

# Low Noise Amplifier

## ZEL-1724LN+

50Ω

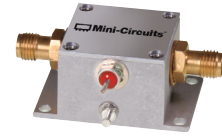
1700 to 2400 MHz

### Features

- very low noise figure, 1.5 dB max.
- wideband, 1700 to 2400 MHz
- rugged, shielded case

### Applications

- PCS/DCS
- UMTS
- communication systems



Case Style: EEE132

Connectors	Model
SMA	ZEL-1724LN-S+

**+RoHS Compliant**

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

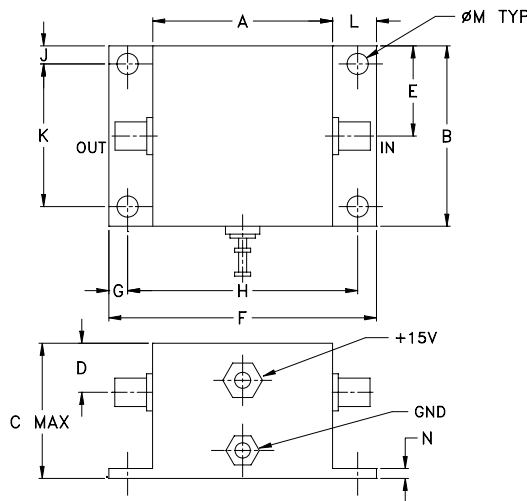
### Electrical Specifications

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Units
Frequency Range		1700		2400	MHz
Noise Figure	1700-2400	—	—	1.5	dB
Gain	1700-2400	20	—	—	dB
Gain Flatness	1700-2400	—	—	±1.0	dB
Output Power at 1dB compression	1700-2400	—	+8	—	dBm
Output third order intercept point	1700-2400	—	+22	—	dBm
Input VSWR	1700-2400	—	—	2.5	:1
Output VSWR	1700-2400	—	—	2.5	:1
DC Supply Voltage		—	15	—	V
Supply Current		—	—	70	mA

Noise Figure specified at room temperature, increases to 2 dB typical at +85°C

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

### Outline Drawing



### Maximum Ratings

Parameter	Ratings
Operating Temperature	-54°C to 85°C
Storage Temperature	-55°C to 100°C
DC Voltage	17V
Input RF Power (no damage)	+13 dBm

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

### Outline Dimensions (inch/mm)

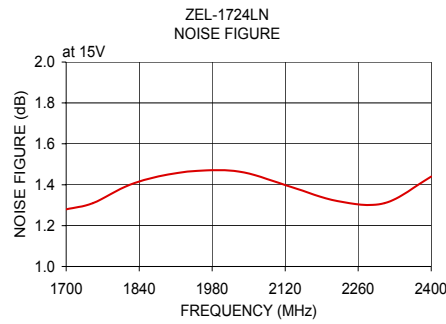
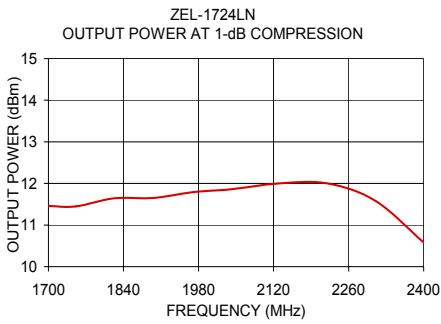
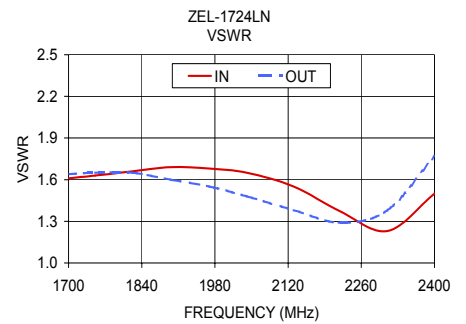
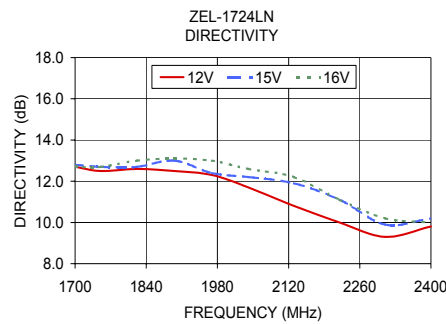
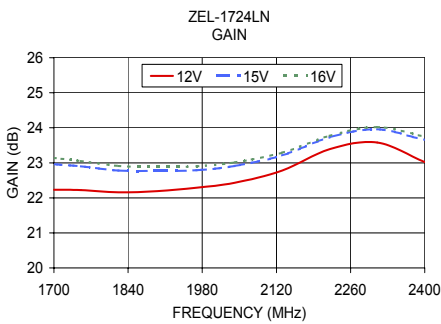
A	B	C	D	E	F	G	H	J	K	L	M	N	wt
.90	.90	.675	.245	.45	1.34	.09	1.152	.09	.712	.22	.106	.05	grams
22.86	22.86	17.15	6.22	11.43	34.04	2.29	29.26	2.29	18.08	5.59	2.69	1.27	50.0

#### 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.
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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		
1700.00	22.23	22.96	23.14	12.70	12.80	12.70	1.61	1.64	1.28	11.46
1751.20	22.22	22.90	23.05	12.50	12.70	12.70	1.63	1.65	1.31	11.45
1821.90	22.16	22.78	22.91	12.60	12.70	13.00	1.66	1.65	1.40	11.64
1895.50	22.19	22.77	22.88	12.50	13.00	13.10	1.69	1.60	1.45	11.65
1969.20	22.29	22.79	22.90	12.30	12.40	13.00	1.68	1.55	1.47	11.79
2041.00	22.43	22.91	23.01	11.70	12.20	12.60	1.65	1.48	1.46	11.86
2130.80	22.78	23.21	23.29	10.80	11.90	12.20	1.55	1.38	1.39	12.00
2220.50	23.39	23.73	23.77	10.00	11.10	11.10	1.37	1.29	1.32	12.00
2310.30	23.58	23.96	24.02	9.30	9.90	10.20	1.23	1.38	1.31	11.58
2400.00	23.02	23.65	23.75	9.80	10.20	10.00	1.50	1.77	1.44	10.58



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