Coaxial

Low Noise Amplifier

ZHL-1217HLN

50Ω 1200 to 1700 MHz

Features

- very low noise, 1.5 dB max.
- wideband, 1200 to 1700 MHz
- high dynamic range

Applications

- GPS
- mar sat
- communication systems

ZHL-1217HLNX-S

ZHL-1217HLN-S

CASE STYLE: NN92

Connectors	Model	Price	Qty.
SMA	ZHL-1217HLN-S	$399.50 ea.	(1-9)
SMA	ZHL-1217HLNX-S	$389.50 ea.	(1-9)

Low Noise Amplifier Electrical Specifications

MODEL NO.	FREQUENCY (MHz)		NOISE FIGURE (dB)	GAIN (dB)		MAXIMUM POWER (dBm)		INTERCEPT POINT (dBm)	VSWR (:1) Max.		DC POWER	
	f_L	f_U	Max.	Min.	Flatness Max.	Output (1 dB Compr.) Typ.	Input (no damage)	IP3 Typ.	In	Out	Volt (V) Nom.	Current (mA) Max.
ZHL-1217HLN	1200	1700	1.5	30	±1.0	+26	+10	+36	2.4	2.4	15	725
ZHL-1217HLNX*	1200	1700	1.5	30	±1.0	+26	+10	+36	2.4	2.4	15	725

* Heat sink not included

Noise Figure specified at room temperature, increases to 2.3 dB max. at +65°C

Open load is not recommended, potentially can cause damage.
With no load derate max input power by 20 dB

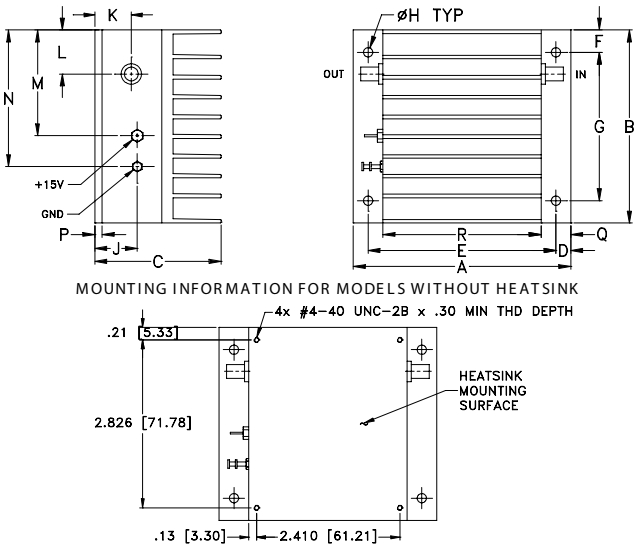
To order without heat sink, add suffix X to model number. Alternative heat sinking and heat removal must be provided by the user to limit maximum temperature to 65°C, in order to ensure proper performance. For reference, this requires thermal resistance of user's external heat sink to be 1.8°C/W Max.

Maximum Ratings

Operating Temperature	-20°C to 65°C
Storage Temperature	-55°C to 100°C
DC Voltage	+20V Max.

Permanent damage may occur if any of these limits are exceeded.

Outline Drawing



Outline Dimensions (inch / mm)

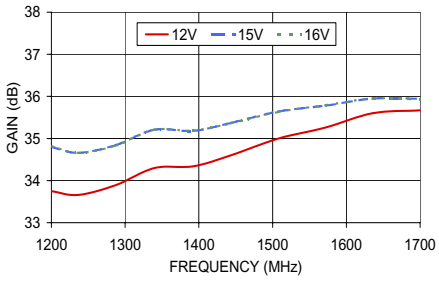
A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	wt
3.66	3.25	2.13	.25	3.16	.38	2.50	.156	.72	.64	.74	1.78	2.30	.125	.50	2.66	grams*
92.96	82.55	54.10	6.35	80.26	9.65	63.50	3.96	18.29	16.26	18.80	45.21	58.42	3.18	12.70	67.56	500.0

*362 grams without heatsink

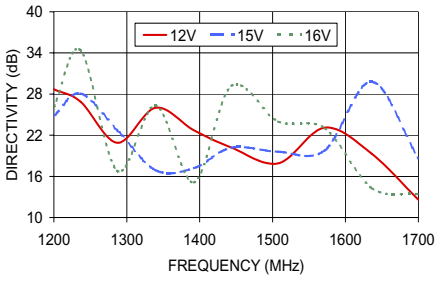
Typical Performance Data/Curves ZHL-1217HLN

FREQUENCY (MHz)	GAIN (dB)			DIRECTIVITY (dB)			VSWR (:1)		NOISE FIGURE (dB)	POUT at 1 dB COMPR. (dBm)
	12V	15V	16V	12V	15V	16V	IN	OUT	15V	15V
1200.00	33.75	34.80	34.82	28.70	24.80	26.10	1.75	1.59	1.30	26.55
1236.60	33.66	34.66	34.66	26.90	28.10	34.40	1.66	1.53	1.26	26.55
1287.00	33.89	34.84	34.83	20.90	22.70	16.80	1.56	1.46	1.24	26.60
1339.60	34.30	35.21	35.21	26.00	16.90	26.30	1.50	1.40	1.20	26.69
1392.30	34.34	35.18	35.19	22.70	17.20	15.10	1.46	1.36	1.16	26.91
1443.60	34.60	35.37	35.36	20.20	20.20	29.20	1.48	1.30	1.14	27.11
1507.70	35.00	35.64	35.63	17.90	19.60	24.00	1.55	1.26	1.13	27.47
1571.80	35.26	35.78	35.79	23.10	19.80	23.00	1.69	1.21	1.15	28.20
1635.90	35.60	35.95	35.95	19.30	29.80	14.30	1.95	1.18	1.22	28.89
1700.00	35.67	35.94	35.93	12.60	18.60	13.40	2.32	1.14	1.35	28.72

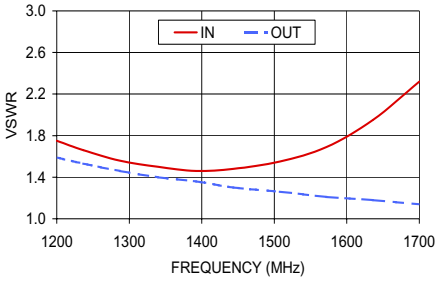
ZHL-1217HLN
GAIN



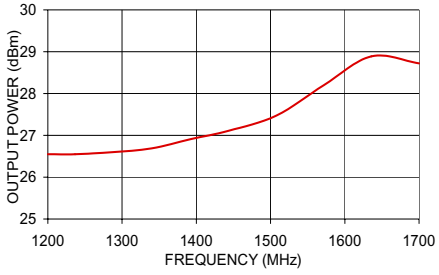
ZHL-1217HLN
DIRECTIVITY



ZHL-1217HLN
VSWR



ZHL-1217HLN
OUTPUT POWER AT 1-dB COMPRESSION



ZHL-1217HLN
NOISE FIGURE