

Broadband High Power Amplifiers - Rackmount

FEATURES:

- ❖ Coverage From 0.01 to 40.0 GHz (Octave/Multi-octave)
- ❖ Up To 1K Watt Output Power (@1dB Compression Point)
- ❖ Economically Priced

APPLICATIONS:

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



CBP-R Series

DESCRIPTION:

Cernex's CBP-R 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 various high power devices.

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.	VAC 100-260V @W Typ.	Case Type
CBPK1U15654R	0.01MHz-175MHz	56	2.0	10	54.5	60	2:1	1500	19x8.75x22
CBPK1U26060R	0.01MHz-0.2GHz	60	2.0	10	60	66	2:1	8000(Max)	19x26.25x22
CBPK1U25048R	0.01MHz-0.23GHz	50	1.5	10	48	58	2:1	600(Max)	19x5.25x22
CBPK1U25453R	0.01MHz-0.23GHz	54	2.0	10	53	61	2:1	1000	19x8.75x22
CBPK1U54443R	0.01MHz-0.5GHz	44	1.5	10	43	54	2:1	200	19x3.5x18
CBPL1U24038R	0.15MHz-0.23GHz	40	1.5	10	38.5	48	2:1	100(Max)	8.5x3.5x16
CBPL1U24442R	0.15MHz-0.23GHz	44	1.5	10	42	52	2:1	250(Max)	8.5x3.5x16
CBPL1U24645R	0.15MHz-0.23GHz	46	1.5	10	45	57	2:1	300	19x3.5x18
CBPL1U24847R	0.15MHz-0.23GHz	48	1.5	10	47	55	2:1	400	19x5.75x22
CBPL1U25047R	0.15MHz-0.23GHz	50	1.5	10	47.5	58	2:1	400	19x5.25x22
CBPL1U25452R	0.15MHz-0.23GHz	54	1.5	10	52	61	2:1	1200(Max)	19x5.25x22
CBPL1U25654R	0.15MHz-0.23GHz	56	2.0	10	54.5	60	2:1	1500	19x8.75x22
CBPL1U26058R	0.15MHz-0.23GHz	60	1.5	10	58	64	2:1	6250	19x26.25x22
CBPL1013030R	0.15MHz-1.0GHz	30	1.5	10	30	43	2:1	40	8.5x3.5x16
CBPL5014038R	0.5MHz-1.0GHz	40	1.5	10	38.5	48	2:1	100	8.5x3.5x16
CBPH1U15050R	0.001-0.1	50	1.5	10	50	58	2:1	300	19x5.25x22



Broadband High Power Amplifiers - Rackmount

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.	VAC 100-260V @W Typ.	Case Type
CBPH1U15653R	0.001-0.1	56	1.5	10	53	63	2:1	1000	19x5.25x22
CBPH1U15656R	0.001-0.1	56	1.5	10	56	-	2:1	2200(Max)	19x5.25x22
CBPH1U16058R	0.001-0.1	60	1.5	10	58.5	-	2:1	3500(Max)	19x8.75x22
CBPH1U24443R	0.001-0.25	44	1.5	10	43	53	2:1	150(Max)	8.5x3.5x16
CBPH1U54037R	0.001-0.5	40	1.5	10	37.5	48	2:1	100(Max)	8.5x3.5x16
CBPH1U53636R	0.001-0.5	36	1.5	10	36	48	2:1	100(Max)	8.5x3.5x16
CBPH1U54443R	0.001-0.5	44	1.5	10	43	52	2:1	220(Max)	8.5x3.5x16
CBPH1U55049R	0.001-0.5	50	2.0	10	49	59	2:1	600(Max)	19x5.25x22
CBPH1014441R	0.001-1.0	44	1.5	10	41	50	2:1	200(Max)	8.5x3.5x18
CBPH1014645R	0.001-1.0	46	2.0	10	45	51	2:1	660(Max)	19x5.25x22
CBPH1015249R	0.001-1.0	52	2.0	10	49	58	2:1	2500(Max)	19x8.75x22
CBPH1U45047R	0.0015-0.4	50	2.0	10	47	55	2:1	500(Max)	19x5.25x22
CBPV1U15656R	0.01-0.1	56	1.5	10	56.5	60	2:1	1500	19x5.25x22
CBPV1U16058R	0.01-0.1	60	1.5	10	58.5	64	2:1	3500(Max)	19x8.75x22
CBPV1U14039R	0.01-0.1	40	1.5	10	39	49	2:1	110(Max)	8.5x3.5x16
CBPV1014441R	0.01-1.0	44	1.5	10	41	52	2:1	150	8.5x3.5x16
CBPV2U16363R	0.02-0.11	63	2.0	10	63	72	2:1	6000	17x14x22
CBPV2U54645R	0.02-0.5	46	1.5	10	45	55	2:1	300	19x3.5x18
CBPV2U55049R	0.02-0.5	50	1.5	10	49	56	2:1	450(Max)	19x3.5x18
CBPV2U55451R	0.02-0.5	54	2.0	10	51	59	2:1	1000(Max)	19x5.25x22
CBPV2U55657R	0.02-0.5	56	2.0	10	57	64	2:1	2000	19x8.75x22
CBPV2014645R	0.02-1.0	46	2.0	10	45	53	2:1	700(Max)	19x5.25x22
CBPV2015047R	0.02-1.0	50	2.0	10	47.5	57	2:1	800(Max)	19x5.25x22
CBPV2015250R	0.02-1.0	52	2.0	10	50	58	2:1	2500(Max)	19x8.75x22
CBPV2015252R	0.02-1.0	52	2.0	10	52	60	2:1	2500	19x8.75x22
CBPV8015250R	0.08-1.0	52	2.0	10	50	59	2:1	1500(Max)	19x8.75x22
CBPV8015452R	0.08-1.0	54	2.0	10	52	60	2:1	3000(Max)	19x8.75x22
CBPV8015654R	0.08-1.0	56	2.0	10	54.5	69	2:1	6000(Max)	19x26.25x22
CBPV8016358R	0.08-1.0	63	5.0	-	58	64	2:1 (In)	240V @ 10,000 (Max)	31 x 24 x 26
CBPU1U55048R	0.1-0.5	50	1.5	10	48	55	2:1	600(Max)	19x5.25x22
CBPU1U55253R	0.1-0.5	52	2.0	10	53	63	2:1	1000(Max)	19x5.25x22
CBPU1U55454R	0.1-0.5	54	1.5	10	54	63	2:1	1500(Max)	19x5.25x22
CBPU1U55656R	0.1-0.5	56	1.5	10	56	64	2:1	2000	19x8.75x22
CBPU1U56059R	0.1-0.5	60	2.0	10	59	69	2:1	5000(Max)	17x14x22
CBPU1015251R	0.1-1.0	52	1.5	10	51.5	60	2:1	1500(Max)	19x5.25x22
CBPU2015452R	0.2-1.0	54	2.0	10	52	61	2:1	2500(Max)	19x8.75x2
CBPU2016058R	0.2-1.0	60	2.0	10	58.5	67	2:1	6000(Max)	19x17.5x22
CBPU2016058R	0.2-1.0	60	2.0	10	58.5	64	1.5:1	2000	19x14x22
CBPU4014037R	0.4-1.0	40	1.5	10	37.5	48	2:1	100(Max)	8.5x3.5x16
CBPU4014442R	0.4-1.0	44	1.5	10	42	52	2:1	150(Max)	8.5x3.5x16



Broadband High Power Amplifiers - Rackmount

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.	VAC 100-260V @W Typ.	Case Type
CBPU4014645R	0.4-1.0	46	1.5	10	45	57	2:1	250(Max)	8.5x3.5x16
CBPU4015454R	0.4-1.0	54	1.5	10	54	60	2:1	40(Max)	19x5.25x22
CBPU4015454R	0.4-1.0	54	1.5	10	54	62	2:1	1000	19x5.25x22
CBPU5015049R	0.5-1.0	50	1.5	10	49	58	2:1	600(Max)	19x5.25x22
CBPU5015250R	0.5-1.0	52	1.5	10	50	61	2:1	1000(Max)	19x5.25x22
CBPU5015657R	0.5-1.0	56	1.5	10	57	66	2:1	2000	19x8.75x22
CBPU5016059R	0.5-1.0	60	2.0	10	59	69	2:1	5000(Max)	17x14x22
CBPU5024443R	0.5-2.5	44	1.5	10	43	47	2:1	120(Max)	19x3.5x22
CBPU5024644R	0.5-2.5	46	1.5	10	44.5	48	2:1	230(Max)	19x3.5x22
CBPU5025050R	0.5-2.5	50	2.0	10	50	57	2:1	800(Max)	19x5.25x22
CBPU7045147R	0.7-4.2	51	3.0	-	47	54	2:1 (In)	240V@1500 (Max)	19x5.25x26
CBPU8024646R	0.8-2.0	46	1.5	10	46	58	2:1	300(Max)	19x3.5x18
CBPU8025048R	0.8-2.0	50	1.5	10	48	60	2:1	500(Max)	19x5.25x22
CBPU8025252R	0.8-2.0	52	2.0	10	52	63	2:1	1400(Max)	19x8.75x22
CBPU8024241R	0.8-2.5	42	1.5	10	41	52	2:1	100(Max)	8.5x3.5x16
CBPU8024644R	0.8-2.5	46	2.0	10	44	54	2:1	250(Max)	19x3.5x18
CBPU8024847R	0.8-2.5	48	2.0	10	47	57	2:1	500(Max)	19x5.25x22
CBPU8025250R	0.8-2.5	52	2.0	10	50	60	2:1	1300(Max)	19x8.75x22
CBPU8033231R	0.8-3.0	32	1.5	15	31.7	43	2:1	30(Max)	8.5x3.5x16
CBPU8034443R	0.8-3.0	44	1.5	10	43	53	2:1	200	19x3.5x18
CBPU8043837R	0.8-4.2	38	1.5	10	37.5	48	2:1	65(Max)	8.5x3.5x16
CBPU8044240R	0.8-4.2	42	2.0	10	40	50	2:1	150(Max)	8.5x3.5x16
CBPU8044443R	0.8-4.2	44	2.0	10	43	53	2:1	280(Max)	19x3.5x18
CBPU8044646R	0.8-4.2	46	2.0	10	46	56	2:1	600(Max)	19x5.25x22
CBPU8045048R	0.8-4.2	50	2.0	10	48.5	59	2:1	1200(Max)	19x8.75x22
CBPU8064039R	0.8-6.0	40	2.0	10	39.5	50	2:1	150(Max)	19x3.5x18
CBPU8063047R	0.8-6.0	30	3.5	-	47	-	2:1	650	19x14.3x7.4.
CBP01024040R	1.0-2.0	40	1.5	10	40	50	2:1	100(Max)	8.5x3.5x16
CBP01024443R	1.0-2.0	44	1.5	10	43	53	2:1	200(Max)	19x3.5x18
CBP01024646R	1.0-2.0	46	1.5	10	46	55	2:1	300(Max)	19x3.5x18
CBP01025049R	1.0-2.0	50	1.5	10	49	60	2:1	500(Max)	19x5.25x22
CBP01025251R	1.0-2.0	52	2.0	10	51	61	2:1	1200(Max)	19x5.25x22
CBP01025252R	1.0-2.0	52	1.5	10	52	63	2:1	1400(Max)	19x8.75x22
CBP01025454R	1.0-2.0	54	2.0	10	54	64	2:1	1800	19x8.75x22
CBP01025656R	1.0-2.0	56	1.5	10	56	66	2:1	3750(Max)	19x14x22
CBP01023626R	1.0-2.5	36	1.5	10	26	48	2:1	50(Max)	8.5x3.5x16
CBP01024241R	1.0-2.7	42	1.5	10	41.5	50	2:1	150(Max)	19x3.5x18
CBP01034039R	1.0-3.0	40	1.5	10	39	48	2:1	100(Max)	8.5x3.5x16
CBP01034646R	1.0-3.0	46	2.0	10	46	58	2:1	600(Max)	19x5.25x22
CBP01035049R	1.0-3.0	50	2.0	10	49	59	2:1	1400(Max)	19x8.75x22



Broadband High Power Amplifiers - Rackmount

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.	VAC 100-260V @W Typ.	Case Type
CBP01035656R	1.0-3.0	56	2.0	10	56	66	2:1	4000(Max)	19x26.25x22
CBP02035251R	2.0-3.0	52	1.5	10	51.8	63	2:1	1500(Max)	19x8.75x22
CBP02044240R	2.0-4.0	42	1.5	10	40	50	2:1	150(Max)	19x3.5x18
CBP02044443R	2.0-4.0	44	1.5	10	43	53	2:1	250	19x3.5x18
CBP02044543R	2.0-4.0	45	4.0	7	43	50	2:1	240	19x7.9x14
CBP02044545R	2.0-4.0	45	4.0	7	45	52	2:1	300	19x7.9x14
CBP02044646R	2.0-4.0	46	1.5	10	46	56	2:1	400	19x5.25x22
CBP02045049R	2.0-4.0	50	2.0	10	49	60	2:1	800(Max)	19x8.75x22
CBP02064547R	2.0-6.0	45	2.5 Typ	10	47Psat	52	2:1	600	19x8.75x22
CBP02065050R	2.0-6.0	50	4.00	10	50	57	2:1	12V@TBD	2 of 19" Rackmount
CBPG02065050R*	2.0-6.0	50	4.00	8	50Psat	-	2:1	50V@18A Typ	19" Rackmount
CBPG02065050RQT*	2.0-6.0	50	4.00	10	50Psat	-	2:1	30V@22A Typ	19" Rackmount
CBP02084040R	2.0-8.0	40	5.0	8	40	47	2:1	230	19x7.9x14
CBP02084542R	2.0-8.0	45	5.0	8	42	49	2:1	300	19x7.9x14
CBPG02184040R*	2.0-18.0	40	3.0 Typ	-	40Psat	47	2:1	100-240V@160	19x7.4x14.3
CBPG02184543R*	2.0-18.0	45	5.0 Typ	-	43Psat	-	2:1 Typ	100-240V@430	19x8.75x22
CBPG02184545R*	2.0-18.0	45	6.0 Typ	-	44.5Psat	-	2:1 Typ	100-240V@860	19x8.75x22
CBP04064646R	4.0-6.0	46	2.0	10	46	56	2:1	1000(Max)	19x8.75x22
CBP06115050R	6.0-11.0	50	4.0	8	49.5Psat	*	2:1	110-220V	19" Rackmount
CBP06125050R	6.0-12.0	50	4.0	8	48Psat	*	2:1	110-220V	19" Rackmount
CBP06184547R	6.0-18.0	45	3.0Typ	12	47Psat Typ	54	2:1	1800	19x8.75x22 & 19x7.9x14
CBP06185042R	6.0-18.0	50	6.0	7	42	49	2:1	600	19x7.9x14
CBP07115050R	7.0-11.0	50	4.0	8	100W Psat	*	2:1	110-220V	19" Rackmount
CBP08124051R-01	8.0-12.0	40	-	-	51.7Psat	-	-	-	19x7.4x14.3
CBP08125047R*	8.0-12.0	50 Typ	4.5	12	47	54	2:1	1000	19x8.75x22
CBP08125050R	8.0-12.0	50	4.0	8	48Psat	*	2:1	110-220V	19" Rackmount
CBP17214038R	17.0-21.0	40	2.5 Typ	12	38 Psat	45	2:1	200	19x7.9x14
CBP27322534R	27.0-32.0	25	3.5	8	34	-	2:1	140	19x14.3x7.4
CBP30403534R	30.0-40.0	45 Typ.	4.5	6	34 Psat	41	2:1	150	12"x4"x14"
CBP40454033R	40.0-45.5	40	3	10	33	40Typ	2:1Typ	9ATyp	12x6x14



Broadband High Power Amplifiers - Rackmount

ALL THE ABOVE SPECIFICATIONS ARE @ 25°C
OTHER FREQUENCY BANDS & HIGHER POWER ARE ALSO AVAILABLE.
TEMPERATURE COMPENSATED AMPLIFIERS & GAIN CONTROL ARE ALSO AVAILABLE
*THEY ARE ITAR.
** GAIN WINDOW IS 10dB

CERNEX RESERVE THE RIGHT TO CHANGE THE SPECIFICATIONS WITHOUT NOTICE