

# Low Noise Amplifier

ZQL-900LNW+

50Ω 800 to 900 MHz

### Features

- Very low noise figure, 1.6 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-900LNW+

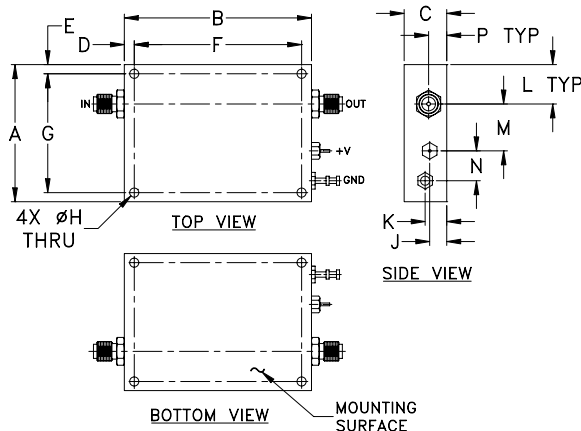
**+RoHS Compliant**  
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

### Electrical Specifications

Parameter	Condition (MHz)	Min.	Typ.	Max.	Units
Frequency Range		800		900	MHz
Noise Figure	800-900	—	—	1.6	dB
Gain	800-900	13	—	—	dB
Gain Flatness	800-900	—	—	±1.6	dB
Output Power at 1dB compression	800-900	—	+21	—	dBm
Output third order intercept point	800-900	—	+35	—	dBm
Input VSWR	800-900	—	1.2	—	:1
Output VSWR	800-900	—	1.1	—	:1
DC Supply Voltage	800-900	—	15	—	V
Supply Current	800-900	—	—	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)

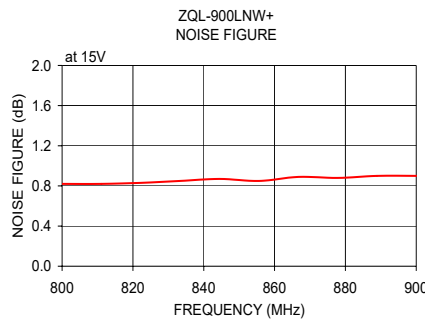
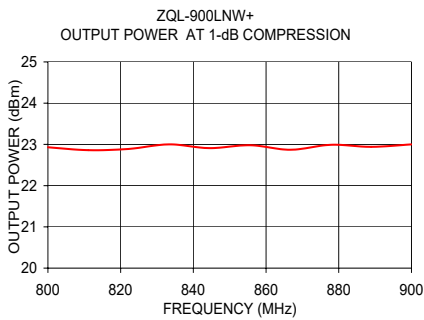
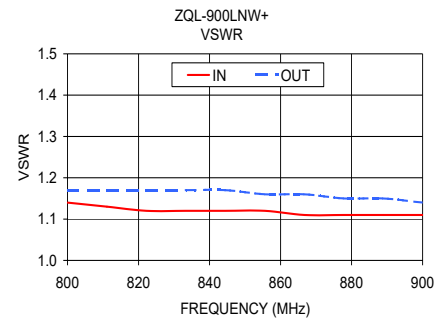
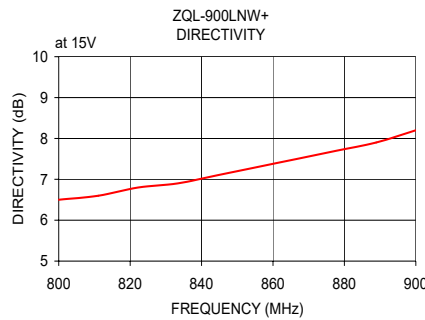
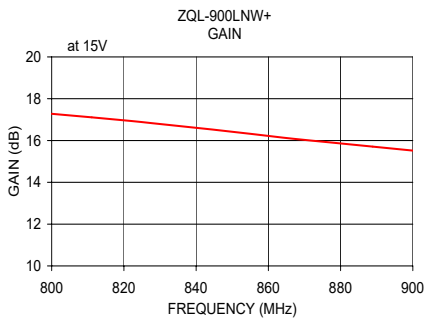
A	B	C	D	E	F	G	H	J	K	L	M	N	P	wt
1.77	2.42	.55	.13	.12	2.165	1.535	.126	.22	.28	.51	.61	.39	0.22	grams
44.96	61.47	13.97	3.30	3.05	55.0	39.0	3.20	5.59	7.11	12.95	15.49	9.91	5.59	71.0

### 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.
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FREQUENCY (MHz)	GAIN (dB)	DIRECTIVITY (dB)	VSWR (:1)		NOISE FIGURE (dB)	POUT at 1 dB COMPR. (dBm)
	15V		IN	OUT		
800.00	17.28	6.50	1.14	1.17	0.82	22.93
811.10	17.11	6.60	1.13	1.17	0.82	22.86
822.20	16.93	6.80	1.12	1.17	0.83	22.89
833.30	16.73	6.90	1.12	1.17	0.85	23.00
844.40	16.53	7.10	1.12	1.17	0.87	22.91
855.60	16.31	7.30	1.12	1.16	0.85	22.98
866.70	16.09	7.50	1.11	1.16	0.89	22.87
877.80	15.90	7.70	1.11	1.15	0.88	22.99
888.90	15.71	7.90	1.11	1.15	0.90	22.94
900.00	15.52	8.20	1.11	1.14	0.90	23.00



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