RF Sources.
- ❖ Output Amplifiers in test Equipment (ATE & AGE)
- ❖ Driver Amplifiers in RF Distribution Networks
- ❖ Driver Amplifiers for TWTAs
- ❖ UAV & UGV



CNP (GaN) Series

DESCRIPTION:

Cernex's **CNP GaN series** amplifiers are designed for use in a wide range of general purpose applications such as laboratory test equipment, instrumentation and other applications requiring high power output. Reliable operation is achieved using rugged stripline circuit construction with selected GaN devices.

SPECIFICATIONS:

Model Number	Frequency Range (GHz)	Gain (dB) Min.	SS Flatness (+/-dB) Max.	NF (dB) Max.	Psat (dBm) Min.	VSWR In/Out Max.	Voltage(V) Current(A) Typ. **	Case Type	ECCN
CNPG02043548	2.7-4.0	35	2.00	8.0	48 Typ	2/3:1 Typ	28V, 8.0A	-	EAR99
CNPG02044050	2.7-4.0	40	2.50	8.0	50 Typ	2:1	28V, 16.0A	-	EAR99
CNPG02044552	2.7-4.0	45	3.00	8.0	52 Typ	2:1	28V, 32.0A	-	EAR99
CNPG05094545	5.5-9.0	45	5.00 Typ	8.0	45	2:1	28V, 5.0A	-	3A001.b.4.b
CNPG05094548	5.5-9.0	45	5.00 Typ	8.0	48	2:1	28V, 10.0A	-	3A001.b.4.b
CNPG05083543	5.7-8.5	35	5.00	8.0	43 Typ	2/3:1 Typ	28V, 3.0A	-	3A001.b.4.b
CNPG05084045	5.7-8.5	40	5.50	8.0	45 Typ	2:1 Typ	28V, 6.0A	-	3A001.b.4.b
CNPG06084037	6.4-8.5	40	2.50	7.0	37	2:1	30V, 1.3A	-	
CNPG06084541	6.4-8.5	45	2.50	7.0	41	2:1	30V, 1.93A	-	
CNPG06084643	6.4-8.5	46	2.50	7.0	43	2:1	30V, 3.8A	-	
CNPG07113837	7.0-11.0	38	2.50	7.0	37	2:1	30V, 1.1A	-	
CNPG07114440	7.0-11.0	44	2.50	7.0	40	2:1	30V, 1.95A	-	
CNPG07114542	7.0-11.0	45	2.50	7.0	42	2:1	30V, 3.8A	-	
CNPG07084045	7.7-8.5	40	0.75	-	45.5	2:1/3:1 Typ	28V, 10.0A	-	3A001.b.4.b
CNPG07084548	7.7-8.5	45	1.00	-	48	2:1	28V, 18.0A	-	3A001.b.4.b
CNPG07085049	7.7-8.5	50	1.00	-	49.5	2:1/3:1 Typ	28V, 20.0A	-	3A001.b.4.b
CNPG07085551	7.7-8.5	55	1.25	-	51.5	2:1	28V, 34.0A	-	3A001.b.4.b
CNPG08096052	8.5-9.3	60	2.0	8.0	52	2:1	30V, 13.8A	-	



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CNPG07103837	7.7-10.7	38	2.50	7.0	37	2:1	30V,1.1A	-	
CNPG07104441	7.7-10.7	44	2.50	7.0	41	2:1	30V,1.95A	-	
CNPG07104543	7.7-10.7	45	2.50	7.0	43	2:1	30V,3.8A	-	
CNPG08094045	8.5-9.6	40	0.75	-	45.5	2:1/3:1 Typ	28V, 10.0A	-	3A001.b.4.b
CNPG08094548	8.5-9.6	45	1.00	-	48	2:1	28V, 20.0A	-	3A001.b.4.b
CNPG08105042	8.5-10.5	50	2.50	8.0	42	2:1	30V,4A	-	3A001.b.4.b
CNPG08105045	8.5-10.5	50	2.50	8.0	45	2:1	30V,8A	-	3A001.b.4b
CNPG08103837	8.5-10.5	38	2.50	7.0	37	2:1	30V,1.3A	-	
CNPG08104441	8.5-10.5	44	2.50	7.0	41	2:1	30V,1.93A	-	
CNPG08104543	8.5-10.5	45	2.50	7.0	43	2:1	30V,3.8A	-	
CNPG09095749	9.0-9.9	57	2.0	8.0	49	2:1	30V,13.8A	-	
CNPG09096052	9.0-9.9	60	2.0	8.0	52	2:1	30V,27.0A	-	
CNPG09104045	9.5-10.5	40	0.75	-	45.5	2:1/3:1 Typ	28V, 10.0A	-	3A001.b.4.b
CNPG09104337	9.9-10.7	43	1.50	8.0	37	2:1 Typ	32V, 0.5A	-	3A001.b.4.b
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CNPG09104339	9.9-10.7	43	1.50	8.0	39	2:1 Typ	32V, 0.8A	-	3A001.b.4.b
CNPG09104641	9.9-10.7	46	1.50	8.0	41.5	2:1 Typ	32V, 1.3A	-	3A001.b.4.b
CNPG09104642	9.9-10.7	46	1.50	8.0	42	2:1 Typ	32V, 1.3A	-	3A001.b.4.b
CNPG09105246	9.9-10.7	52	2.0	8.0	46	2:1	30V,7.0A	-	
CNPG09105749	9.9-10.7	57	2.0	8.0	49	2:1	30V,13.8A	-	
CNPG09106052	9.9-10.7	60	2.0	8.0	52	2:1	30V,27.0A	-	
CNPG13144045	13.75-14.5	40	0.75	-	45.5	2:1/3:1 Typ	28V, 12.0A	-	3A001.b.4.b
CNPG13144548	13.75-14.5	45	1.00	-	48	2:1	28V, 22.0A	-	3A001.b.4.b
CNPG14144045	14-14.5	40	0.75	-	45.5	2:1/3:1 Typ	28V, 12.0A	-	3A001.b.4.b
CNPG14144548	14-14.5	45	1.00	-	48	2:1	28V, 22.0A	-	3A001.b.4.b
CNPG14164542	14.0-16.0	45	2.0	8.0	42 Typ	2:1 Typ	35V, 3.2A	-	ITAR
CNPG14164545	14.0-16.0	45	2.0	8.0	45 Typ	2:1 Typ	35V, 6.2A	-	ITAR

ALL THE ABOVE SPECIFICATIONS ARE @ 25°C

OTHER FREQUENCY BANDS & HIGHER POWER ARE ALSO AVAILABLE.

TEMPERATURE COMPENSATED AMPLIFIERS & GAIN CONTROL ARE ALSO AVAILABLE

*CONSULT THE FACTORY

**@SMALL SIGNAL

CERNEX RESERVE THE RIGHT TO CHANGE THE SPECIFICATIONS WITHOUT NOTICE.