

# Coaxial Low Noise Amplifier

## ZQL-1900LNW+ ZQL-1900LNW

50Ω 1700 to 2000 MHz

### Features

- Very low noise figure, 1.6 dB max.
- High IP3, +37 dBm typ.
- Rugged, shielded case

### Applications

- PCS
- UMTS
- Mobile satellite service



Case Style: CW686

Connectors	Model
SMA	ZQL-1900LNW(+)

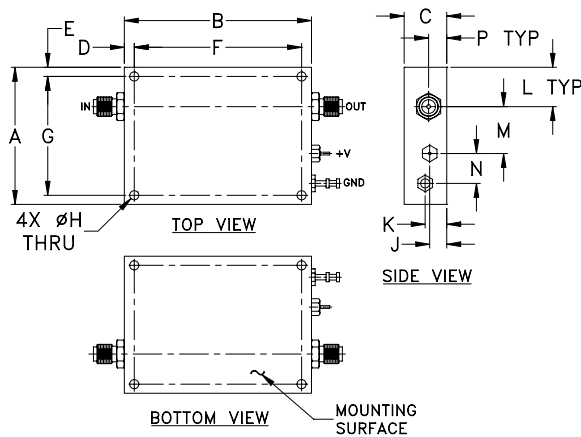
**+RoHS Compliant**  
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

### Electrical Specifications

Parameter	Condition (MHz)	Min.	Typ.	Max.	Units
Frequency Range		1700		2000	MHz
Noise Figure	1700-2000	—	—	1.6	dB
Gain	1700-2000	14	—	—	dB
Gain Flatness	1700-2000	—	—	±1.8	dB
Output Power at 1dB compression	1700-2000	—	+18.5	—	dBm
Output third order intercept point	1700-2000	—	+37	—	dBm
Input VSWR	1700-2000	—	1.15	—	:1
Output VSWR	1700-2000	—	1.25	—	:1
DC Supply Voltage	1700-2000	—	15	—	V
Supply Current	1700-2000	—	—	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

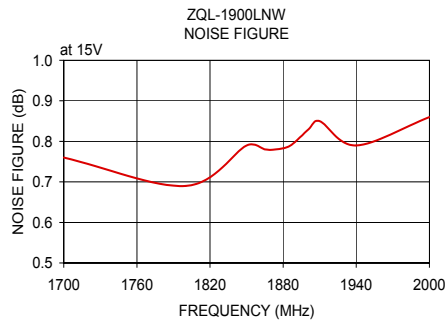
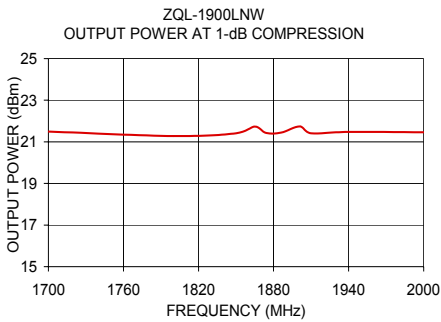
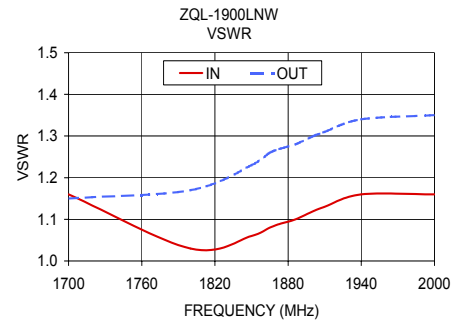
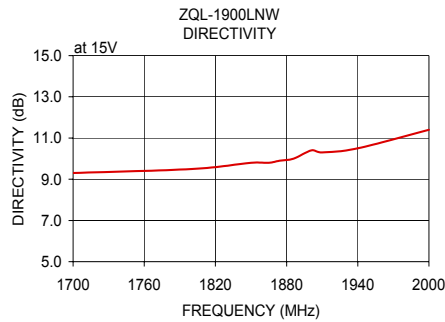
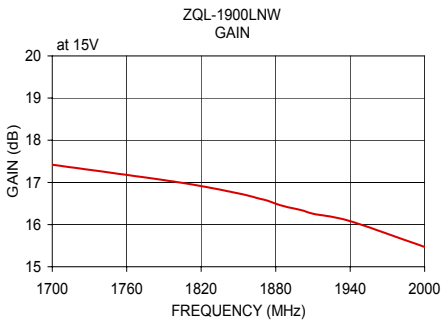
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# Typical Performance Data/Curves

# ZQL-1900LNW+ ZQL-1900LNW

FREQUENCY (MHz)	GAIN (dB)	DIRECTIVITY (dB)	VSWR (:1)		NOISE FIGURE (dB)	POUT at 1 dB COMPR. (dBm)
	15V	15V	IN	OUT		
1700.00	17.42	9.30	1.16	1.15	0.76	21.49
1800.00	17.01	9.50	1.03	1.17	0.69	21.28
1850.00	16.74	9.80	1.06	1.23	0.79	21.41
1865.00	16.63	9.80	1.08	1.26	0.78	21.73
1874.00	16.56	9.90	1.09	1.27	0.78	21.43
1886.00	16.44	10.00	1.10	1.28	0.79	21.44
1901.00	16.34	10.40	1.12	1.30	0.83	21.74
1910.00	16.26	10.30	1.13	1.31	0.85	21.41
1940.00	16.08	10.50	1.16	1.34	0.79	21.48
2000.00	15.47	11.40	1.16	1.35	0.86	21.46



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