

WLA1216L

1.0 – 2.0 GHz, Low Noise Limiter Amplifier

August 2016, REV D



Key Features

- 1.0~ 2.0 GHz, 50 Ohm impedance
- 0.7 dB noise figure
- Built-in input & output limiter
- 28 dB gain
- 1.25:1 VSWR
- Precision machined housing
- RoHS compliant

Applications

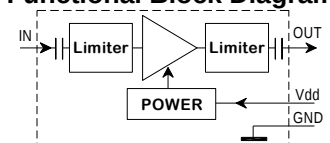
- GPS
- Receiver amplifiers
- RF bench tests
- Mobile base station applications
- DCS
- Fixed wireless



Absolute Maximum Ratings

Input CW RF Power	30 dBm
DC Voltage, V_{dd}	-0.5, +32V
Operating Temperature	-40°C to +85°C
Storage Temperature	-40°C to +85°C

Functional Block Diagram



Ordering Information

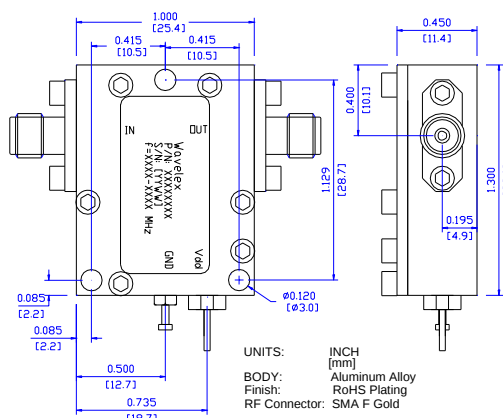
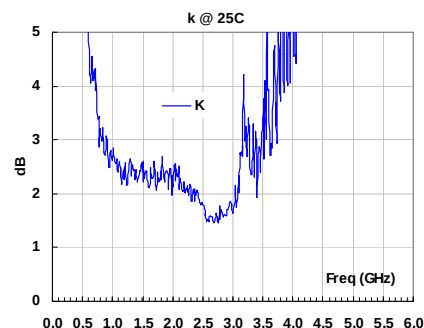
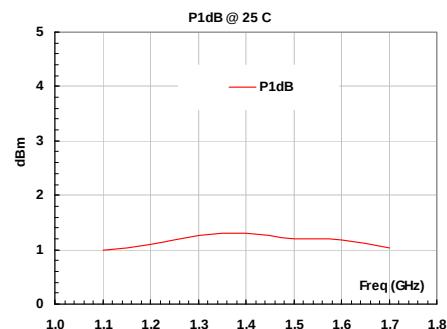
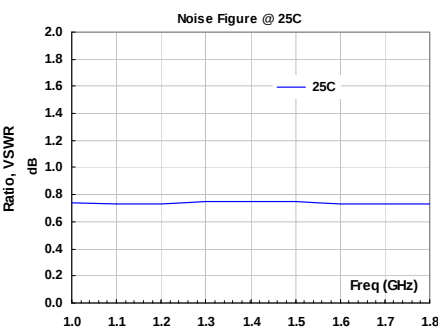
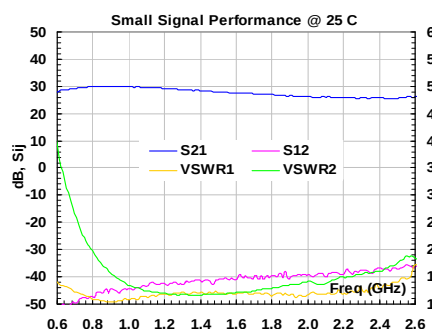
Model	Connectors
WLA1216L	SMA Female

Marking: WLA1216L

Specifications (Tested at +25°C)

tem	Symbol	Test Constraints	Min	Nom	Max	Unit
Frequency Range	BW	50 Ohm Impedance	1.2		1.6	GHz
Gain	S_{21}	1.2 – 1.6 GHz	26.5	28	29.5	dB
Noise Figure	NF	1.2 – 1.6 GHz		0.7	1.0	dB
VSWR	SWR_i	1.2 – 1.6 GHz, all RF ports		1.25:1	1.65:1	Ratio
Gain Flatness	ΔG	1.2 – 1.6 GHz		+/- 0.7		dB
Reverse Isolation	S_{12}	1.2 – 1.6 GHz		42		dB
Output Power 1dB Compression Point	P_{1dB}	1.2 – 1.6 GHz		1		dBm
Current Consumption	I_{dd}	$V_{dd} = +12.0$ V		21		mA
Power Supply Operating Voltage	V_{dd}		+7	+12	+16	V
Operating Temperature	T_o		-40		+85	°C
Thermal Resistance	$R_{th,c}$	Junction to case			215	°C/W
Maximum Average RF Input Power	$P_{IN, MAX}$	DC – 12.0 GHz			30	dBm

Typical Performance



Outline, IP-3

Specifications and information are subject to change without notice.