

**Key Features**

- 135 ~ 175 MHz, 50 Ohm impedance
- 30 dBm P<sub>1dB</sub>
- 17 dB gain
- 1.5:1 VSWR
- 43 dBm IP<sub>3</sub>
- Precision machined housing
- RoHS compliant

**Applications**

- VHF
- PA driver amplifiers
- RF bench tests
- Fixed wireless communication

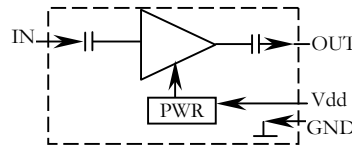
Additional heat sink is required for continuous operation!



**Absolute Maximum Ratings**

Input CW RF Power	24 dBm
DC Voltage, V <sub>dd</sub>	-0.5, +16V
Operating Temperature	-40°C to +85°C
Storage Temperature	-40°C to +85°C

**Functional Block Diagram**



**Ordering Information**

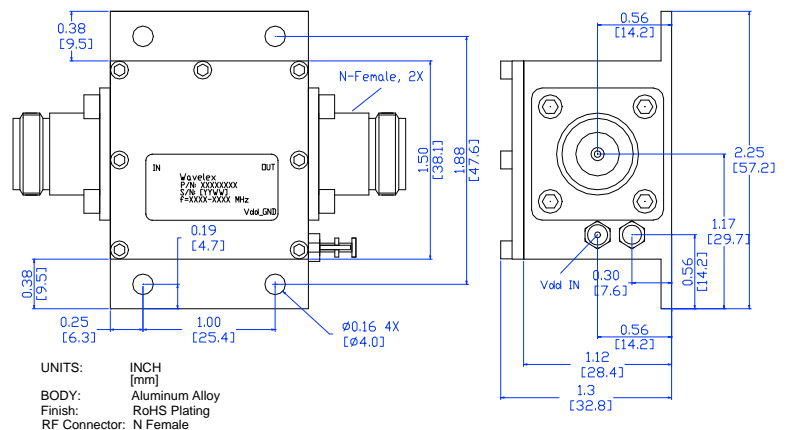
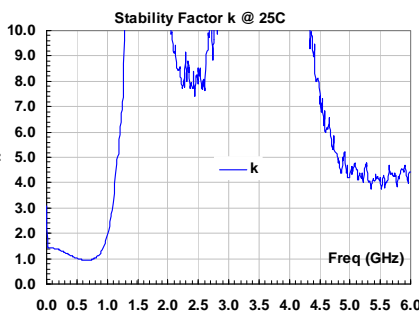
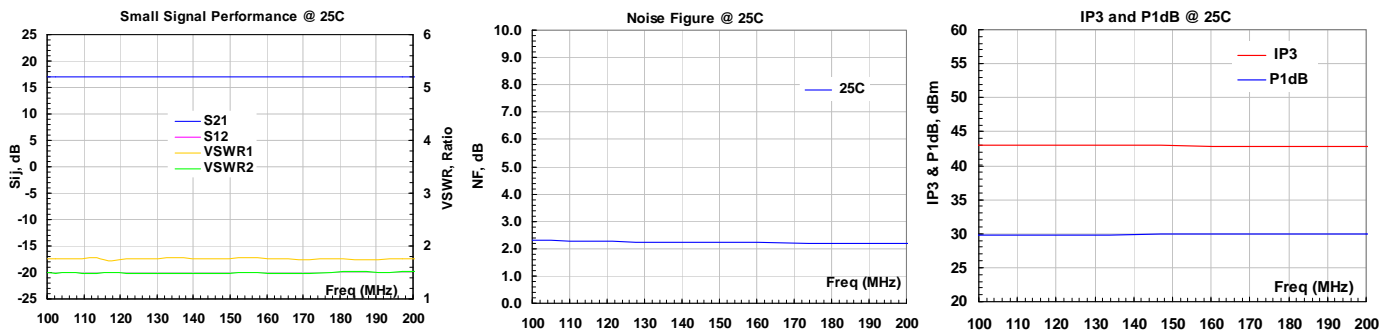
Model	Connectors
WPA0102N	N Female

**Marking:** WPA0102N

**Specifications** (Tested at +25°C)

tem	Symbol	Test Constraints	Min	Nom	Max	Unit
Frequency Range	BW	50 Ohm Impedance	135		175	MHz
Gain	S <sub>21</sub>	135 – 175 MHz	16	17	18	dB
Noise Figure	NF	135 – 175 MHz		2.3		dB
VSWR	SWR <sub>i</sub>	135 – 175 MHz		1.5:1	2:1	Ratio
Gain Flatness	ΔG	135 – 175 MHz		+/- 0.1		dB
Reverse Isolation	S <sub>12</sub>	135 – 175 MHz		25		dB
Output Power 1dB Compression Point	P <sub>1dB</sub>	135 – 175 MHz	28	30		dBm
Output-Third-Order Interception point	IP <sub>3</sub>	Two-Tone, P <sub>out</sub> = 10 dBm each, 1 MHz separation	40	43		dBm
Current Consumption	I <sub>dd</sub>	V <sub>dd</sub> = +12.0 V		220		mA
Power Supply Operating Voltage	V <sub>dd</sub>		+12		+16	V
Operating Temperature	T <sub>o</sub>		-40		+85	°C
Thermal Resistance	R <sub>th,c</sub>	Junction to case			32	°C/W

**Typical Performance**



**Outline, IP-2**