

# Low Noise Amplifier

ZEL-0812LN

50Ω

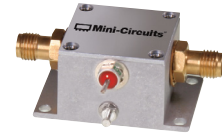
800 to 1200 MHz

**Features**

- very low noise figure, 1.5 dB max.
- wideband, 800 to 1200 MHz
- rugged, shielded case

**Applications**

- UHF
- cellular
- PCS/GSM



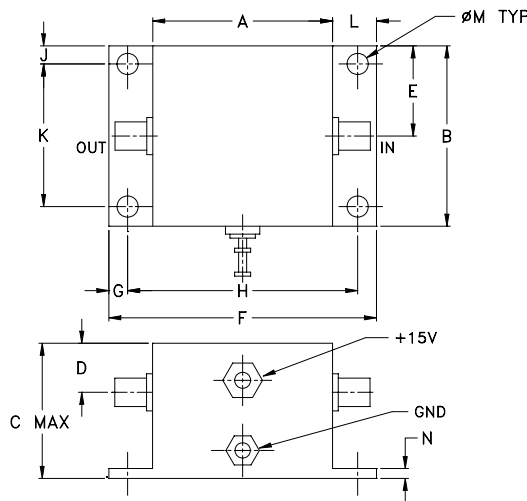
Case Style: EEE132	
Connectors	Model
SMA	ZEL-0812LN-S

**Electrical Specifications**

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Units
Frequency Range		800		1200	MHz
Noise Figure	800-1200	—	—	1.5	dB
Gain	800-1200	20	—	—	dB
Gain Flatness	800-1200	—	—	±1.0	dB
Output Power at 1dB compression	800-1200	—	+8	—	dBm
Output third order intercept point	800-1200	—	+18	—	dBm
Input VSWR	800-1200	—	—	2.5	:1
Output VSWR	800-1200	—	—	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)**

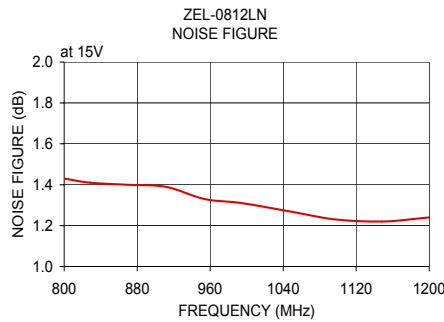
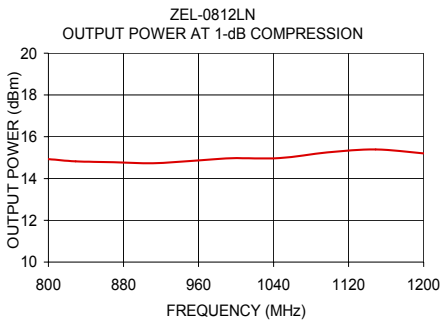
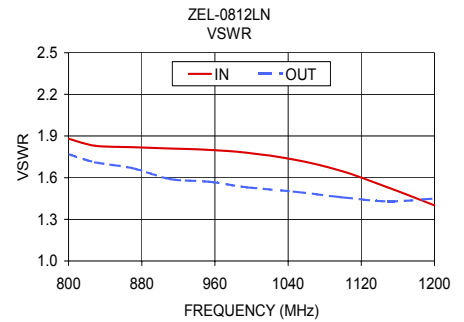
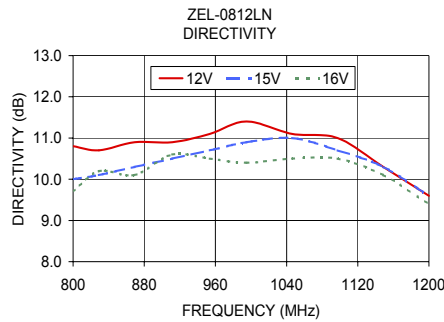
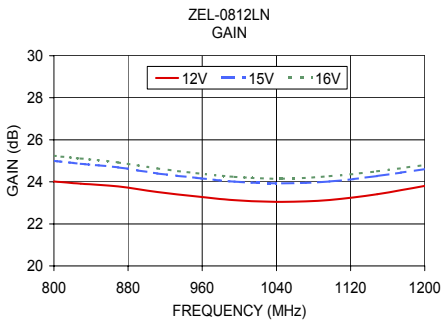
A	B	C	D	E	F	G	H	J	K	L	M	N	wt
.90	.90	.675	.245	.45	1.34	.09	1.152	.09	.712	.22	.106	.05	grams
22.86	22.86	17.15	6.22	11.43	34.04	2.29	29.26	2.29	18.08	5.59	2.69	1.27	50.0

**Notes**

- A. 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.
- B. 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)	P <sub>OUT</sub> at 1 dB COMPR. (dBm)
	12V	15V	16V	12V	15V	16V	IN	OUT		
800.00	24.02	25.00	25.24	10.80	10.00	9.70	1.88	1.77	1.43	14.93
829.00	23.91	24.86	25.11	10.70	10.10	10.20	1.83	1.71	1.41	14.82
869.20	23.78	24.69	24.92	10.90	10.30	10.10	1.82	1.67	1.40	14.78
911.50	23.52	24.40	24.64	10.90	10.50	10.60	1.81	1.59	1.39	14.73
953.80	23.31	24.19	24.41	11.10	10.70	10.50	1.80	1.57	1.33	14.85
994.90	23.13	24.01	24.24	11.40	10.90	10.40	1.78	1.53	1.31	14.97
1046.20	23.05	23.93	24.15	11.10	11.00	10.50	1.73	1.50	1.27	14.98
1097.40	23.14	24.02	24.27	11.00	10.70	10.50	1.65	1.46	1.23	15.25
1148.70	23.41	24.28	24.50	10.30	10.30	10.10	1.53	1.43	1.22	15.39
1200.00	23.81	24.61	24.80	9.60	9.60	9.40	1.40	1.45	1.24	15.20



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