

# Coaxial Low Noise Amplifier

## ZQL-900LN+

50Ω

824 to 849 MHz

### Features

- Very low noise figure, 1.3 dB max.
- High IP3, +35 dBm typ.
- Rugged, shielded case

### Applications

- UHF
- Communications systems
- Cellular



Generic photo used for illustration purposes only

Case Style: CW686	
Connectors	Model
SMA	ZQL-900LN+

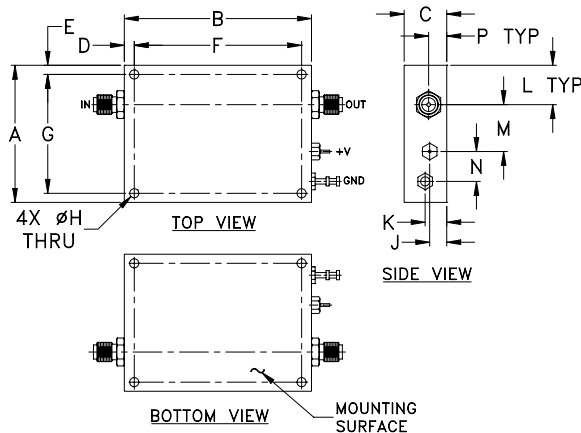
**+RoHS Compliant**  
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

### Electrical Specifications

Parameter	Condition (MHz)	Min.	Typ.	Max.	Units
Frequency Range		824		849	MHz
Noise Figure	824-849	—	—	1.3	dB
Gain	824-849	15	—	—	dB
Gain Flatness	824-849	—	—	±0.5	dB
Output Power at 1dB compression	824-849	—	+21	—	dBm
Output third order intercept point	824-849	—	+35	—	dBm
Input VSWR	824-849	—	1.2	—	:1
Output VSWR	824-849	—	1.1	—	:1
DC Supply Voltage	824-849	—	15	—	V
Supply Current	824-849	—	—	160	mA

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	-40°C to 70°C
Storage Temperature	-55°C to 100°C
DC Voltage	17V
Input RF Power (no damage)	+10 dBm

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

### Outline Dimensions (inch/mm)

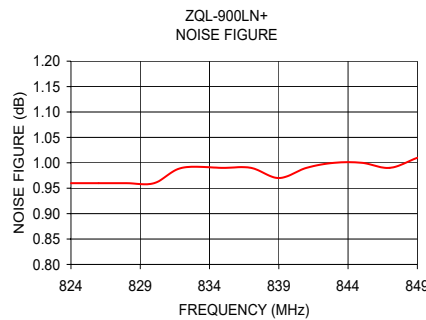
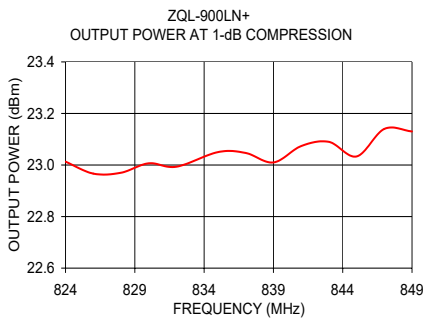
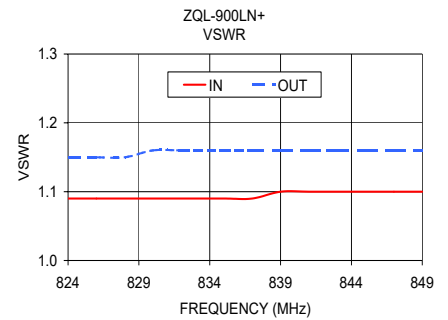
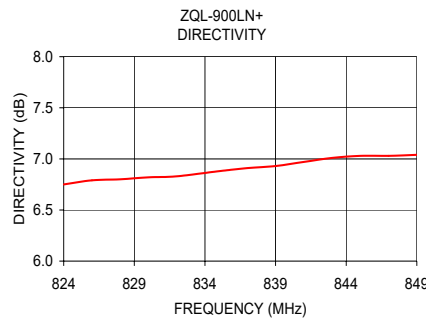
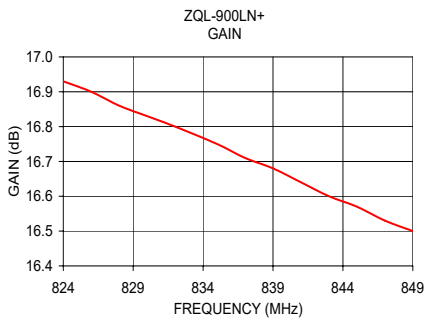
A	B	C	D	E	F	G	H	J	K	L	M	N	P	wt
1.77	2.42	.55	.13	.12	2.165	1.535	.126	.22	.28	.51	.61	.39	0.22	grams
44.96	61.47	13.97	3.30	3.05	55.0	39.0	3.20	5.59	7.11	12.95	15.49	9.91	5.59	71.0

### 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.
- 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](http://www.minicircuits.com/MCLStore/terms.jsp)



FREQUENCY (MHz)	GAIN (dB)	DIRECTIVITY (dB)	VSWR (:1)		NOISE FIGURE (dB)	POUT at 1 dB COMPR. (dBm)
	15V	15V	IN	OUT	15V	15V
824.00	16.93	6.75	1.09	1.15	0.96	23.01
826.00	16.90	6.79	1.09	1.15	0.96	22.97
828.00	16.86	6.80	1.09	1.15	0.96	22.97
830.00	16.83	6.82	1.09	1.16	0.96	23.01
832.00	16.80	6.83	1.09	1.16	0.99	22.99
835.00	16.75	6.88	1.09	1.16	0.99	23.05
837.00	16.71	6.91	1.09	1.16	0.99	23.05
839.00	16.68	6.93	1.10	1.16	0.97	23.01
841.00	16.64	6.97	1.10	1.16	0.99	23.07
843.00	16.60	7.01	1.10	1.16	1.00	23.09
845.00	16.57	7.03	1.10	1.16	1.00	23.03
847.00	16.53	7.03	1.10	1.16	0.99	23.14
849.00	16.50	7.04	1.10	1.16	1.01	23.13



**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.
- C. 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](http://www.minicircuits.com/MCLStore/terms.jsp)

