

Broadband Medium Power Amplifiers

FEATURES:

- ❖ Coverage From 0.5 to 65.0 GHz (Octave/Multi-octave)
- ❖ Up to 2 Watt Output Power (@1dB Compression Point)
- ❖ Compact/Rugged Thin-Film Construction
- ❖ Economically Priced



CBM Series

APPLICATIONS:

- ❖ General High Power Laboratory RF Sources.
- ❖ Output Amplifiers in test Equipment (ATE & AGE)
- ❖ Driver Amplifiers in RF Distribution Intermediate Power Amplifiers (IPA) in High Power Chains.

DESCRIPTION:

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

SPECIFICATIONS:

Model Number	Frequency Range (GHz)	Gain (dB) Min.	SS Flatness (+/-dB) Min. Max.	NF (dB) Max.	P1dB (dBm) Min.	VSWR In/Out Max.	Current @ 12-15 VDC (mA) Typ.	Case Type
CBML1013030	0.00015-1	30	1.5	10	30	2:1	2.0	6.0 x 3.0 x 1.0
CBMU5022523	0.5-2	25	1.5	5.00	23	2:1	300	LN4 / HN4
CBMU5022425	0.5-2	24	1.5	5.00	25	2:1	450	LN4 / HN4
CBMU5023027	0.5-2	30	1.5	5.00	27	2:1	700	LN4 / HN4
CBMU5023030	0.5-2	30	1.5	5.00	30	2:1	1300	LN5 / HN5
CBMU5042023	0.5-4	20	2.0	5.00	23	2.5:1	300	LN4 / HN4
CBMU5042523	0.5-4	25	2.0	5.00	23	2.5:1	350	LN4 / HN4
CBMU5042525	0.5-4	25	2.0	5.00	25	2.5:1	550	LN4 / HN4
CBMU5043225	0.5-4	32	2.5	5.00	25	2.5:1	600	LN4 / HN4
CBMU5042527	0.5-4	25	2.0	5.00	27	2.5:1	700	LN5 / HN5
CBMU5043027	0.5-4	30	2.5	5.00	27	2.5:1	780	LN5 / HN5
CBMU5043030	0.5-4	30	3.00	6.00	30	2.5:1	1500	LN7
CBM01022723	1-2	27	1.50	5.00	23	2:1	300	LN4 / HN4
CBM01023523	1-2	35	1.75	5.00	23	2:1	400	LN4 / HN4
CBM01022727	1-2	27	1.50	5.00	27	2:1	700	LN4 / HN4
CBM01023527	1-2	35	1.75	5.00	27	2:1	650	LN5 / HN5
CBM01022730	1-2	27	1.50	5.00	30	2:1	1500	LN5 / HN5



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CBM01023530	1-2	35	2.00	5.00	30	2:1	1400	LN5 / HN5
CBM01023527	1-2	35	1.75	5.00	27	2:1	650	LN5 / HN5
CBM01022730	1-2	27	1.50	5.00	30	2:1	1500	LN5 / HN5
CBM01023530	1-2	35	2.00	5.00	30	2:1	1400	LN5 / HN5
CBM02042523	2-4	25	1.50	5.00	23	2:1	300	LN3 / HN3
CBM02043223	2-4	32	1.75	5.50	23	2:1	350	LN5 / HN5
CBM02042527	2-4	25	1.50	5.00	27	2:1	600	LN5
CBM02043527	2-4	35	1.75	5.50	27	2:1	680	LN7
CBM02042530	2-4	25	1.50	5.00	30	2:1	850	LN5
CBM02043530	2-4	35	2.00	5.00	30	2:1	1000	LN7
CBM02044033	2-4	40	2.25	5.00	33	2:1	1900	LN7
CBM02062523	2-6	25	1.50	5.00	23	2:1	300	LN4 / HN4
CBM02063523	2-6	35	2.00	5.00	23	2:1	400	LN4 / HN4
CBM02062527	2-6	25	1.50	5.00	27	2:1	550	LN5 / HN5
CBM02063527	2-6	35	2.00	5.00	27	2:1	650	LN5 / HN5
CBM02062530	2-6	25	1.50	5.00	30	2:1	950	LN7
CBM02063530	2-6	35	1.75	5.50	30	2:1	1000	LN7
CBM02082823	2-8	28	1.75	5.00	23	2:1	400	LN5 / HN5
CBM02083523	2-8	35	2.50	5.00	23	2:1	450	LN5 / HN5
CBM02083027	2-8	30	1.75	5.00	27	2:1	750	LN7 / HN7
CBM02083827	2-8	38	2.00	5.00	27	2:1	850	LN7 / HN7
CBM02083030	2-8	30	2.25	5.50	30	2:1	1100	LN6
CBM02083830	2-8	38	2.50	5.50	30	2:1	1200	LN7
CBM02181822	2-18	18	3.00	6.00	22	2.3:1	600	LN4 / HN4
CBM02182422	2-18	24	3.25	6.00	22	2.3:1	700	LN4 / HN4
CBM02183022	2-18	30	3.50	6.00	22	2.3:1	800	LN4 / HN4
CBM02183522	2-18	35	3.75	6.00	22	2.3:1	900	LN4 / HN4
CBM02183023	2-18	30	3.0	6.5	23	2.3:1	1000	LN5 / HN5
CBM02183825	2-18	38	3.0	6.5	25	2.3:1	1700	MN5
CBM02201621	2-20	16	3.50	7.00	21	2.5:1	600	LN4 / HN4
CBM02202221	2-20	22	3.75	7.00	21	2.5:1	700	LN4 / HN4
CBM02202821	2-20	28	3.75	7.00	21	2.5:1	800	LN4 / HN4
CBM02203421	2-20	34	4.00	7.00	21	2.5:1	900	LN5 / HN5
CBM03122523	3.7-12.7	25	2.00	5.5	23	2:1	400	LN4 / HN4
CBM03123023	3.7-12.7	30	2.50	5.5	23	2:1	480	LN4 / HN4
CBM03123823	3.7-12.7	38	2.75	5.5	23	2:1	560	LN5 / HN5
CBM03122527	3.7-12.7	25	2.00	6.0	27	2:1	640	LN4 / HN4
CBM03123027	3.7-12.7	30	2.50	6.0	27	2:1	800	LN5 / HN5
CBM03123827	3.7-12.7	38	2.75	6.0	27	2:1	860	LN5 / HN5
CBM03122530	3.7-12.7	25	2.00	6.0	30	2:1	880	LN5 / HN5
CBM03123030	3.7-12.7	30	2.50	6.0	30	2:1	1600	LN5 / HN5
CBM03123030	3.7-12.7	30	2.50	6.0	30	2:1	1600	LN5 / HN5



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CBM03122530	3.7-12.7	25	2.00	6.0	30	2:1	880	LN5 / HN5
CBM03123030	3.7-12.7	30	2.50	6.0	30	2:1	1600	LN5 / HN5
CBM03123830	3.7-12.7	38	2.75	6.0	30	2:1	1675	LN7 / HN7
CBM03142323	3.7-14.5	23	2.50	6.0	23	2.2:1	400	LN4 / HN4
CBM03142823	3.7-14.5	28	2.75	6.0	23	2.2:1	480	LN4 / HN4
CBM03143623	3.7-14.5	36	3.00	6.0	23	2.2:1	560	LN5 / HN5
CBM03142327	3.7-14.5	23	2.50	6.50	27	2.2:1	640	LN4 / HN4
CBM03142827	3.7-14.5	28	2.75	6.50	27	2.2:1	800	LN5 / HN5
CBM03143627	3.7-14.5	36	3.00	6.50	27	2.2:1	860	LN5 / HN5
CBM04082823	4-8	28	1.50	5.50	23	2:1	350	LN4 / HN4
CBM04083623	4-8	36	1.75	5.50	23	2:1	425	LN4 / HN4
CBM04082627	4-8	26	1.25	6.00	27	2:1	600	LN4 / HN4
CBM04083027	4-8	30	1.50	6.00	27	2:1	680	LN4 / HN4
CBM04082830	4-8	28	2.00	6.00	30	2:1	1100	LN5
CBM04083830	4-8	38	2.00	6.00	30	2:1	1200	LN7
CBM04082833	4-8	28	2.25	6.00	33	2:1	2000	LN7
CBM04102523	4-10.5	25	2.00	6.00	23	2:1	500	LN4 / HN4
CBM04103027	4-10.5	30	2.00	6.00	27	2:1	800	LN5 / HN5
CBM04103030	4-10.5	30	2.25	6.00	30	2:1	1400	LN5 / HN5
CBM04103830	4-10.5	38	2.25	6.00	30	2:1	1500	LN7 / HN7
CBM04122523	4-12	25	1.50	6.00	23	2:1	400	LN4 / HN4
CBM04123523	4-12	35	1.75	6.00	23	2:1	500	LN5 / HN5
CBM04124023	4-12	40	2.00	6.00	23	2:1	560	LN5 / HN5
CBM04123027	4-12	30	2.50	7.00	27	2:1	800	LN4 / HN4
CBM04124027	4-12	40	3.00	7.00	27	2:1	880	LN5 / HN5
CBM04123030	4-12	30	2.50	8.00	30	2:1	1500	LN5 / HN5
CBM04124030	4-12	40	3.00	8.00	30	2:1	1800	LN7 / HN7
CBM05152523	5-15	25	1.50	6.00	23	2:1	400	LN4 / HN4
CBM05153023	5-15	30	1.75	6.00	23	2:1	480	LN4 / HN4
CBM05153823	5-15	38	2.00	6.00	23	2:1	560	LN5 / HN5
CBM05152527	5-15	25	2.00	7.00	27	2:1	640	LN4 / HN4
CBM05153027	5-15	30	2.50	7.00	27	2:1	800	LN5 / HN5
CBM05153827	5-15	38	3.00	7.00	27	2:1	880	LN5 / HN5
CBM05152530	5-15	25	2.75	7.00	30	2:1	1600	LN5 / HN5
CBM05153030	5-15	30	3.00	7.00	30	2:1	1670	LN5 / HN5
CBM05153830	5-15	38	3.50	7.00	30	2:1	1800	LN7 / HN7
CBM06122423	6-12	24	1.50	6.00	23	2:1	400	LN4 / HN4
CBM06123023	6-12	30	1.75	6.00	23	2:1	480	LN4 / HN4
CBM06124023	6-12	40	2.00	6.00	23	2:1	640	LN5 / HN5
CBM06122427	6-12	24	1.50	6.00	27	2:1	800	LN4 / HN4
CBM06123027	6-12	30	1.75	6.00	27	2:1	850	LN5 / HN5
CBM06124027	6-12	40	2.00	6.00	27	2:1	980	LN5 / HN5



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CBM06122430	6-12	24	1.50	6.50	30	2:1	1000	LN4 / HN4
CBM06123030	6-12	30	1.75	6.50	30	2:1	1100	LN7 / HN7
CBM06124030	6-12	40	2.00	6.50	30	2:1	1200	LN7 / HN7
CBM06182223	6-18	22	1.50	6.00	23	2:1	400	LN4 / HN4
CBM06183023	6-18	30	1.75	6.00	23	2:1	480	LN4 / HN4
CBM06183823	6-18	38	2.00	6.00	23	2:1	560	LN5 / HN5
CBM06182627	6-18	26	2.00	6.00	27	2:1	640	LN4 / HN4
CBM06183027	6-18	30	2.50	7.00	27	2:1	800	LN5 / HN5
CBM06183827	6-18	38	2.50	7.00	27	2:1	960	LN7 / HN7
CBM06182530	6-18	25	2.75	10.00	30	2:1	1600	SN8▲
CBM06183030	6-18	30	3.00	10.00	30	2:1	1670	SN8▲
CBM06183830	6-18	38	3.50	10.00	30	2:1	1800	SN8▲
CBM08122423	8-12.4	24	1.00	5.50	23	2:1	400	LN4 / HN4
CBM08123023	8-12.4	30	1.50	5.00	23	2:1	480	LN4 / HN4
CBM08123823	8-12.4	38	1.75	5.00	23	2:1	560	LN4 / HN4
CBM08122427	8-12.4	24	1.50	6.00	27	2:1	700	LN4 / HN4
CBM08123027	8-12.4	30	1.75	6.00	27	2:1	800	LN5 / HN5
CBM08123827	8-12.4	38	2.00	6.00	27	2:1	900	LN4 / HN4
CBM08122430	8-12.4	24	1.75	6.00	30	2:1	1500	LN4 / HN4
CBM08123230	8-12.4	32	2.00	6.00	30	2:1	1600	LN5 / HN5
CBM08123830	8-12.4	38	2.25	6.00	30	2:1	1670	LN5 / HN5
CBM08182423	8-18	24	1.25	7.00	23	2:1	400	LN4 / HN4
CBM08183023	8-18	30	1.50	7.00	23	2:1	480	LN5 / HN5
CBM08183823	8-18	38	1.75	7.50	23	2:1	560	LN5 / HN5
CBM08182627	8-18	26	2.00	7.00	27	2:1	800	LN4 / HN4
CBM08183427	8-18	34	2.00	7.00	27	2:1	880	LN5 / HN5
CBM08184027	8-18	40	2.50	7.50	27	2:1	960	LN5 / HN5
CBM08182830	8-18	28	2.50	10.00	30	2:1	1600	SN8
CBM08183430	8-18	34	3.00	10.00	30	2:1	1670	SN8
CBM08184030	8-18	40	3.00	10.00	30	2:1	1740	SN8
CBM12182423	12-18	24	1.25	7.00	23	2:1	400	LN4 / HN4
CBM12183023	12-18	30	1.50	7.00	23	2:1	480	LN4 / HN4
CBM12183623	12-18	36	1.75	7.00	23	2:1	560	LN4 / HN4
CBM12182827	12-18	28	2.00	7.00	27	2:1	800	LN4 / HN4
CBM12183827	12-18	38	2.50	7.00	27	2:1	960	LN5 / HN5
CBM12182830	12-18	28	2.00	10.00	30	2:1	1600	SN8▲
CBM12183830	12-18	38	2.50	10.00	30	2:1	1700	SN8▲
CBM12202523	12-20	25	1.50	7.00	23	2:1	650	LN4 / HN4
CBM12203023	12-20	30	1.50	7.00	23	2:1	700	LN5 / HN5
CBM12203523	12-20	35	2.00	7.00	23	2:1	800	LN5 / HN5
CBM18242227	18-24.5	22	3.00	7.00	27	2:1	1500	MN3
CBM18243030	18-24.5	30	3.00	7	30.5	2:1	3500	MN4



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CBM18243027	18-24.5	30	3.00	7.00	27	2:1	1700	MN3
CBM18262423	18-26.5	24	2.00	7.00	23	2:1	850	LN4 / HN4
CBM18263023	18-26.5	30	2.50	7.00	23	2:1	600	LN4 / HN4
CBM18263523	18-26.5	35	2.50	7.00	23	2:1	950	LN5 / HN5
CBM18262827	18-26.5	28	2.50	7.00	27	2:1	1150	MN3
CBM18263427	18-26.5	35	2.50	7.00	27	2:1	1200	MN3
CBM18263030	18-26.5	30	3.0	7.0	30	2:1	2400	SN8
CBM18263530	18-26.5	35	4.0	7.0	30	2:1	2500	SN8
CBM18402020	18-40	20	4.0	9.0	20	2.5:1	450	MK3
CBM18402023	18-40	20	4.0	9.0	23	2.5:1	500	MK3
CBM18403523	18-40	35	4.0	9.0	23	2.5:1	1000	MK3
CBM18403525	18-40	35	4.0	9.0	25	2:1	1000	MKP4
CBM20422020	20-42	20	4.0	10.0	20	2.5:1	400	MK3
CBM23283020	23-28	30	3.5	10.0	20	2:1	300	MK3
CBM25302523	25-30	25	2.50	8.00	23	2:1	1000	MK3
CBM25303027	25-30	30	3.00	8.00	27	2:1	1800	Mk3
CBM25303530	25-30	35	3.50	8.00	30	2:1	2500	MKP4
CBM26402020	26.5-40	20	2.5	9.0	20	2.5:1	500	MK3
CBM26402520	26.5-40	25	2.5	9.0	20	2.5:1	575	MK3
CBM26403022	26.5-40	30	2.5	9.0	22	2.5:1	650	MK3
CBM26403025	26.5-40	30	2.5	9.0	25	2.5:1	1100	MKP4
CBM26403527	26.5-40	35	4.0Typ	9.0	27Psat	2.5:1	3000	MKP4
CBM27323027	27-32	30	3.0	10.0	27	2:1	800	MK3
CBM27323530	27-32	35	3.5	10.0	30	2:1	1500	MPK4
CBM30362523	30-36	25	2.50	10.00	23	2:1	800	MK3
CBM30363027	30-36	30	3.00	10.00	27	2:1	1500	MK3
CBM30363528	30-36	35	3.50	10.00	28	2:1	2000	MK3
CBM36402520	36-40	25	2.5	10.0	20	2:1	500	MK3
CBM36402523	36-40	25	2.50	10.00	23	2:1	800	MK3
CBM36403025	36-40	30	3.00	10.00	25	2:1	1000	MK3
CBM36403527	36-40	35	3.50	10.00	27	2:1	1000	MK3
CBM36403530	36-40	35	350	10.0	30	2:1	2000	MKP4
CBM36432222	36-43	22	2.0	10.0	22	2:1typ	500	MK3
CBM36434022	36-43	40	4.5	10.0	22	2:1typ	650	MK3
CBM37453020	37-45	30	3.5	5.0	20	2:1	500	MK3
CBM57653015	57-65	30	3.50	7	15	2:1	300	*
CBM92961810	92-96	18	2Typ	-	10	2:1typ	250	*
CBM92961520	92-96	15	2Typ	-	20Typ	2:1typ	750	*

ALL THE ABOVE SPECIFICATIONS ARE @ 25°C

OTHER FREQUENCY BANDS & POWER LEVELS ARE ALSO AVAILABLE.

TEMPERATURE COMPENSATED AMPLIFIERS & GAIN CONTROL ARE ALSO AVAILLABLE

*CONSULT THE FACTORY

▲ SMALLER PACKAGES ARE ALSO AVAILABLE

CERNEX RESERVE THE RIGHT TO CHANGE THE SPECIFICATIONS WITHOUT NOTICE.