

# Coaxial Low Noise Amplifier

## ZQL-900MLNW+ ZQL-900MLNW

50Ω 800 to 900 MHz

### Features

- Very low noise figure, 1.7 dB max.
- High IP3, +41 dBm typ.
- Rugged, shielded case

### Applications

- UHF
- Communications systems
- Cellular



Case Style: CW686

Connectors	Model	Price	Qty.
SMA	ZQL-900MLNW(+)	\$249.00 ea.	(1-9)

**+ RoHS compliant in accordance with EU Directive (2002/95/EC)**

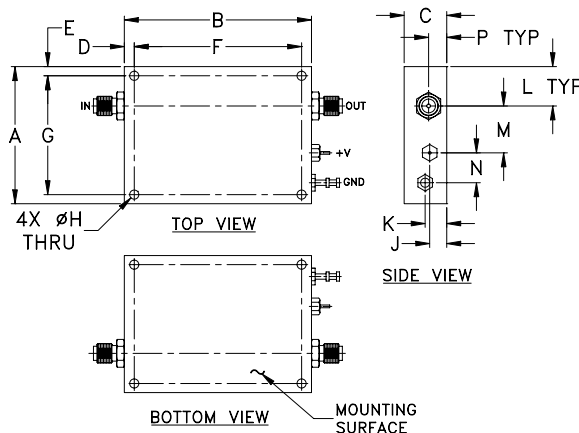
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

### Electrical Specifications

Parameter	Condition (MHz)	Min.	Typ.	Max.	Units
Frequency Range		800		900	MHz
Noise Figure	800-900	—	—	1.7	dB
Gain	800-900	22	—	—	dB
Gain Flatness	800-900	—	—	±2.2	dB
Output Power at 1dB compression	800-900	—	+23	—	dBm
Output third order intercept point	800-900	—	+41	—	dBm
Input VSWR	800-900	—	1.3	—	:1
Output VSWR	800-900	—	1.4	—	:1
DC Supply Voltage	800-900	—	15	—	V
Supply Current	800-900	—	—	230	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



For detailed performance specs & shopping online see web site

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine Provides ACTUAL Data Instantly at [minicircuits.com](http://minicircuits.com)

IFIRF MICROWAVE COMPONENTS

Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet 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).

# Typical Performance Data/Curves

# ZQL-900MLNW+ ZQL-900MLNW

FREQUENCY (MHz)	GAIN (dB)	DIRECTIVITY (dB)	VSWR (:1)		NOISE FIGURE (dB)	POUT at 1 dB COMPR. (dBm)
	15V		IN	OUT		
750.00	29.52	17.20	1.34	1.41	1.08	27.68
800.00	29.30	19.90	1.14	1.36	1.07	27.85
824.00	27.69	21.10	1.22	1.35	1.11	28.07
830.00	27.52	21.70	1.25	1.35	1.12	27.80
833.00	27.46	22.20	1.26	1.35	1.12	27.87
839.00	27.31	26.90	1.28	1.34	1.14	27.88
842.00	27.21	21.10	1.29	1.34	1.14	28.16
849.00	27.03	24.40	1.32	1.34	1.14	28.14
900.00	25.81	24.40	1.48	1.32	1.31	28.39
1000.00	23.60	27.70	1.68	1.37	1.67	28.69

