

**Key Features**

- 1 ~ 500 MHz, 50 Ohm impedance
- 1.0 dB noise figure
- 20 dB gain
- 1.5:1 VSWR
- 10 dBm P<sub>1dB</sub>
- Precision machined housing
- RoHS compliant

**Applications**

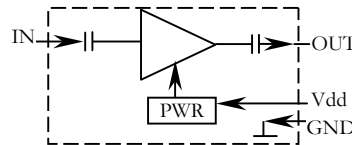
- VHF & UHF
- Receiver amplifiers
- RF bench tests
- Fixed wireless applications



**Absolute Maximum Ratings**

Input CW RF Power	10 dBm
Maximum DC Voltage, V <sub>dd</sub>	-0.5, +32 V
Operating Temperature	-40°C to +85°C
Storage Temperature	-40°C to +85°C

**Functional Block Diagram**



**Ordering Information**

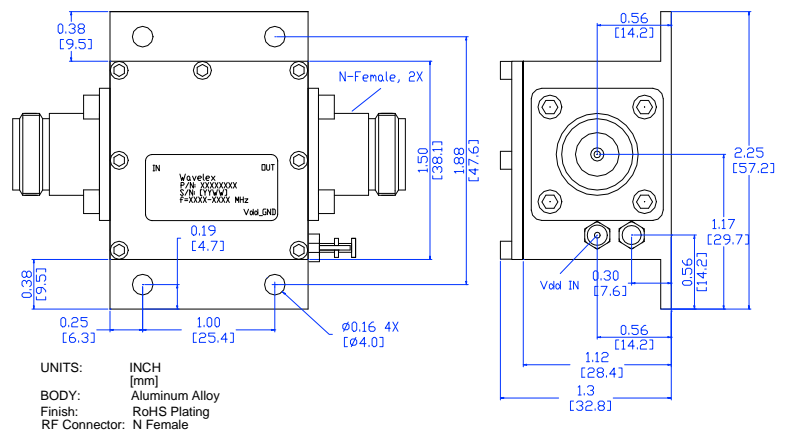
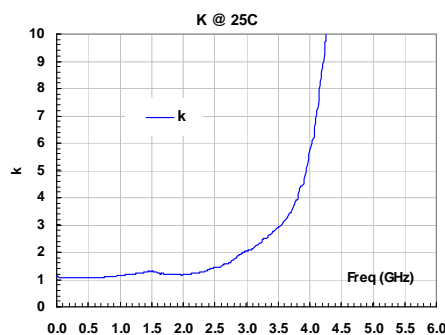
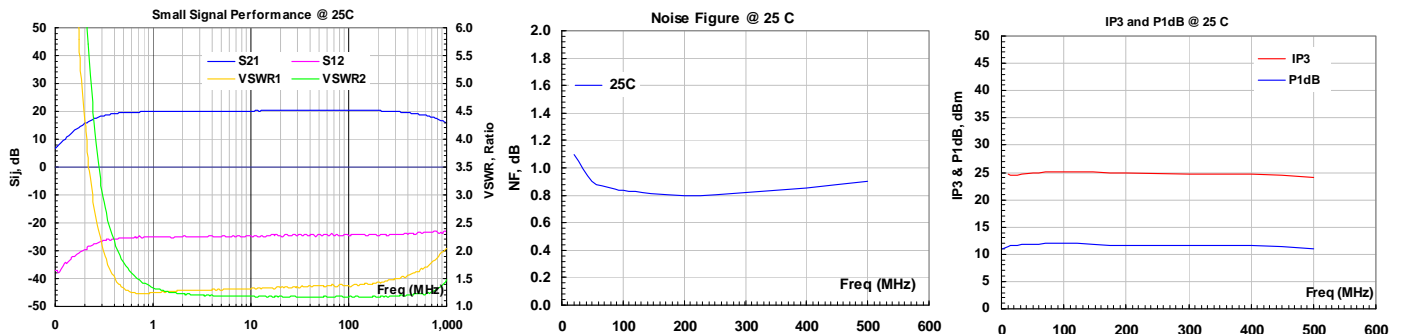
Model	Connectors
WLA0005P	N Female

**Marking:** WLA0005P

**Specifications** (Tested at +25°C)

tem	Symbol	Test Constraints	Min	Nom	Max	Unit
Frequency Range	BW	50 Ohm Impedance	1		500	MHz
Gain	S <sub>21</sub>	1 – 500 MHz	18	20	22	dB
Noise Figure	NF	50 – 500 MHz		1.0	1.4	dB
VSWR	SWR <sub>i</sub>	1 – 500 MHz, all RF ports		1.5:1	1.8:1	Ratio
Gain Flatness	ΔG	1 – 500 MHz		+/- 0.5		dB
Reverse Isolation	S <sub>12</sub>	1 – 500 MHz	15	20		dB
Output Power 1dB Compression Point	P <sub>1dB</sub>	1 – 500 MHz	8	10		dBm
Output-Third-Order Interception point	IP <sub>3</sub>	Two-Tone, P <sub>out</sub> = 0 dBm each, 1 MHz separation	18	20		dBm
Current Consumption	I <sub>dd</sub>	V <sub>dd</sub> = +12.0 V		25		mA
Power Supply Operating Voltage	V <sub>dd</sub>		+8	+12	+16	V
Operating Temperature	T <sub>o</sub>		-40		+85	°C
Thermal Resistance	R <sub>th,c</sub>	Junction to case			215	°C/W

**Typical Performance**



**Outline, IP-2**