

Coaxial

Low Noise Amplifier

ZQLSC-1100

50Ω 600 to 1100 MHz

Features

- high reliability balanced design
- noise figure, 0.6 dB typ.
- built-in alarm monitoring
- TTL alarm output, green/red alarm status LED
- voltage regulated/protected DC input

Applications

- low noise receiver
- digital cellular base stations
- TDMA, CDMA, GSM



Connectors	Model	Price	Qty.
SMA	ZQLSC-1100	\$295.00 ea.	(1-9)

CASE STYLE: GZ1067

Low Noise Amplifier Electrical Specifications (T_{AMB}= 25°C)

MODEL NO.	FREQUENCY (MHz)		GAIN (dB)				NOISE FIGURE (dB)		MAXIMUM POWER (dBm)			INTERCEPT POINT (dBm)	VSWR (:1) Max.		DC POWER	
	f _L	f _U	Typ.	Min.	Typ.	Max.	Typ.	Max.	Typ.	Min.	Input (no damage)	IP3 Typ.	In	Out	Volt ¹ (V) Nom.	Current (mA) Max.
ZQLSC-1100	600	824	20	17.5	±.75	±1.0	0.6	1.1	18.5	16	+10	32.5	2.0	2.0	24	185
	824	849	19	17.5	±.15	±0.3	0.55	0.7	19	16	+10	34	1.7	1.7	24	185
	880	915	18.5	17	±0.2	±0.4	0.55	0.8	19	16	+10	35	1.8	1.8	24	185
	915	1100	17.5	15	±0.9	±1.2	0.6	1.0	19	16	+10	35.5	1.8	1.8	24	185

Maximum Ratings

Operating Temperature	-40°C to 80°C case
	-40°C to 60°C ambient
Storage Temperature	-55°C to 100°C
DC Voltage	+18Vmin., 36V max.

¹ Other voltages available in the 6.5 to 60V range, please contact factory. Permanent damage may occur if any of these limits are exceeded.

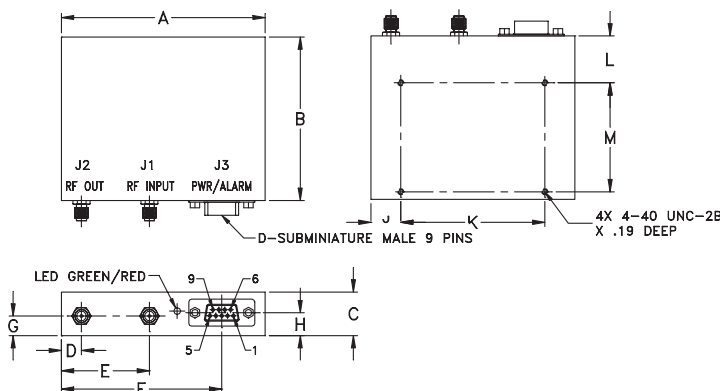
Pin Connections

RF input	J1
RF output	J2
DC power input	5
TTL alarm output	1
Ground to test alarm, normally open	7*, 9*
No connection	3, 6, 8
Ground	2, 4
Case ground	2, 4

*Grounding Pin 7 will sink 75mA of current through Pin 7 creating a high-current alarm condition inside the amplifiers. A red LED and TTL high output will occur. Pin 7 floats at +4.3V typ. when open.

*Grounding Pin 9 will sink 2mA of current through pin 9 and creating a low-current alarm condition inside the amplifier. A red LED and TTL high output will occur. Pin 9 floats at about +0.6V typ. when open.

Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J	K	L	M	wt
3.75	3.00	.80	.37	1.62	2.95	.36	.42	.55	2.650	.86	2.000	grams
95.25	76.20	20.32	9.40	41.15	74.93	9.14	10.67	13.97	67.31	21.84	50.80	280.0

Alarm Functions

Normal:	TTL low output (0 to 0.8V), green LED
Alarm:	TTL high output (4 to 5V), red LED
DC & alarm connector:	9-pin male D-sub

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IF/RF MICROWAVE COMPONENTS

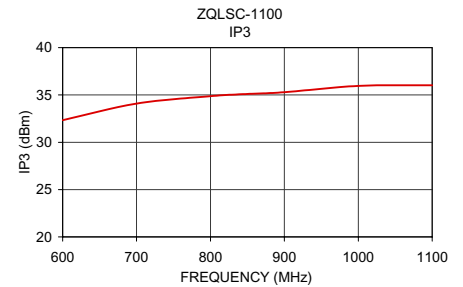
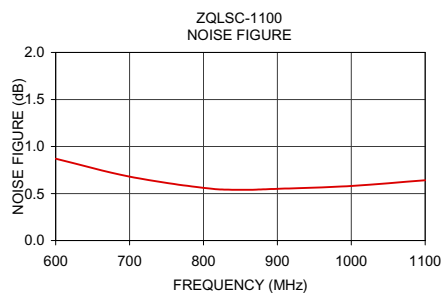
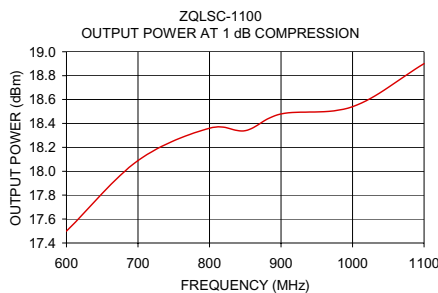
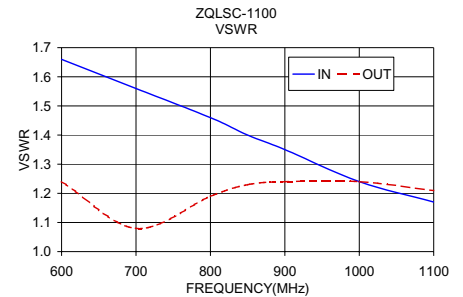
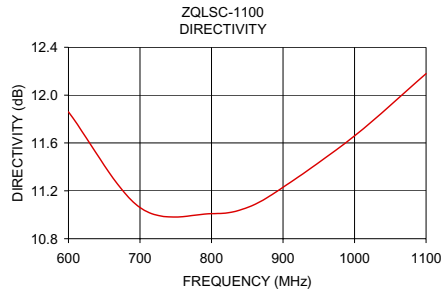
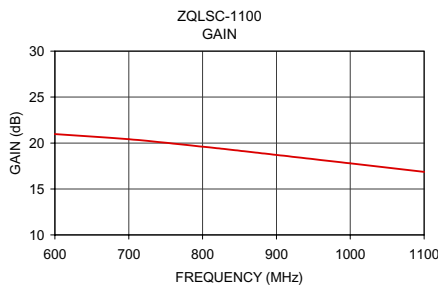
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Typical Performance Data/Curves

ZQLSC-1100

FREQUENCY (MHz)	GAIN (dB)	DIRECTIVITY (dB)	VSWR (:1)		POUT at 1 dB COMPR. (dBm)	IP3 (dBm)	NOISE FIGURE (dB)
	24V	24V	IN	OUT	24V	24V	24V
600.00	20.97	11.86	1.66	1.24	17.50	32.33	0.87
700.00	20.42	11.06	1.56	1.08	18.09	34.09	0.68
800.00	19.60	11.01	1.46	1.19	18.36	34.87	0.56
850.00	19.17	11.06	1.40	1.23	18.34	35.10	0.54
900.00	18.71	11.23	1.35	1.24	18.48	35.29	0.55
1000.00	17.79	11.66	1.24	1.24	18.54	35.95	0.58
1100.00	16.86	12.18	1.17	1.21	18.90	36.02	0.64



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