

Coaxial Low Noise Amplifier

ZQL-900MLN+ ZQL-900MLN

50Ω 824 to 849 MHz

Features

- Very low noise figure, 1.5 dB max.
- High IP3, +41 dBm typ.
- Rugged, shielded case

Applications

- UHF
- Communications systems
- Cellular



Case Style: CW686

Connectors	Model
SMA	ZQL-900MLN(+)

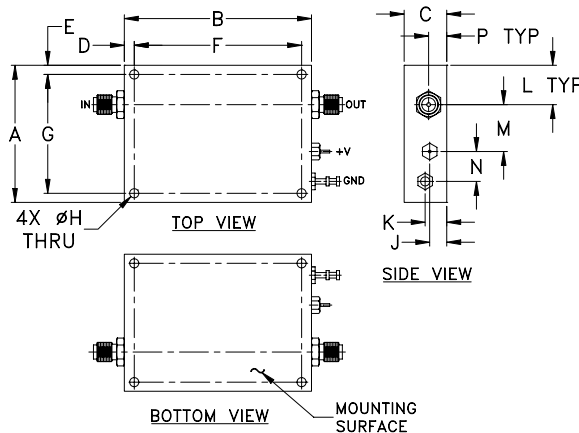
+RoHS Compliant
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

Electrical Specifications

Parameter	Condition (MHz)	Min.	Typ.	Max.	Units
Frequency Range		824		849	MHz
Noise Figure	824-849	—	—	1.5	dB
Gain	824-849	25.5	—	—	dB
Gain Flatness	824-849	—	—	±0.5	dB
Output Power at 1dB compression	824-849	—	+24.5	—	dBm
Output third order intercept point	824-849	—	+41	—	dBm
Input VSWR	824-849	—	1.3	—	:1
Output VSWR	824-849	—	1.4	—	:1
DC Supply Voltage	824-849	—	15	—	V
Supply Current	824-849	—	—	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

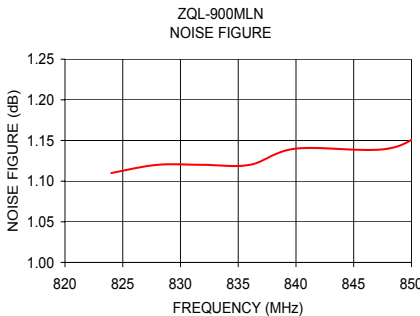
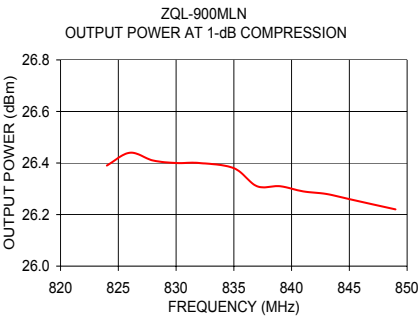
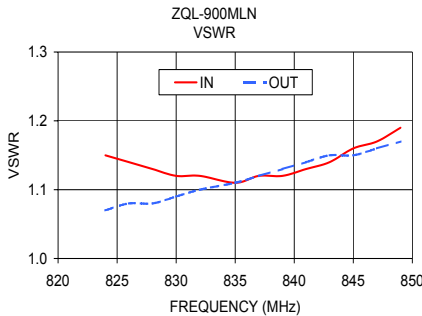
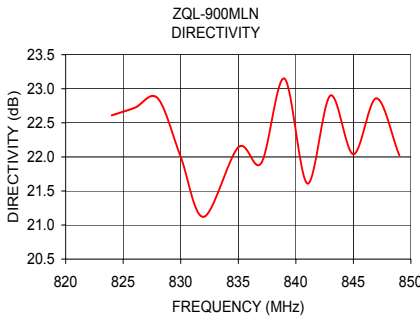
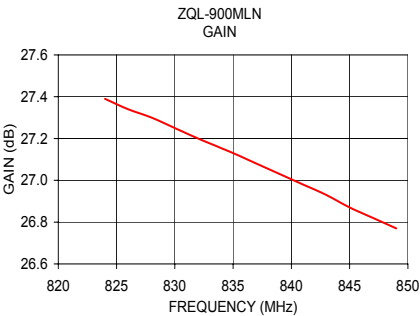
Notes

- 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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Typical Performance Data/Curves

FREQUENCY (MHz)	GAIN (dB)	DIRECTIVITY (dB)	VSWR (:1)		POUT at 1 dB COMPR. (dBm)	FREQUENCY (MHz)	NOISE FIGURE (dB)
	15V		IN	OUT			
824.00	27.39	22.61	1.15	1.07	26.39	824.00	1.11
826.00	27.34	22.72	1.14	1.08	26.44		
828.00	27.30	22.86	1.13	1.08	26.41	828.00	1.12
830.00	27.25	22.00	1.12	1.09	26.40		
832.00	27.20	21.12	1.12	1.10	26.40	832.00	1.12
835.00	27.13	22.14	1.11	1.11	26.38		
837.00	27.08	21.91	1.12	1.12	26.31	836.00	1.12
839.00	27.03	23.15	1.12	1.13	26.31		
841.00	26.98	21.61	1.13	1.14	26.29	840.00	1.14
843.00	26.93	22.90	1.14	1.15	26.28		
845.00	26.87	22.04	1.16	1.15	26.26	848.00	1.14
847.00	26.82	22.86	1.17	1.16	26.24		
849.00	26.77	22.02	1.19	1.17	26.22	852.00	1.17



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