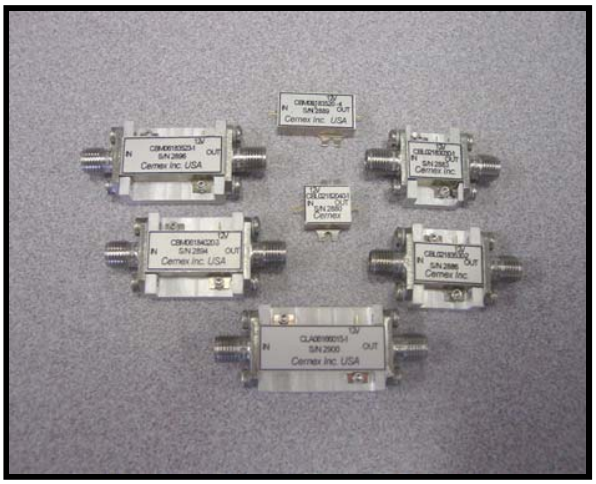
CERNEX, Inc.

Miteq's Equivalent Amplifiers



FEATURES:

- Coverage From 0.1 to 40 GHz
- (Narrowband & Broadband)
- Noise Figure As Low As 0.5 dB
- Wide Dynamic Range
- Economically Priced

SPECIFICATIONS:

Amplifiers for Radar Application (Moderate Bandwidth)

Model Number	Frequency Range (GHz)	Gain (dB) Min.	SS Flatness (+/-dB) Max.	NF (dB) Max.	P1dB (dBm) Min.	VSWR In/Out Max.	Current @ 12-15 VDC (mA) Typ.	Case Type
CNL010138064M	1.2-1.4	38	0.50	0.6*	10	1.5:1	110	MS6
CNL010138067M	1.4-1.7	38	0.50	0.6*	10	1.5:1	85	MS6
CNL020236087M	2.4-2.7	36	0.50	0.8*	10	1.5:1	100	MS6
CNL020236089M	2.7-2.9	36	0.50	0.8*	10	1.5:1	100	MS6
CNL020336081M	2.9-3.1	36	0.50	0.8*	10	1.5:1	100	MS6
CNL020334097M	2.9-3.7	34	0.50	0.9*	10	1.5:1	100	MS6
CNL05062411M	5.2-6	24	0.75	1.1*	10	1.5:1	100	MS4
CNL080932156M	8.5-9.6	32	0.75	1.5*	10	1.5:1	125	MS4
CNL081126156M	8.5-11.6	26	0.75	1.5*	10	1.5:1	125	MS4
CNL090928142M	9-9.2	28	0.75	1.4*	10	1.5:1	150	MS4
CNL090928145M	9-9.5	28	0.75	1.4*	10	1.5:1	150	MS4
CNL10102815M	10.5-10.7	28	0.75	1.5*	10	1.5:1	150	MS4
CNL13142416M	13.2-14	24	0.75	1.6*	10	1.5:1	120	MS4
CNL15152220M	15.4-15.7	22	0.50	2.0*	10	1.5:1	150	MS4
CNL24251545M	24.2-25.3	15	1.00	4.5*	10	2.0:1	100	MS4
CNL31331080M	31.8-33.4	10	1.50	8.0*	5	2.5:1	250	MS6
CNL33361085M	33.4-36	10	1.50	8.5*	5	2.5:1	250	MS6

* LOWER NOISE FIGURE ARE ALSO AVAILABLE. SEE OUR NARROW BAND LOW NOISE AMPLIFIERS DATA SHEET

CERNEX, Inc.

Miteq's Equivalent Amplifiers

Amplifiers for Communications Applications (Moderate Bandwidth)

Model Number	Frequency Range (GHz)	Gain (dB) Min.	SS Flatness (+/-dB) Max.	NF (dB) Max.	P1dB (dBm) Min.	VSWR In/Out Max.	Current @ 12-15 VDC (mA) Typ.	Case Type
CNLU90138072M	.9-1.2	38	0.50	0.7*	10	1.5:1	100	MS4
CNL010125086M	1.2-1.6	25	0.75	0.8*	5	1.5:1	80	MS6
CNL010138069M	1.7-1.9	38	0.50	0.6*	10	1.5:1	80	MS6
CNL010236082M	1.8-2.2	36	0.50	0.8*	10	1.5:1	100	MS4
CNL020236063M	2.2-2.3	36	0.50	0.6*	10	1.5:1	100	MS6
CNL020236087M	2.4-2.7	36	0.50	0.8*	10	1.5:1	100	MS6
CNL030434092M	3.4-4.2	34	0.50	0.9*	10	1.5:1	75	MS4
CNL030434082M	3.7-4.2	34	0.50	0.8*	10	1.5:1	75	MS4
CNL04053611M	4.4-5	36	0.50	1.1*	10	1.5:1	175	MS4
CNL050634124M	5.9-6.4	34	0.75	1.2*	10	1.5:1	175	MS4
CNL070734118M	7.2-7.8	34	0.75	1.1*	10	1.5:1	175	MS4
CNL070834134M	7.9-8.4	34	0.75	1.3*	10	1.5:1	175	MS4
CNL10112815M	10.7-11.7	28	0.75	1.5*	10	1.5:1	175	MS4
CNL10132420M	10.7-13.7	24	0.75	2.0*	10	1.5:1	150	MS4
CNL11122715M	11.7-12.2	27	0.75	1.5*	10	1.5:1	175	MS4
CNL12122716M	12.2-12.8	27	0.75	1.6*	10	1.5:1	175	MS4
CNL12132718M	12.7-13.3	27	0.75	1.8*	10	1.5:1	175	MS4
CNL14142419M	14-14.5	24	0.75	1.9*	10	1.5:1	150	MS4
CNL17201830M	17.7-20.2	18	0.75	3.0*	10	1.5:1	150	MS4
CNL20211833M	20.2-21.2	18	0.75	3.3*	8	1.5:1	150	MS4
CNL21241538M	21.2-24	15	1.00	3.8*	10	2.0:1	150	MS4
CNL25271250M	25.2-27.5	12	1.50	5.0*	8	2.0:1	210	MS4
CNL27301160M	27.5-30	11	1.50	6.0*	8	2.0:1	210	MS4
CNL30311065M	30-31	10	1.00	6.5*	8	2.5:1	210	MS4
CNL31311065M	31-31.2	10	1.00	6.5*	8	2.5:1	240	MS5
CNL36381085M	36-38.6	10	1.50	8.5*	5	2.5:1	260	MS6
CNL38401095M	38.6-40	10	1.50	9.5*	5	2.5:1	260	MS6

* LOWER NOISE FIGURE ARE ALSO AVAILABLE. SEE OUR NARROW BAND LOW NOISE AMPLIFIER DATA SHEET

CERNEX, Inc.

Miteq's Equivalent Amplifiers

General Purpose Amplifiers

Model Number	Frequency Range (GHz)	Gain (dB) Min.	SS Flatness (+/-dB) Max.	NF (dB) Max.	P1dB (dBm) Min.	VSWR In/Out Max.	Current @ 12-15 VDC (mA) Typ.	Case Type
CNLU2U24010M	.2-.25	40	0.50	1.0*	10	2.0:1	190	MS6
CNLU2U34009M	.25-.3	40	0.50	0.9*	10	2.0:1	190	MS6
CNLU3U32808M	.3-.35	28	0.50	0.8*	10	2.0:1	80	MS4
CNLU3042508M	.35-4	25	0.50	0.8*	10	2.0:1	80	MS4
CNLU4U42508M	.4-.45	25	0.50	0.8*	10	2.0:1	80	MS4
CNLU4U52609M	.45-.55	26	0.50	0.9*	10	2.0:1	80	MS4
CNLU5U72610M	.5-.7	26	0.50	1.0*	10	1.5:1	80	MS4
CNLU7U92610M	.7-.9	26	0.50	1.0*	10	1.5:1	80	MS4
CNLU8U92008M	.8-.9	20	0.25	0.8*	5	1.5:1	80	MS4
CNLU90125101M	.9-1.1	25	0.50	1.0*	10	1.5:1	80	MS4
CNL010125103M	1.1-1.3	25	0.50	1.0*	8	1.5:1	80	MS4
CNL010125085M	1.3-1.5	25	0.50	0.8*	8	1.5:1	80	MS6
CNL010120076M	1.5-1.6	20	0.25	0.7*	5	1.5:1	80	MS4
CNL010128087M	1.5-1.7	28	0.50	0.8*	10	1.5:1	80	MS2
CNL01022008M	1.9-2.0	20	0.25	0.8*	5	1.5:1	80	MS4
CNL010236101M	1.9-2.1	36	0.50	1.0*	10	1.5:1	150	MS4
CNL020225083M	2.1-2.3	25	0.50	0.8*	8	1.5:1	80	MS6
CNL020225095M	2.3-2.5	25	0.50	0.9*	8	1.5:1	80	MS6
CNL020224097M	2.5-2.7	24	0.50	0.9*	8	1.5:1	80	MS6
CNL030335095M	3.1-3.5	35	0.50	0.9*	10	1.5:1	150	MS4
CNL050628115M	5.5-6.5	28	0.75	1.1*	8	1.5:1	150	MS4
CNL090924169M	9.4-9.9	24	0.75	1.6*	10	1.5:1	150	MS4
CNL09102616M	9.5-10.5	26	0.75	1.6*	10	1.5:1	150	MS4
CNL12131817M	12.5-13	18	0.75	1.7*	10	1.5:1	150	MS4
CNL13132418M	13-13.5	24	0.75	1.8*	10	1.5:1	200	MS4
CNL13141818M	13.5-14	18	0.75	1.8*	10	1.5:1	150	MS4
CNL14152219M	14-15	22	0.75	1.9*	8	1.5:1	200	MS4
CNL14152419M	14.5-15	24	0.75	1.9*	10	1.5:1	200	MS4
CNL15162410M	15-16	24	0.75	2.1*	10	1.5:1	200	MS4
CNL16172021M	16-17	20	0.75	2.1*	10	1.5:1	200	MS4
CNL17172022M	17-17.5	20	0.75	2.2*	10	1.5:1	200	MS4
CNL17182210M	17.5-18	22	0.75	2.3*	10	1.5:1	200	MS4
CNL18182025M	18-18.5	20	0.75	2.5*	10	1.5:1	200	MS4
CNL18191828M	18-19	18	0.75	2.8*	10	1.5:1	200	MS4
CNL18192026M	18.5-19	20	0.75	2.6*	10	1.5:1	200	MS4
CNL19192030M	19-19.5	20	0.75	3.0*	10	1.5:1	200	MS4

CERNEX, Inc.

Miteq's Equivalent Amplifiers

Model Number	Frequency Range (GHz)	Gain (dB) Min.	SS Flatness (+/-dB) Max.	NF (dB) Max.	P1dB (dBm) Min.	VSWR In/Out Max.	Current @ 12-15 VDC (mA) Typ.	Case Type
CNL19202233M	19-20	22	0.75	3.3*	8	1.5:1	200	MS4
CNL19202032M	19.5-20	20	0.75	3.2*	10	1.5:1	200	MS4
CNL20211835M	20-21	18	0.75	3.5*	10	1.5:1	200	MS4
CNL20211834M	20.5-21	18	0.75	3.4*	10	1.5:1	200	MS4
CNL21211837M	21-21.5	18	0.75	3.7*	10	2.0:1	200	MS4
CNL21221838M	21-22	18	0.75	3.8*	10	2.0:1	200	MS4
CNL21221620M	21.5-22	16	0.75	2.0*	10	2.0:1	200	MS4
CNL22231638M	22-23	16	0.75	3.8*	10	2.0:1	200	MS4
CNL23241639M	23-24	16	0.75	3.9*	10	2.0:1	200	MS4
CNL24251440M	24-25	14	0.75	4.0*	10	2.0:1	200	MS4
CNL25261445M	25-26	14	0.75	4.5*	10	2.0:1	200	MS4
CNL27301160M	27-30	11	1.50	6.0*	8	2.0:1	210	MS4
CNL30331065M	30-33	10	1.50	6.5*	8	2.0:1	210	MS4
CNL33361075M	33-36	10	1.50	7.5*	8	2.5:1	240	MS5
CNL36381085M	36-38	10	1.50	8.5*	5	2.5:1	260	MS6
CNL38401095M	38-40	10	1.50	9.5*	5	2.5:1	260	MS6

* LOWER NOISE FIGURE ARE ALSO AVAILABLE. SEE OUR NARROW BAND LOW NOISE AMPLIFIERS DATA SHEET

Octave

Model Number	Frequency Range (GHz)	Gain (dB) Min.	SS Flatness (+/-dB) Max.	NF (dB) Max.	P1dB (dBm) Min.	VSWR In/Out Max.	Current @ 12-15 VDC (mA) Typ.	Case Type
CBLU1U23611M	.12-.25	36	1.00	1.1	10	2.0:1	120	MS6
CBLU2053610M	.25-5	36	1.00	1.0	10	2.0:1	120	MS6
CBLU5012408M	.5-1	24	1.00	0.8	10	2.0:1	100	MS6
CBL01023407M	1-2	34	1.00	0.7	10	2.0:1	130	MS6
CBL010223104M	1.2-2.4	23	1.00	1.0	8	2.0:1	100	MS2
CBL02042810M	2-4	28	1.00	1.0	10	2.0:1	125	MS6
CBL020532152M	2.6-5.2	32	1.25	1.5	10	2.0:1	150	MS4
CBL04083412M	4-8	34	1.00	1.2	10	2.0:1	175	MS4
CBL05102718M	5-10	27	1.25	1.8	10	2.0:1	150	MS4
CBL06122219M	6-12	22	1.00	1.9	10	2.0:1	175	MS4
CBL08123015M	8-12	30	1.25	1.5	10	2.0:1	150	MS4
CBL12182420M	12-18	24	1.50	2.0	10	2.0:1	120	MS4

CERNEX, Inc.

Miteq's Equivalent Amplifiers

Multioctave

Model Number	Frequency Range (GHz)	Gain (dB) Min.	SS Flatness (+/-dB) Max.	NF (dB) Max.	P1dB (dBm) Min.	VSWR In/Out Max.	Current @ 12-15 VDC (mA) Typ.	Case Type
CBLU30125104M	.3-1.4	25	1.00	1.0	10	2.0:1	100	MS4
CBLU5023610M	.5-2	36	1.00	1.0	10	2.0:1	130	MS8
CBL01032811M	1-3	28	1.50	1.1	8	2.5:1	150	MS8
CBL01042608M	1-4	26	1.75	1.3	8	2.5:1	175	MS8
CBL02062616M	2-6	26	1.00	1.6	10	2.0:1	125	MS4
CBL02083020M	2-8	30	1.50	2.0	10	2.0:1	175	MS4
CBL02182035M	2-18	20	2.50	3.5	10	2.5:1	100	MS4
CBL04122225M	4-12	22	1.00	2.5	10	2.0:1	175	MS4
CBL06182030M	6-18	20	2.00	3.0	10	2.5:1	175	MS4
CBL08182028M	8-18	20	1.50	2.8	10	2.0:1	150	MS4

Low-Noise Ultra Wideband Amplifiers

Model Number	Frequency Range (GHz)	Gain (dB) Min.	SS Flatness (+/-dB) Max.	NF (dB) Max.	P1dB (dBm) Min.	VSWR In/Out Max.	Current @ 5 VDC (mA) Typ.	Case Type
CBLU1011313M	.1-1	13	1.00	1.3*	10	2.5:1	85	MS4
CBLU1023612M	.1-2	36	1.00	1.2*	10	2.0:1	150	MS4
CBLU1033213M	.1-3	32	1.00	1.3*	10	2.0:1	150	MS4
CBLU1042615M	.1-4	26	1.25	1.5*	10	2.0:1	150	MS4
CBLU1063020M	.1-6	30	1.50	2.0*	10	2.0:1	175	MS4
CBLU1083025M	.1-8	30	1.50	2.5*	10	2.0:1	175	MS4
CBLU1102830M Δ	.1-10	28	1.50	3.0*	10	2.0:1	175	MS4
CBLU1122635M Δ	.1-12	26	1.50	3.5*	10	2.0:1	175	MS4
CBLU1142240M Δ	.1-14	22	2.00	4.0*	10	2.5:1	200	MS4
CBLU1162142M Δ	.1-16	21	2.00	4.2*	10	2.5:1	200	MS4
CBLU1181843M Δ	.1-18	18	2.00	4.3*	10	2.5:1	200	MS4
CBLU1201845M Δ	.1-20	18	2.50	4.5*	10	2.5:1	175	MS4
CBLU1221455M Δ	.1-22	14	2.50	5.5*	10	2.5:1	175	MS4
CBLU1241265M Δ	.1-24	12	2.50	6.5*	10	2.5:1	175	MS4
CBLU12610905MΔ	.1-26.5	10	2.50	9.0*	10	2.5:1	175	MS4
CBLU1280915M Δ	.1-28	9	2.50	9.5*	10	2.7:1	175	MS4
CBLU1300810M Δ	.1-30	8	2.50	10.0*	7	3.0:1	175	MS4
CBLU1400812M Δ	.1-40	8	4.00	12.0*	6	3.5:1	275	MS8

* NOISE FIGURE INCREASES BELOW 500 MHz
Δ LOWER NOISE FIGURE IS ALSO AVAILABLE. SEE OUR BROADBAND LOW NOISE AMPLIFIERS DATA SHEET

CERNEX, Inc.

Miteq's Equivalent Amplifiers

Medium Power Amplifiers

Model Number	Frequency Range (GHZ)	Gain (dB) Min.	SS Flatness (+/-dB) Max.	NF (dB) Max.	P1dB (dBm) Min.	VSWR In/Out Max.	Current @ 12-15 VDC (mA) Typ.	Case Type
CBMU1011423M	.1-1	14	1.00	3.5	23	2.5:1	180	MS4
CBMU10110205M	.1-1.5	10	1.50	1.8	20	2.0:1	180	MS4
CBMU1023327M	.1-2	33	1.00	2.5	27	2.0:1	275	MS6
CBMU1032523M	.1-3	25	1.50	4.0	23	2.5:1	275	MS6
CBMU1042323M	.1-4	23	1.50	4.5	23	2.5:1	275	MS6
CBMU1062223M	.1-6	22	1.50	6.0	23	2.5:1	275	MS4
CBMU1082122M	.1-8	21	1.50	6.5	22	2.5:1	275	MS4
CBMU1101820M	.1-10	18	1.75	7.0	20	2.5:1	295	MS4
CBMU1122420M	.1-12	24	2.50	7.5	20	2.5:1	275	MS6
CBMU1181820M	.1-18	18	3.00	8.5	20	2.7:1	300	MS6
CBMU40316205M	.4-3.5	16	1.50	4.0	20	2.0:1	185	MS4
CBM01022020M	1-2	20	1.00	3.0	20	2.0:1	190	MS4
CBM02042625M	2-4	26	1.00	4.0	25	2.0:1	275	MS4
CBM02082623M	2-8	26	1.50	6.0	23	2.0:1	295	MS4
CBM02182018M	2-18	20	2.00	5.0	18	2.5:1	295	MS4
CBM04082823M	4-8	28	1.00	4.0	23	2.0:1	295	MS4
CBM06121822M	6-12	18	1.50	6.0	22	2.0:1	275	MS4
CBM06182420M	6-18	24	3.00	6.0	20	2.0:1	375	MS8
CBM08122423M	8-12	24	1.50	4.0	23	2.0:1	285	MS4
CBM08182621M	8-18	26	1.75	6.0	21	2.0:1	325	MS6
CBM18262015M	18-26.5	20	3.00	8.0	15	2.5:1	385	MS8

CERNEX RESERVE THE RIGHT TO CHANGE THE SPECIFICATIONS WITHOUT NOTICE.