

Coaxial Amplifier

ZHL-1042J+

50Ω Medium Power 10 to 4200 MHz

Features

- wideband, 10 to 4200 MHz
- high IP3, +30 dBm typ.
- low noise, 6 dB typ.

Applications

- laboratory
- communication systems



ZHL-1042JX-S

ZHL-1042J-S

CASE STYLE: NN92

Connectors	Model	Price	Qty.
SMA	ZHL-1042J+	\$495.00 ea.	(1-9)
SMA	ZHL-1042JX+	\$485.00 ea.	(1-9)

+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

Electrical Specifications

MODEL NO.	FREQ. (MHz)		GAIN (dB)			MAXIMUM POWER OUTPUT (dBm)		DYNAMIC RANGE		VSWR (:1) Typ.		DC POWER	
	f _L	f _U	Typ.	Flatness		Min.	Input (no damage)	NF (dB) Typ.	IP3 (dBm) Typ.	In	Out	Volt (V) Nom.	Current (A) Max.
				Min.	Max.								
ZHL-1042J+	10	4200	—	25	±1.5	+20	+10	6	+30	2.5	2.5	15	0.330
ZHL-1042JX+*	10	4200	—	25	±1.5	+20	+10	6	+30	2.5	2.5	15	0.330

* Heat sink not included

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 2.2°C/W Max.

Maximum Ratings

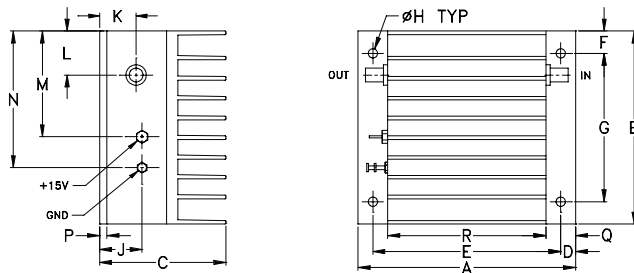
Operating Temperature -20°C to 65°C

Storage Temperature -55°C to 100°C

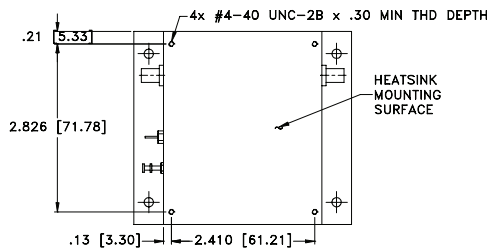
DC Voltage +20V Max.

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

Outline Drawing



MOUNTING INFORMATION FOR MODELS WITHOUT HEATSINK



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

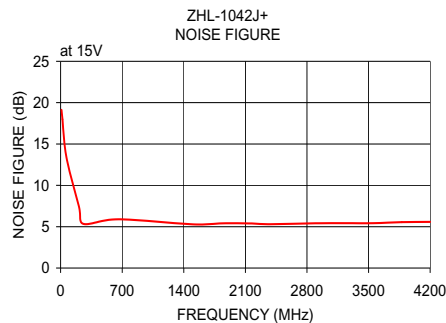
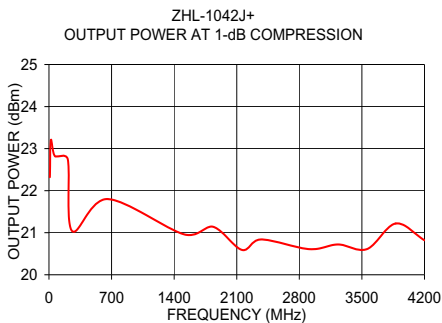
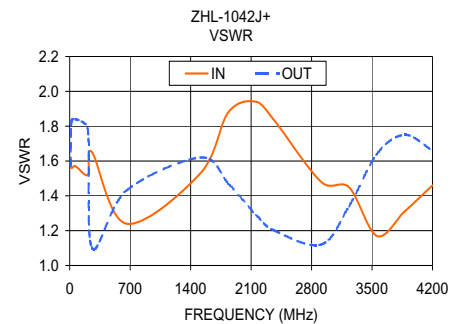
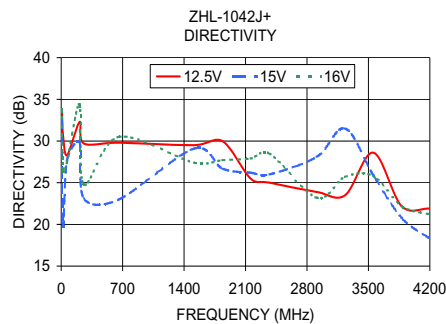
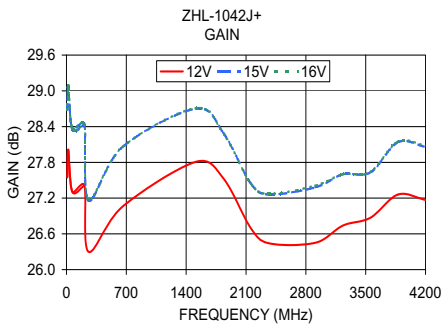
*362 grams without heatsink

Notes

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp



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		
10.00	27.55	28.68	28.68	33.40	32.60	33.80	1.60	1.57	19.14	22.32
21.40	28.01	29.08	29.09	30.70	19.80	26.40	1.56	1.83	17.99	23.20
67.00	27.31	28.36	28.37	28.30	27.70	27.50	1.57	1.84	13.37	22.82
209.90	27.41	28.43	28.44	32.30	29.80	34.40	1.52	1.78	7.36	22.75
258.50	26.30	27.16	27.18	29.70	23.10	24.80	1.65	1.10	5.34	21.04
657.20	27.06	28.06	28.06	29.80	23.00	30.50	1.24	1.43	5.90	21.80
1514.10	27.81	28.70	28.71	29.50	29.10	27.40	1.53	1.62	5.28	20.96
1836.40	27.53	28.29	28.28	30.00	26.70	27.70	1.88	1.47	5.40	21.14
2158.70	26.69	27.44	27.44	25.50	26.20	27.90	1.94	1.29	5.39	20.59
2373.60	26.44	27.26	27.27	25.00	26.00	28.50	1.83	1.20	5.30	20.84
2910.80	26.45	27.38	27.41	23.90	28.10	23.20	1.48	1.12	5.41	20.61
3233.10	26.74	27.60	27.60	23.50	31.50	25.70	1.45	1.34	5.43	20.72
3555.40	26.87	27.63	27.64	28.60	25.90	25.80	1.17	1.64	5.43	20.61
3877.70	27.26	28.14	28.15	22.20	20.80	22.20	1.31	1.75	5.55	21.22
4200.00	27.17	28.06	28.08	21.90	18.30	21.20	1.46	1.66	5.58	20.82



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