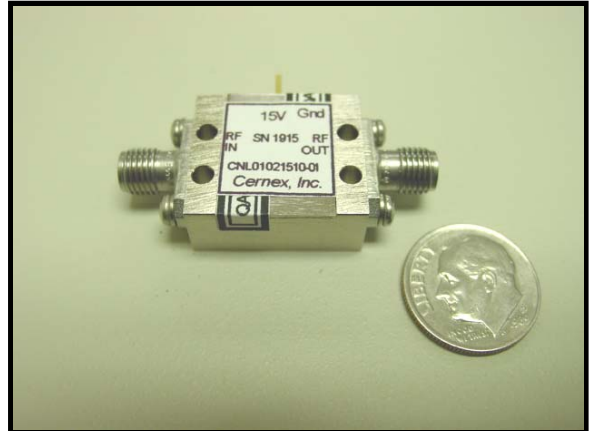


## Narrow Band Low Noise Amplifiers

### FEATURES:

- ❖ Coverage From 0.3 to 97.0 GHz
- ❖ Removable Connectors
- ❖ Noise Figure As Low As 0.3dB
- ❖ Compact/Rugged Thin-Film Construction
- ❖ Economically Priced



### DESCRIPTION:

### CNL Series

Cernexwave's CNL series offer coverage of most needed bands. Typical applications include airborne, shipboard, and ground electronic systems, IFF, radar, and communication receivers, EHF satellite communications. Low noise performance of these CNL series, combined with a wide selection of gain and output power, provide some of the industry's most versatile amplifiers.

### SPECIFICATIONS:

Model Number	Frequency Range (GHz)	Gain (dB) Min. **	SS Flatness (+/-dB) Max.	NF (dB) Max.	P1dB (dBm) Min.	VSWR In/Out Max.	Current @ 12 VDC (mA) Typ.	Case Type
CNLU4U43808	0.43-0.45	30	0.50	0.80	10	2:1	100	MSA4
CNLU5U63805	0.5-0.6	30	0.25	0.50	10	2:1/1.8:1	185	MSA4
CNLU5U73009	0.5-0.7	30	0.50	0.9	10	2:1	150	MSA4
CNLU5U73014	0.5-0.7	30	0.50	1.4	10	2:1	150	MSA4
CNLU5U74009	0.5-0.7	40	0.75	0.9	10	2:1	200	MSA6
CNLU5U74014	0.5-0.7	40	0.75	1.4	10	2:1	200	MSA6
CNLU6U83009	0.6-0.8	30	0.50	0.9	10	2:1	150	MSA4
CNLU6U83014	0.6-0.8	30	0.50	1.4	10	2:1	150	MSA4
CNLU6U84009	0.6-0.8	40	0.75	0.9	10	2:1	200	MSA6
CNLU6U84014	0.6-0.8	40	0.75	1.4	10	2:1	200	MSA6
CNLU7U83804	0.7-0.8	30	0.50	0.40	10	1.5:1	90	MSA4
CNLU7U93008	0.7-0.9	30	0.50	0.8	10	2:1	175	MSA4
CNLU7U93009	0.7-0.9	30	0.50	0.9	10	2:1	150	MSA4
CNLU7U93014	0.7-0.9	30	0.50	1.4	10	2:1	150	MSA4
CNLU7U94009	0.7-0.9	40	0.75	0.9	10	2:1	200	MSA6
CNLU7U94014	0.7-0.9	40	0.75	1.4	10	2:1	200	MSA6
CNLU8011005	0.8-1.0	14	1.00	0.5	15	1.6:1	125	MSA2
CNLU8013009	0.8-1.0	30	0.50	0.9	10	2:1	150	MSA4



## Narrow Band Low Noise 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 VDC (mA) Typ.	Case Type
CNLU8013014	0.8-1.0	30	0.50	1.4	10	2:1	150	MSA4
CNLU8014009	0.8-1.0	40	0.75	0.9	10	2:1	200	MSA6
CNLU8014014	0.8-1.0	40	0.75	1.4	10	2:1	200	MSA6
CNLU9013009	0.9-1.1	30	0.50	0.9	10	2:1	150	MSA4
CNLU9013014	0.9-1.1	30	0.50	1.4	10	2:1	150	MSA4
CNLU9014009	0.9-1.1	40	0.75	0.9	10	2:1	200	MSA6
CNLU9014014	0.9-1.1	40	0.75	1.4	10	2:1	200	MSA6
CNLU9013005	0.9-1.2	30	0.50	0.5	13	1.5:1	150	MSA4
CNLU9014408	0.95-1.05	44	0.50	0.8	10	2:1	125	MSA6
CNLU9012507	0.95-1.22	30	0.50	0.7	15	1.8:1	100	MSA4
CNLU9012508	0.95-1.22	30	0.50	0.8	15	1.8:1/1.5:1	100	MSA4
CNLU9013011	0.95-1.22	30	0.50	1.10	15	1.8:1	100	MSA4
CNLU9013805	0.95-1.45	38	0.50	0.5	13	1.8:1	150	MSA6
CNLU9011210	0.95-1.6	14	1.00	1.00	13	2.0:1	80	MSA2
CNLU9013806	0.95-1.75	38	1.00	0.6	13	1.75:1	200	MSA6
CNL01014408	1.0-1.1	44	0.50	0.8	10	2.0:1	125	MSA6
CNL010130092	1.0-1.2	30	0.50	0.9	10	2:1	150	MSA4
CNL010130142	1.0-1.2	30	0.50	1.4	10	2:1	150	MSA4
CNL010140092	1.0-1.2	40	0.75	0.9	10	2:1	200	MSA6
CNL010140142	1.0-1.2	40	0.75	1.4	10	2:1	200	MSA6
CNL010130143	1.1-1.3	30	0.50	1.4	10	2:1	150	MSA4
CNL010140093	1.1-1.3	40	0.75	0.9	10	2:1	200	MSA6
CNL010140143	1.1-1.3	40	0.75	1.4	10	2:1	200	MSA6
CNL010130094	1.2-1.4	30	0.50	0.9	10	2:1	150	MSA4
CNL010130144	1.2-1.4	30	0.50	1.4	10	2:1	150	MSA4
CNL010140094	1.2-1.4	40	0.75	0.9	10	2:1	200	MSA6
CNL010140144	1.2-1.4	40	0.75	1.4	10	2:1	200	MSA6
CNL010140056	1.2-1.6	40	0.50	0.5	13	1.5:1	125	MSA6
CNL010128044	1.3-1.4	28	0.50	0.40	10	1.5:1	90	MSA4
CNL010130095	1.3-1.5	30	0.50	0.9	10	2:1	150	MSA4
CNL010130145	1.3-1.5	30	0.50	1.4	10	2:1	150	MSA4
CNL010140095	1.3-1.5	40	0.75	0.9	10	2:1	200	MSA6
CNL010140145	1.3-1.5	40	0.75	1.4	10	2:1	200	MSA6
CNL010130066	1.4-1.6	30	0.50	0.7	10	2:1	150	MSA4
CNL010130096	1.4-1.6	30	0.50	0.9	10	2:1	150	MSA4
CNL010130146	1.4-1.6	30	0.50	1.4	10	2:1	150	MSA4
CNL010140096	1.4-1.6	40	0.75	0.9	10	2:1	200	MSA6
CNL010140146	1.4-1.6	40	0.75	1.4	10	2:1	200	MSA6
CNL010250067	1.4-2.7	50	1.00	0.6	10	2:1	250	MSA6
CNL010150046	1.5-1.6	50	0.50	0.43	10	1.3:1	200	MSB6
CNL010160046	1.5-1.6	60	0.50	0.4	13	1.5:1	250	MSA8



## Narrow Band Low Noise 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 VDC (mA) Typ.	Case Type
CNL010130077	1.5-1.7	30	0.50	0.7	10	2:1	150	MSA4
CNL010130097	1.5-1.7	30	0.50	0.9	10	2:1	150	MSA4
CNL010130147	1.5-1.7	30	0.50	1.4	10	2:1	150	MSA4
CNL010140097	1.5-1.7	40	0.75	0.9	10	2:1	200	MSA6
CNL010140147	1.5-1.7	40	0.75	1.4	10	2:1	200	MSA6
CNL010113058	1.5-1.8	13	0.50	0.5	10	2.5:1	125	MSA2
CNL010115078	1.5-1.8	13	0.50	0.7	10	2:1	125	MSA2
CNL010140058	1.5-1.8	40	0.50	0.5	13	1.5:1	175	MSA6
CNL010130046	1.52-1.66	30	0.50	0.4	10	1.5:1	125	MSA4
CNL010130078	1.6-1.8	30	0.50	0.7	10	2:1	150	MSA4
CNL010130098	1.6-1.8	30	0.50	0.9	10	2:1	150	MSA4
CNL010130148	1.6-1.8	30	0.50	1.4	10	2:1	150	MSA4
CNL010140098	1.6-1.8	40	0.75	0.9	10	2:1	200	MSA6
CNL010140148	1.6-1.8	40	0.75	1.4	10	2:1	200	MSA6
CNL010130099	1.7-1.9	30	0.50	0.9	10	2:1	150	MSA4
CNL010130069	1.7-1.9	30	0.50	0.6	10	2:1	150	MSA4
CNL010130149	1.7-1.9	30	0.50	1.4	10	2:1	150	MSA4
CNL010140099	1.7-1.9	40	0.75	0.9	10	2:1	200	MSA6
CNL010140149	1.7-1.9	40	0.75	1.4	10	2:1	200	MSA6
CNL010238014	1.7-2.4	38	0.50	1.0	10	1.8:1	200	MSA6
CNL01023006	1.8-2.0	30	0.50	0.6	10	2:1	150	MSA4
CNL01023009	1.8-2.0	30	0.50	0.9	10	2:1	150	MSA4
CNL01023014	1.8-2.0	30	0.50	1.4	10	2:1	150	MSA4
CNL01024009	1.8-2.0	40	0.75	0.9	10	2:1	200	MSA6
CNL01024014	1.8-2.0	40	0.75	1.4	10	2:1	200	MSA6
CNL010230061	1.9-2.1	30	0.50	0.6	10	2:1	150	MSA4
CNL010230091	1.9-2.1	30	0.50	0.9	10	2:1	150	MSA4
CNL010230141	1.9-2.1	30	0.50	1.4	10	2:1	150	MSA4
CNL010240091	1.9-2.1	40	0.75	0.9	10	2:1	200	MSA6
CNL010240141	1.9-2.1	40	0.75	1.4	10	2:1	200	MSA6
CNL020230072	2.0-2.2	30	0.50	0.7	10	2:1	150	MSA4
CNL020230102	2.0-2.2	30	0.50	1.0	10	2:1	150	MSA4
CNL020230152	2.0-2.2	30	0.50	1.5	10	2:1	150	MSA4
CNL020240102	2.0-2.2	40	0.75	1.0	10	2:1	200	MSA6
CNL020240152	2.0-2.2	40	0.75	1.5	10	2:1	200	MSA6
CNL020236084	2.05-2.4	36	1.00	0.8	10	1.5:1	125	MSA6
CNL020230073	2.1-2.3	30	0.50	0.7	10	2:1	150	MSA4
CNL020230103	2.1-2.3	30	0.50	1.0	10	2:1	150	MSA4
CNL020230153	2.1-2.3	30	0.50	1.5	10	2:1	150	MSA4
CNL020240103	2.1-2.3	40	0.75	1.0	10	2:1	200	MSA6
CNL020240153	2.1-2.3	40	0.75	1.5	10	2:1	200	MSA6



## Narrow Band Low Noise 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 VDC (mA) Typ.	Case Type
CNL020260044	2.19-2.4	60	0.50	0.45	10	1.3:1	250	MSA8
CNL020260057	2.1-2.7	60	1.00	0.55	10	1.5:1	200	MSA8
CNL020240073	2.2-2.3	40	0.50	0.70	5	1.5:1	175	MSA6
CNL020250043	2.2-2.3	50	0.50	0.45	10	1.3:1	225	MSA6
CNL020230074	2.2-2.4	30	0.50	0.7	10	2:1	150	MSA3
CNL020230104	2.2-2.4	30	0.50	1.0	10	2:1	150	MSA3
CNL020230154	2.2-2.4	30	0.50	1.5	10	2:1	150	MSA3
CNL020240104	2.2-2.4	40	0.75	1.0	10	2:1	200	MSA4
CNL020240154	2.2-2.4	40	0.75	1.5	10	2:1	200	MSA4
CNL020232054	2.3-2.4	32	0.50	0.5	10	1.5:1	185	MSA6
CNL020230085	2.3-2.5	30	0.50	0.8	10	2:1	150	MSA3
CNL020230105	2.3-2.5	30	0.50	1.0	10	2:1	150	MSA3
CNL020230155	2.3-2.5	30	0.50	1.5	10	2:1	150	MSA3
CNL020240105	2.3-2.5	40	0.75	1.0	10	2:1	200	MSA4
CNL020240155	2.3-2.5	40	0.75	1.5	10	2:1	200	MSA4
CNL020226057	2.3-2.7	26	0.50	0.5	10	1.5:1	90	MSA4
CNL020230086	2.4-2.6	30	0.50	0.8	10	2:1	150	MSA3
CNL020230106	2.4-2.6	30	0.50	1.0	10	2:1	150	MSA3
CNL020230156	2.4-2.6	30	0.50	1.5	10	2:1	150	MSA3
CNL020240106	2.4-2.6	40	0.75	1.0	10	2:1	200	MSA4
CNL020240156	2.4-2.6	40	0.75	1.5	10	2:1	200	MSA4
CNL020203087	2.5-2.7	30	0.50	0.8	10	2:1	150	MSA3
CNL020230107	2.5-2.7	30	0.50	1.0	10	2:1	150	MSA3
CNL020230157	2.5-2.7	30	0.50	1.5	10	2:1	150	MSA3
CNL020240107	2.5-2.7	40	0.75	1.0	10	2:1	200	MSA4
CNL020240157	2.5-2.7	40	0.75	1.5	10	2:1	200	MSA4
CNL020226058	2.6-2.8	26	0.50	0.5	13	1.5:1	125	MSA4
CNL020230088	2.6-2.8	30	0.50	0.8	10	2:1	150	MSA3
CNL020230108	2.6-2.8	30	0.50	1.0	10	2:1	150	MSA3
CNL020230158	2.6-2.8	30	0.50	1.5	10	2:1	150	MSA3
CNL020240108	2.6-2.8	40	0.75	1.0	10	2:1	200	MSA4
CNL020240158	2.6-2.8	40	0.75	1.5	10	2:1	200	MSA4
CNL020230089	2.7-2.9	30	0.50	0.8	10	2:1	150	MSA3
CNL020230109	2.7-2.9	30	0.50	1.0	10	2:1	150	MSA3
CNL020230159	2.7-2.9	30	0.50	1.5	10	2:1	150	MSA3
CNL020240109	2.7-2.9	40	0.75	1.0	10	2:1	200	MSA4
CNL020240159	2.7-2.9	40	0.75	1.5	10	2:1	200	MSA4
CNL02033008	2.8-3.0	30	0.50	0.8	10	2:1	150	MSA3
CNL02033010	2.8-3.0	30	0.50	1.1	10	2:1	150	MSA3
CNL02033015	2.8-3.0	30	0.50	1.6	10	2:1	150	MSA3
CNL02034011	2.8-3.0	40	0.75	1.1	10	2:1	200	MSA4



## Narrow Band Low Noise 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 VDC (mA) Typ.	Case Type
CNL02033016	2.8-3.0	40	0.75	1.6	10	2:1	200	MSA4
CNL020330081	2.9-3.1	30	0.50	0.8	10	2:1	150	MSA3
CNL020330111	2.9-3.1	30	0.50	1.1	10	2:1	150	MSA3
CNL020330161	2.9-3.1	30	0.50	1.6	10	2:1	150	MSA3
CNL020340111	2.9-3.1	40	0.75	1.1	10	2:1	200	MSA4
CNL020340161	2.9-3.1	40	0.75	1.6	10	2:1	200	MSA4
CNL030330082	3.0-3.2	30	0.50	0.8	10	2:1	150	MSA3
CNL030330112	3.0-3.2	30	0.50	1.1	10	2:1	150	MSA3
CNL030330162	3.0-3.2	30	0.50	1.6	10	2:1	150	MSA3
CNL030340112	3.0-3.2	40	0.75	1.1	10	2:1	200	MSA4
CNL030340162	3.0-3.2	40	0.75	1.6	10	2:1	200	MSA4
CNL030329055	3.0-3.5	29	0.50	0.5	10	1.5:1	150	MSA4
CNL030330083	3.1-3.3	30	0.50	0.8	10	2:1	150	MSA3
CNL030330113	3.1-3.3	30	0.50	1.1	10	2:1	150	MSA3
CNL030330163	3.1-3.3	30	0.50	1.6	10	2:1	150	MSA3
CNL030340113	3.1-3.3	40	0.75	1.1	10	2:1	200	MSA4
CNL030340163	3.1-3.3	40	0.75	1.6	10	2:1	200	MSA4
CNL030330084	3.2-3.4	30	0.50	0.8	10	2:1	150	MSA3
CNL030330114	3.2-3.4	30	0.50	1.1	10	2:1	150	MSA3
CNL030330164	3.2-3.4	30	0.50	1.6	10	2:1	150	MSA3
CNL030340114	3.2-3.4	40	0.75	1.1	10	2:1	200	MSA4
CNL030340164	3.2-3.4	40	0.75	1.6	10	2:1	200	MSA4
CNL030330085	3.3-3.5	30	0.50	0.8	10	2:1	150	MSA3
CNL030330115	3.3-3.5	30	0.50	1.1	10	2:1	150	MSA3
CNL030330165	3.3-3.5	30	0.50	1.6	10	2:1	150	MSA3
CNL030340115	3.3-3.5	40	0.75	1.1	10	2:1	200	MSA4
CNL030340165	3.3-3.5	40	0.75	1.6	10	2:1	200	MSA4
CNL030330086	3.4-3.6	30	0.50	0.8	10	2:1	150	MSA3
CNL030330116	3.4-3.6	30	0.50	1.1	10	2:1	150	MSA3
CNL030330166	3.4-3.6	30	0.50	1.6	10	2:1	150	MSA3
CNL030340116	3.4-3.6	40	0.75	1.1	10	2:1	200	MSA4
CNL030340166	3.4-3.6	40	0.75	1.6	10	2:1	200	MSA4
CNL030428052	3.4-4.2	28	1.00	0.5	10	2:1	175	MSA4
CNL030450042	3.4-4.2	50	1.00	0.43	10	1.45:1	200	MSA6
CNL030460042	3.4-4.2	60	1.50	0.45	10	1.45:1	225	MSA7
CNL030330087	3.5-3.7	30	0.50	0.8	10	2:1	150	MSA3
CNL030330117	3.5-3.7	30	0.50	1.1	10	2:1	150	MSA3
CNL030330167	3.5-3.7	30	0.50	1.6	10	2:1	150	MSA3
CNL030340117	3.5-3.7	40	0.75	1.1	10	2:1	200	MSA4
CNL030340167	3.5-3.7	40	0.75	1.6	10	2:1	200	MSA4
CNL030330088	3.6-3.8	30	0.50	0.8	10	2:1	150	MSA3



## Narrow Band Low Noise 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 VDC (mA) Typ.	Case Type
CNL030330118	3.6-3.8	30	0.50	1.1	10	2:1	150	MSA3
CNL030330168	3.6-3.8	30	0.50	1.6	10	2:1	150	MSA3
CNL030340118	3.6-3.8	40	0.75	1.1	10	2:1	200	MSA4
CNL030340168	3.6-3.8	40	0.75	1.6	10	2:1	200	MSA4
CNL030410062	3.6-4.2	50	1.50	0.69	10	1.45:1	75	MSA6
CNL030435052	3.6-4.2	35	0.50	0.5	13	2:1	135	MSA6
CNL030435042	3.6-4.2	35	0.50	0.43	10	1.45:1	200	MSA5
CNL030435062	3.6-4.2	35	0.50	0.69	10	1.45:1	125	MSA5
CNL030450042	3.6-4.2	50	0.75	0.49	10	1.45:1	300	MSA6
CNL03043008	3.7-4.2	30	0.75	0.8	10	2:1	150	MSA3
CNL03043012	3.7-4.2	30	0.50	1.2	10	2:1	150	MSA3
CNL03043017	3.7-4.2	30	0.50	1.7	10	2:1	150	MSA3
CNL03044012	3.7-4.2	40	0.75	1.2	10	2:1	200	MSA4
CNL03044017	3.7-4.2	40	0.75	1.7	10	2:1	200	MSA4
CNL04053008	4.4-5.0	30	0.50	0.8	10	2:1	150	MSA3
CNL04053012	4.4-5.0	30	0.50	1.2	10	2:1	150	MSA3
CNL04053017	4.4-5.0	30	0.50	1.7	10	2:1	150	MSA3
CNL04054012	4.4-5.0	40	0.75	1.2	12	2:1	200	MSA4
CNL04054017	4.4-5.0	40	0.75	1.7	12	2:1	200	MSA4
CNL040536051	4.4-5.1	36	0.50	0.5	10	1.5:1	125	MSA6
CNL040540055	4.4-5.5	40	1.00	0.55	10	1.45:1	175	MSA5
CNL040560065	4.4-5.5	60	1.00	0.69	10	1.45:1	225	MSA8
CNL05072509	5.0-7.0	25	1.00	0.9	10	1.5:1	100	MSA3
CNL05073409	5.0-7.0	34	1.00	0.9	10	2:1	100	MSA3
CNL05053009	5.4-5.9	30	0.75	0.9	10	2:1	150	MSA3
CNL05053012	5.4-5.9	30	1.0	1.2	12	2:1	150	MSA3
CNL05053017	5.4-5.9	30	0.50	1.7	12	2:1	150	MSA3
CNL05054012	5.4-5.9	40	0.75	1.2	12	2:1	200	MSA4
CNL05054017	5.4-5.9	40	0.75	1.7	12	2:1	200	MSA4
CNL050616131	5.8-6.1	16	0.50	1.3	11	1.8:1	125	MSB2
CNL05063009	5.9-6.4	30	0.75	0.9	10	2:1	150	MSA3
CNL05063013	5.9-6.4	30	0.50	1.3	12	2:1	150	MSA3
CNL05063018	5.9-6.4	30	0.50	1.8	12	2:1	150	MSA3
CNL05064013	5.9-6.4	40	0.75	1.3	12	2:1	200	MSA4
CNL05064018	5.9-6.4	40	0.75	1.8	12	2:1	200	MSA4
CNL050739061	5.9-7.1	39	1.00	0.69	10	1.45:1	150	MSB5
CNL06073010	6.4-7.2	30	0.75	1.0	10	2:1	150	MSA3
CNL06073013	6.4-7.2	30	0.50	1.3	12	2:1	150	MSA3
CNL06073018	6.4-7.2	30	0.50	1.8	12	2:1	150	MSA3
CNL06074013	6.4-7.2	40	0.75	1.3	12	2:1	200	MSA4
CNL06074018	6.4-7.2	40	0.75	1.8	12	2:1	200	MSA4



## Narrow Band Low Noise 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 VDC (mA) Typ.	Case Type
CNL070828084	7.1-8.4	28	1.00	0.80	10	2:1	150	MSB3
CNL070834084	7.1-8.4	34	1.00	0.8	13	1.8:1	200	MSB4
CNL070850074	7.1-8.4	50	1.00	0.75	10	1.4:1	200	MSB6
CNL070850064	7.1-8.4	50	1.00	0.69	10	1.4:1	200	MSB6
CNL070860064	7.1-8.4	60	1.00	0.69	10	1.4:1	275	MSB6
CNL07073011	7.2-7.8	30	1.0	1.1	10	2:1	150	MSB3
CNL07072813	7.2-7.8	28	0.50	1.3	12	2:1	150	MSB3
CNL07072818	7.2-7.8	28	0.50	1.8	12	2:1	150	MSB3
CNL07073813	7.2-7.8	38	0.75	1.3	12	2:1	200	MSB4
CNL07073818	7.2-7.8	38	0.75	1.8	12	2:1	200	MSB4
CNL070723077	7.25-7.75	23	0.75	0.7	10	1.5:1	100	MSB3
CNL070750067	7.25-7.75	50	1.00	0.60	10	1.45:1	250	MSB6
CNL070840092	7.7-8.2	40	1.00	0.90	15	1.5:1	175	MSB5
CNL07083011	7.9-8.4	30	0.75	1.1	10	2:1	150	MSB3
CNL07082614	7.9-8.4	26	0.50	1.4	12	2:1	150	MSB3
CNL07082619	7.9-8.4	26	0.50	1.9	12	2:1	150	MSB3
CNL070828204	7.9-8.4	28	0.50	2.0	10	2:1	100	MSB3
CNL07083814	7.9-8.4	38	0.75	1.4	12	2:1	200	MSB4
CNL07083819	7.9-8.4	38	0.75	1.9	12	2:1	200	MSB4
CNL080840064	8.0-8.4	40	0.50	0.69	10	1.4:1	175	MSB5
CNL08092030CS	8.0-9.0	20	1.0	3.0	15	2:1	100	25x16.8x10
CNL08092514	8.5-9.6	25	0.50	1.4	12	2:1	175	MSB3
CNL080922519	8.5-9.6	25	0.50	1.9	12	2:1	175	MSB3
CNL08093614	8.5-9.6	36	0.75	1.4	12	2:1	225	MSA4
CNL08093619	8.5-9.6	36	0.75	1.9	12	2:1	225	MSB4
CNL08093011	8.5-9.6	30	1.0	1.1	10	2:1	175	MSB4
CNL09092514	9.0-9.5	25	0.50	1.4	12	2:1	175	MSB4
CNL09092519	9.0-9.5	25	0.50	1.9	12	2:1	175	MSB4
CNL09093614	9.0-9.5	36	0.75	1.4	12	2:1	225	MSB5
CNL09093619	9.0-9.5	36	0.75	1.9	12	2:1	225	MSB5
CNL09093011	9.0-9.5	30	0.75	1.1	10	2:1	175	MSB4
CNL09103210	9.0-10.0	32	0.75	1.0	10	1.5:1	165	MSB4
CNL09102514	9.5-10.5	25	0.50	1.4	12	2:1	175	MSB4
CNL09102519	9.5-10.5	25	0.50	1.9	12	2:1	175	MSB4
CNL09103614	9.5-10.5	36	0.75	1.4	12	2:1	225	MSB5
CNL09103619	9.5-10.5	36	0.75	1.9	12	2:1	225	MSB5
CNL09103011	9.5-10.5	30	1.00	1.1	10	2:1	175	MSB4
CNL101116142	10.7-11.2	16	1.50	1.4	10	1.5:1	125	MSB3
CNL10112415	10.7-11.7	24	0.50	1.5	12	2:1	175	MSB4
CNL10112420	10.7-11.7	24	0.50	2.0	12	2:1	175	MSB4
CNL10113515	10.7-11.7	35	0.75	1.5	12	2:1	225	MSB5



## Narrow Band Low Noise 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 VDC (mA) Typ.	Case Type
CNL10113520	10.7-11.7	35	0.75	2.0	12	2:1	225	MSB5
CNL10113012	10.7-11.7	30	1.00	1.2	10	2:1	175	MSB4
CNL101132107	10.7-11.7	32	1.00	1.0	10	1.5:1	200	MSB4
CNL101214127	10.7-12.7	14	1.50	1.29	8	1.4:1/2:1	75	MSB3
CNL101238107	10.7-12.7	38	1.00	1.0	10	2:1	150	MSB5
CNL101240127	10.7-12.7	40	1.50	1.29	10	1.4:1	100	MSB5
CNL101240107	10.7-12.7	40	1.50	1.0	10	1.5:1	160	MSB5
CNL101245107	10.7-12.7	45	1.00	1.0	10	2:1	190	MSB5
CNL101252107	10.7-12.7	52	1.00	1.0	10	2:1	225	MSB5
CNL101228117	10.7-12.75	28	1.00	1.10	10	1.8:1	175	MSB4
CNL101240157	10.7-12.75	40	1.50	1.06	10	1.4:1	150	MSB5
CNL101260147	10.7-12.75	60	2.00	1.45	10	1.4:1	250	MSB6
CNL101150107	10.95-14.7	50	1.00	1.06	10	1.4:1	375	MSB6
CNL101123097	10.95-14.75	23	0.75	0.90	10	1.5:1	200	MSB3
CNL111223092	11.7-12.2	23	0.75	0.90	10	1.5:1	200	MSB3
CNL11122415	11.7-12.2	24	0.50	1.5	12	2:1	200	MSB3
CNL11122420	11.7-12.2	24	0.50	2.0	12	2:1	200	MSB3
CNL11123515	11.7-12.2	35	0.75	1.5	12	2:1	225	MSB4
CNL11123520	11.7-12.2	35	0.75	2.0	12	2:1	225	MSB4
CNL11123012	11.7-12.2	30	0.75	1.2	10	2:1	200	MSB3
CNL12122416	12.2-12.7	24	0.50	1.6	12	2:1	200	MSB3
CNL12122421	12.2-12.7	24	0.50	2.1	12	2:1	200	MSB3
CNL12123516	12.2-12.7	35	0.75	1.6	12	2:1	225	MSB4
CNL12123521	12.2-12.7	35	0.75	2.1	12	2:1	225	MSB4
CNL12123013	12.2-12.7	30	0.75	1.3	10	2:1	175	MSB4
CNL12126010	12.25-12.75	60	1.00	1.06	10	1.45:1	425	MSB6
CNL12132217	12.7-13.2	22	0.50	1.7	12	2:1	175	MSB3
CNL12132222	12.7-13.2	22	0.50	2.2	12	2:1	175	MSB3
CNL121328102	12.7-13.2	28	1.00	1.0	10	2:1	200	MSB4
CNL12133317	12.7-13.2	33	0.75	1.7	12	2:1	225	MSB4
CNL12133322	12.7-13.2	33	0.75	2.2	12	2:1	225	MSB4
CNL12133014	12.7-13.2	30	0.75	1.4	10	2:1	175	MSB4
CNL121540183	12.7-15.3	40	1.50	1.81	10	1.45:1/2:1	275	MSB5
CNL121540113	12.7-15.3	40	1.00	1.10	10	1.8:1	200	MSB5
CNL13142118	13.2-14.2	21	0.50	1.8	12	2:1	175	MSB3
CNL13142123	13.2-14.2	21	0.50	2.3	12	2:1	175	MSB3
CNL13143218	13.2-14.2	32	0.75	1.8	12	2:1	225	MSB4
CNL13143223	13.2-14.2	32	0.75	2.3	12	2:1	225	MSB4
CNL13143015	13.2-14.2	30	0.75	1.5	10	2:1	175	MSB4
CNL14142119	14.0-14.5	21	0.50	1.9	10	2:1	175	MSB3
CNL14142124	14.0-14.5	21	0.50	2.4	10	2:1	175	MSB3





## Narrow Band Low Noise 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 VDC (mA) Typ.	Case Type
CNL14143218	14.0-14.5	32	0.75	1.9	10	2:1	225	MSB4
CNL14143224	14.0-14.5	32	0.75	2.4	10	2:1	225	MSB4
CNL14143015	14.0-14.5	30	0.75	1.5	10	2:1	175	MSB4
CNL141434145	14.0-14.5	34	0.75	1.4	10	1.5:1	225	MSB5
CNL141540134	14.4-15.4	40	1.00	1.30	15	1.8:1	275	MSB5
CNL14163718	14.0-16.0	37	1.00	1.81	10	1.45:1/2:1	175	MSB5
CNL14152019	14.5-15.3	20	0.50	1.9	10	2:1	175	MSB3
CNL14152024	14.5-15.3	20	0.50	2.4	10	2:1	175	MSB3
CNL14153019	14.5-15.3	30	0.75	1.9	10	2:1	225	MSB4
CNL14153024	14.5-15.3	30	0.75	2.4	10	2:1	225	MSB4
CNL14153016	14.5-15.3	30	0.75	1.6	10	2:1	175	MSB4
CNL151530204	15.1-15.4	30	1.00	2.0	10	2:1	140	MSB4
CNL15162019	15.5-16.5	20	0.50	1.9	10	2:1	175	MSB3
CNL15162024	15.5-16.5	20	0.50	2.4	10	2:1	175	MSB3
CNL15163019	15.5-16.5	30	0.75	1.9	10	2:1	225	MSB4
CNL15163024	15.5-16.5	30	0.75	2.4	10	2:1	225	MSB4
CNL15163016	15.5-16.5	30	0.75	1.6	10	2:1	175	MSB4
CNL16172020	16.5-17.5	20	0.50	2.0	10	2:1	175	MSB3
CNL16172025	16.5-17.5	20	0.50	2.5	10	2:1	175	MSB3
CNL16173020	16.5-17.5	30	0.75	2.0	10	2:1	225	MSB4
CNL16172025	16.5-17.5	30	0.75	2.5	10	2:1	225	MSB4
CNL16173017	16.5-17.5	30	0.75	1.7	10	2:1	225	MSB4
CNL171722165	17.0-17.5	22	1.00	1.6	10	1.5:1	200	MSB3
CNL17190950	17.0-19.0	9	1.00	5.0	22	2:1	125	MSA4
CNL17192020	17.7-19.7	20	0.50	2.0	10	2:1	175	MSB2
CNL17192025	17.7-19.7	20	0.50	2.5	10	2:1	175	MSB2
CNL17193020	17.7-19.7	30	1.00	2.0	10	2:1	225	MSB3
CNL17193025	17.7-19.7	30	0.75	2.5	10	2:1	225	MSB3
CNL171930187	17.7-19.7	30	1.00	1.81	10	1.45:1/2:1	125	MSB3
CNL171938187	17.7-19.7	38	1.00	1.8	11	1.8:1	150	MSB4
CNL171946187	17.7-19.7	46	1.50	1.8	12	1.8:1	150	MSB6
CNL172145183	17.8-21.3	45	2.00	1.81	10	2:1	175	MSB4
CNL182640245	18.0-26.5	40	2.00	2.4	10	2:1	275	MSB4
CNL18182020	18.1-18.6	20	0.50	2.0	10	2:1	175	MSB2
CNL18182025	18.1-18.6	20	0.50	2.5	10	2:1	175	MSB2
CNL18183020	18.1-18.6	30	0.75	2.0	10	2:1	225	MSB3
CNL18183025	18.1-18.6	30	0.75	2.5	10	2:1	225	MSB3
CNL18183018	18.1-18.6	30	0.75	1.8	10	2:1	225	MSB3
CNL18192022	18.3-19.4	20	0.50	2.2	10	2:1	175	MSB2
CNL18192027	18.3-19.4	20	0.50	2.7	10	2:1	175	MSB2
CNL18193022	18.3-19.4	30	0.75	2.2	10	2:1	225	MSB3



## Narrow Band Low Noise 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 VDC (mA) Typ.	Case Type
CNL18193027	18.3-19.4	30	0.75	2.7	10	2:1	225	MSB3
CNL19201822	19.2-20.2	18	0.50	2.2	10	2:1	200	MSB2
CNL19201827	19.2-20.2	18	0.50	2.7	10	2:1	250	MSB2
CNL19202722	19.2-20.2	27	0.75	2.2	10	2:1	200	MSB3
CNL19202727	19.2-20.2	27	0.75	2.7	10	2:1	250	MSB3
CNL20212017	20.2-21.2	20 Typ	0.8	1.7	7	2:1	110	*
CNL202122182	20.2-21.2	22	1.75	1.8	8	1.5:1	200	MSB2
CNL20212224	20.2-21.2	22	0.50	2.4	10	2:1	250	MSB2
CNL20212229	20.2-21.2	22	0.50	2.9	10	2:1	300	MSB2
CNL20213017	20.2-21.2	30 Typ	1.0	1.7	10	2:1	180	*
CNL20213224	20.2-21.2	32	0.75	2.4	10	2:1	250	MSB3
CNL20213229	20.2-21.2	32	0.75	2.9	10	2:1	300	MSB3
CNL202150182	20.2-21.2	50	1.00	1.81	10	1.88:1	350	MSB4
CNL21222019	21.0-22.0	20	2.00	1.9	10	2.5:1	85	MSB2
CNL21222025	21.0-22.0	20	2.00	2.5	10	2.5:1	85	MSB2
CNL21242820	21.0-24.0	28	1.75	2.0	13	2:1	200	MSB4
CNL21243720	21.0-24.0	37	1.00	2.0	13	1.8:1	200	MSB4
CNL21232226	21.2-23.6	22	0.50	2.6	10	2:1	250	MSB2
CNL21232232	21.2-23.6	22	0.50	3.2	10	2:1	300	MSB2
CNL21233226	21.2-23.6	32	0.75	2.6	10	2:1	250	MSB3
CNL21233232	21.2-23.6	32	0.75	3.2	10	2:1	300	MSB3
CNL22241825	22.0-24.0	20	2.00	2.5	10	2:1	100	MSB2
CNL23252017	23.0-25.0	20 Typ	0.80	1.7	7	2:1	110	*
CNL23253017	23.0-25.0	30 Typ	1.00	1.7	10	2:1	180	*
CNL232716405	23.0-27.5	16	1.75	4.0	10	2:1	125	MSB2
CNL23242228	23.2-24.6	22	0.50	2.8	10	2:1	250	MSB2
CNL23242233	23.2-24.6	22	0.50	3.3	10	2:1	165	MSB2
CNL23243228	23.2-24.6	32	0.75	2.8	10	2:1	250	MSB3
CNL23243233	23.2-24.6	32	0.75	3.3	10	2:1	300	MSB3
CNL24261825	24.0-26.0	18	2.0	2.5	10	2.5:1	100	MSB2
CNL24263025	24.0-26.0	30 Typ	2.00	2.5	10	2.5:1	180	*
CNL242520223	24.2-25.3	20	1.50	2.2	10	1.8:1	200	MSB2
CNL24252228	24.2-25.6	22	0.50	2.8	10	2:1	250	MSB2
CNL24252233	24.2-25.6	22	0.50	3.3	10	2:1	300	MSB2
CNL24253228	24.2-25.6	32	0.75	2.8	10	2:1	250	MSB3
CNL24253233	24.2-25.6	32	0.75	3.3	10	2:1	300	MSB3
CNL25282525	25.0-28.0	25	1.50	2.5	10	2.5:1	125	MSB2
CNL25262228	25.2-26.6	22	0.50	2.8	10	2:1	250	MSB2
CNL25262233	25.2-26.6	22	0.50	3.3	10	2:1	300	MSB2
CNL25263228	25.2-26.6	32	0.75	2.8	10	2:1	250	MSB3
CNL25263233	25.2-26.6	32	0.75	3.3	10	2:1	300	MSB3



## Narrow Band Low Noise 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 VDC (mA) Typ.	Case Type
CNL25271829	25.0-27.5	18	0.75	2.9	10	2:1	250	MK3
CNL25271835	25.0-27.5	18	0.75	3.5	10	2:1	300	MK2
CNL25273029	25.0-27.5	30	1.00	2.9	10	2:1	350	MK2
CNL25273035	25.0-27.5	30	1.00	3.5	10	2:1	250	MK2
CNL27281835	27.0-28.5	18	0.50	3.5	10	2:1	250	MK2
CNL27282435	27.0-28.5	24	0.75	3.5	10	2:1	300	MK2
CNL27283035	27.0-28.5	30	1.00	3.5	10	2:1	350	MK2
CNL27292025	27.0-29.0	20 Typ	0.75	2.5	7	2:1	120	*
CNL27293025	27.0-29.0	30 Typ	1.00	2.5	10	2:1	150	*
CNL28302435	28.0-30.0	24	0.75	3.5	8	2:1	300	MK2
CNL28303035	28.0-30.0	30	1.00	3.5	8	2:1	350	MK2
CNL28301835	28.0-30.0	18	1.00	3.5	8	2:1	250	MK2
CNL29311835	29.5-31.5	18	0.50	3.5	8	2:1	250	MK2
CNL29312435	29.5-31.5	24	0.75	3.5	8	2:1	300	MK2
CNL29313035	29.5-31.5	30	1.00	3.5	8	2:1	350	MK2
CNL30322025	30.0-32.0	20 Typ	0.75	2.5	7	2.2	80	*
CNL30323025	30.0-32.0	30 Typ	1.00	2.5	10	2.2	120	*
CNL31331840	31.0-33.0	18	0.50	4.0	8	2:1	250	MK2
CNL31332440	31.0-33.0	24	0.75	4.0	8	2:1	300	MK2
CNL31333040	31.0-33.0	30	1.00	4.0	8	2:1	350	MK2
CNL32341840	32.5-34.5	18	0.50	4.0	8	2:1	250	MK2
CNL32342440	32.5-34.5	24	0.75	4.0	8	2:1	300	MK2
CNL32343040	32.5-34.5	30	1.00	4.0	8	2:1	350	MK2
CNL34361845	34.0-36.0	18	0.50	4.5	8	2:1	250	MK2
CNL34362025	34.0-36.0	20 Typ	0.75	2.5	7	2.2	80	*
CNL34362445	34.0-36.0	24	0.75	4.5	8	2:1	300	MK2
CNL34363025	34.0-36.0	30 Typ	1.00	2.5	10	2.2	120	MK2
CNL34363045	34.0-36.0	30	1.00	4.5	8	2:1	350	MK2
CNL35371845	35.5-37.5	18	0.50	4.5	8	2:1	250	MK2
CNL35372445	35.5-37.5	24	0.75	4.5	8	2:1	300	MK2
CNL35373045	35.5-37.5	30	1.00	4.5	8	2:1	350	MK2
CNL36382025	36.0-38.0	20 Typ	0.75	2.5	7	2.2	80	*
CNL36383025	36.0-38.0	30 Typ	1.00	2.8	10	2.2	120	MK2
CNL37391850	37.0-39.0	18	0.50	5.0	8	2:1	250	MK2
CNL37392450	37.0-39.0	24	1.50	5.0	8	2:1	300	MK2
CNL37393050	37.0-39.0	30	1.00	5.0	8	2:1	350	MK2
CNL38401850	38.0-40.0	18	0.50	5.0	8	2:1	250	MK2
CNL38402450	38.0-40.0	24	0.75	5.0	8	2:1	300	MK2
CNL38403050	38.0-40.0	30	1.00	5.0	8	2:1	350	MSA3
CNL43452040	43.5-45.5	20 Typ	1.50	4.0 Typ	5 Typ	2.0	175	MSB3
CNL43453040	43.5-45.5	30 Typ	2.00	4.0 Typ	5 Typ	2.0	270	MSB3



## Narrow Band Low Noise 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 VDC (mA) Typ.	Case Type
CNL49511045	49.0-51.0	10 Typ	0.50	4.5 Typ	5 Typ	2.2	80	*
CNL49512045	49.0-51.0	20 Typ	0.75	4.5 Typ	7 Typ	2.2	160	*
CNL49513045	49.0-51.0	30 Typ	1.00	4.5 Typ	10 Typ	2.2	240	*
CNL49511070	49.0-51.0	10 Typ	0.70	7 Typ	13 Typ	2.2	300	*
CNL49512070	49.0-51.0	20 Typ	1.00	7 Typ	15 Typ	2.2	400	*
CNL49513070	49.0-51.0	30 Typ	1.25	7 Typ	18 Typ	2.2	700	*
CNL54561050	54.0-56.0	10 Typ	0.75	5 Typ	5 Typ	2.2	80	*
CNL54562050	54.0-56.0	20 Typ	1.00	5 Typ	7 Typ	2.2	160	*
CNL54563050	54.0-56.0	30 Typ	1.30	5 Typ	10 Typ	2.2	240	*
CNL54561080	54.0-56.0	10 Typ	0.75	8 Typ	15 Typ	2.2	400	*
CNL54562080	54.0-56.0	20 Typ	1.00	8 Typ	17 Typ	2.2	600	*
CNL54563080	54.0-56.0	30 Typ	1.30	8 Typ	20Psat Typ	2.2	700	*
CNL57591550	57.0-59.0	15	1.00	5.0	8	2:1	100	*
CNL58601550	58.0-60.0	15	1.00	5.0	8	2:1	100	*
CNL59611550	59.0-61.0	15	1.00	5.0	8	2:1	100	*
CNL59612045	59.0-61.0	20 Typ	0.75	4.5 Typ	7 Typ	2.2	160	*
CNL59613045	59.0-61.0	30 Typ	1.00	4.5 Typ	10 Typ	2.2	240	*
CNL60621550	60.0-62.0	15	1.00	5.0	8	2:1	100	*
CNL61631550	61.0-63.0	15	1.00	5.0	8	2:1	100	*
CNL62641550	62.0-64.0	15	1.00	5.0	8	2:1	100	*
CNL63651550	63.0-65.0	15	1.00	5.0	8	2:1	100	*
CNL85861570	85.0-86.0	15	1.00	7.0	5	2:1	100	*
CNL86871570	86.0-87.0	15	1.00	7.0	5	2:1	100	*
CNL87881570	87.0-88.0	12	1.00	7.0	5 typ	2:1	100	*
CNL87882570	87.0-88.0	25	1.50	7.0	5 typ	2:1	150	*
CNL88891570	88.0-89.0	15	1.00	7.0	5 typ	2:1	100	*
CNL88892570	88.0-89.0	25	1.50	7.0	5 typ	2:1	150	*
CNL89902570	89.0-90.0	25	1.50	7.0	5 typ	2:1	150	*
CNL89901270	89.0-90.0	12	1.00	7.0	5 typ	2:1	100	*
CNL90911270	90.0-91.0	12	1.00	7.0	5 typ	2:1	100	*
CNL90912570	90.0-91.0	25	1.50	7.0	5 typ	2:1	150	*
CNL90921270	90.0-92.0	12	1.00	7.0	5 typ	2:1	50	*
CNL90922570	90.0-92.0	25	1.50	7.0	5 typ	2:1	150	*
CNL92931270	92.0-93.0	12	1.00	7.0	5 typ	2:1	100	*
CNL92932570	92.0-93.0	25	1.50	7.0	5 typ	2:1	150	*
CNL93941270	93.0-94.0	12	1.00	7.0	5 typ	2:1	100	*
CNL94951270	94.0-95.0	12	1.00	7.0	5 typ	2:1	100	*
CNL95961270	95.0-96.0	12	1.00	7.0	5 typ	2:1	100	*
CNL96971270	96.0-97.0	12	1.00	7.0	5 typ	2:1	100	*
CNL93942570	93.0-94.0	25	1.50	7.0	5 typ	2:1	80	*
CNL94952570	94.0-95.0	25	1.50	7.0	5 typ	2:1	150	*



## Narrow Band Low Noise 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 VDC (mA)	Case Type
CNL96972570	96.0-97.0	25	1.50	7.0	5 typ	2:1	150	*

ALL THE ABOVE SPECIFICATIONS ARE @ 25°C

OTHER FREQUENCY BANDS & NOISE FIGURES ARE ALSO AVAILABLE.

\*CONSULT THE FACTORY

\*\* GAIN WINDOW IS 10dB

CERNEXWAVE RESERVE THE RIGHT TO CHANGE THE SPECIFICATIONS WITHOUT NOTICE.