

# Coaxial Low Noise Amplifier

## ZQL-1900MLN+ ZQL-1900MLN

50Ω 1850 to 1910 MHz

### Features

- very low noise, 1.5 dB max.
- high IP3, +41 dBm typ.
- rugged shielded case

### Applications

- PCS
- UMTS
- mobile satellite service



CASE STYLE: CW686

Connectors	Model	Price	Qty.
SMA	ZQL-1900MLN(+)	\$265.00 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.

### Low Noise Amplifier Electrical Specifications

MODEL NO.	FREQUENCY (MHz)		NOISE FIGURE (dB)	GAIN (dB)		MAXIMUM POWER (dBm)		INTERCEPT POINT (dBm)	VSWR (:1) Typ.		DC POWER	
	$f_L$	$f_U$		Max.	Min.	Flatness Max.	Output (1 dB Compr.) Typ.		Input (no damage)	IP3 Typ.	In	Out
ZQL-1900MLN(+)	1850	1910	1.5	25	±0.7	+26	+3	+41	1.25	1.2	15	310

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

### Maximum Ratings

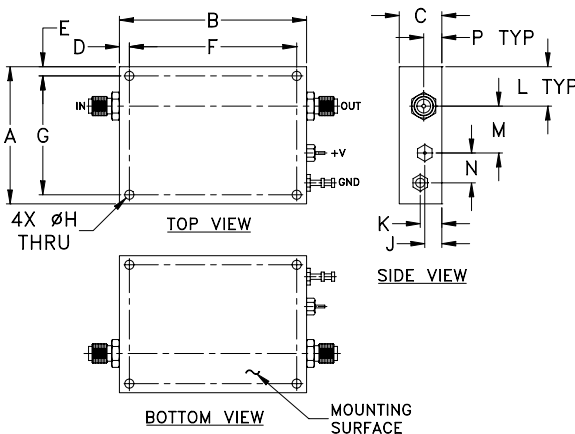
Operating Temperature -40°C to 70°C

Storage Temperature -55°C to 100°C

DC Voltage +17V Max.

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

### Outline Drawing



### 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)

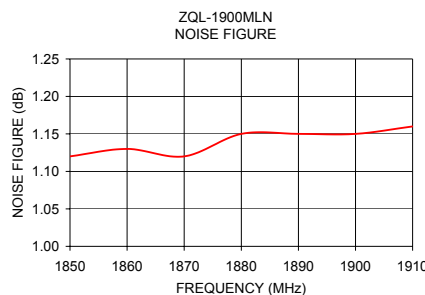
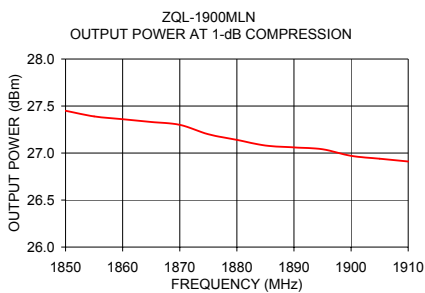
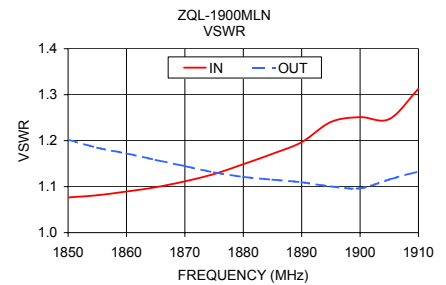
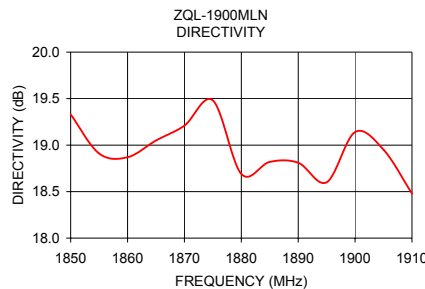
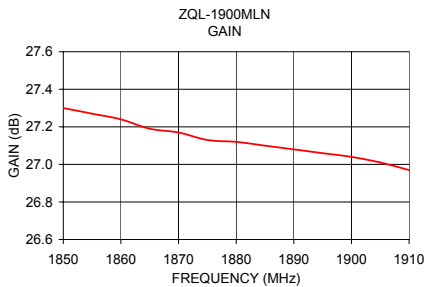
IF/RF MICROWAVE COMPONENTS

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).

# ZQL-1900MLN+ ZQL-1900MLN

## Typical Performance Data/Curves

FREQUENCY (MHz)	GAIN (dB)	DIRECTIVITY (dB)	VSWR (:1)		NOISE FIGURE (dB)	POUT at 1 dB COMPR. (dBm)
	15V	15V	IN	OUT	15V	15V
1850.00	27.30	19.33	1.08	1.20	1.12	27.45
1855.00	27.27	18.91	1.08	1.18		27.39
1860.00	27.24	18.87	1.09	1.17	1.13	27.36
1865.00	27.19	19.05	1.10	1.16		27.33
1870.00	27.17	19.21	1.11	1.14	1.12	27.30
1875.00	27.13	19.48	1.13	1.13		27.20
1880.00	27.12	18.69	1.15	1.12	1.15	27.14
1885.00	27.10	18.82	1.17	1.12		27.08
1890.00	27.08	18.81	1.20	1.11	1.15	27.06
1895.00	27.06	18.60	1.24	1.10		27.04
1900.00	27.04	19.14	1.25	1.10	1.15	26.97
1905.00	27.01	18.95	1.25	1.12		26.94
1910.00	26.97	18.48	1.31	1.13	1.16	26.91



**Mini-Circuits®**

ISO 9001 ISO 14001 AS 9100 CERTIFIED

The Design Engineers Search Engine



Provides ACTUAL Data Instantly at [minicircuits.com](http://minicircuits.com)

For detailed performance specs & shopping online see web site page 2 of 2

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661

IF/RF 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).