

**1487-1507 MHz 5 W Amplifier for Klystron***General Description*

The NA00250 is a 5 W pre-amplifier for Klystron. It is a single biased (+12 V) power amplifier that operates between 1487 MHz and 1507 MHz. The amplifier incorporates internal forward power detection and reverse voltage protection. It has very low spurious (-60 dBc) and harmonic rejection (-30 dBc) characteristics.

*Performance with -40 to +50 °C, Vcc = +12*

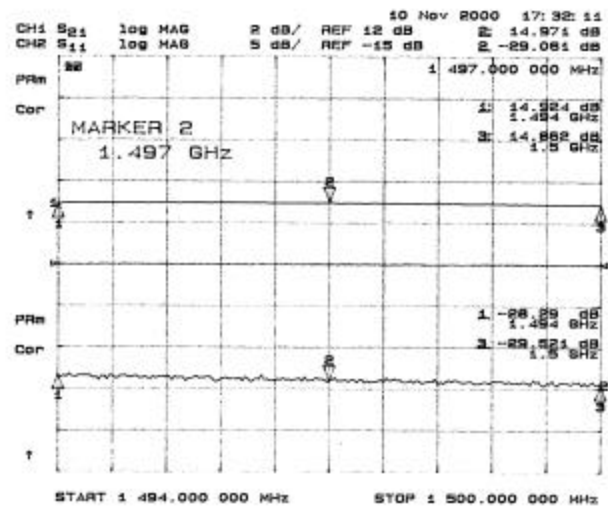
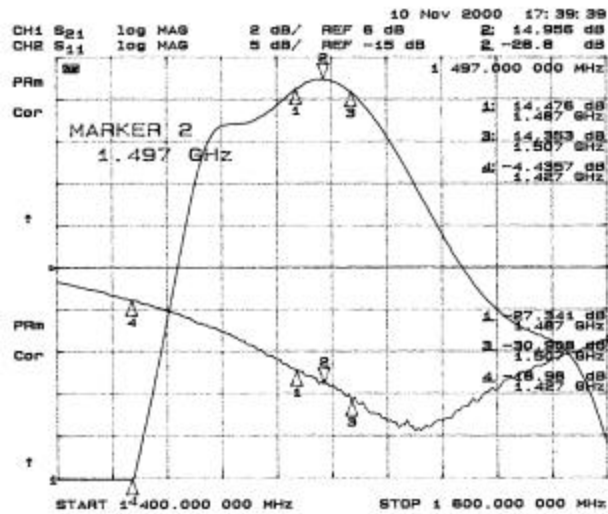
Parameter	Min.	Typ.	Max.	Units
Frequency	1,487		1,507	MHz
Gain	55		57	dB
Gain Flatness over 3 MHz band			± 0.25	dB
Gain Variation Over Temperature			± 1.0	dB
Output Power for 1 dB Compression (P1dB)	37.0			dBm
Noise Figure		5.0	8.0	dBm
Input VSWR			1.3 : 1	
Output VSWR			1.3 : 1	
Spurious Signal Level at output power of 37 dBm			-60	dBc
Harmonics at output power of 37 dBm		-45	-30	dBc
Phase Shift @ 35 +/- 3 °C and output power 27 through 37 dBm			± 5	°
DC supply voltage (Vcc)		+12		V
Supplied Current			3.0	A
Operating Temperature (Ambient)	-40		50	°C

Customized Designs: For custom designs, including both electrical and mechanical, please contact us at [sales@nextec-rf.com](mailto:sales@nextec-rf.com).

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*Typical Test Data*

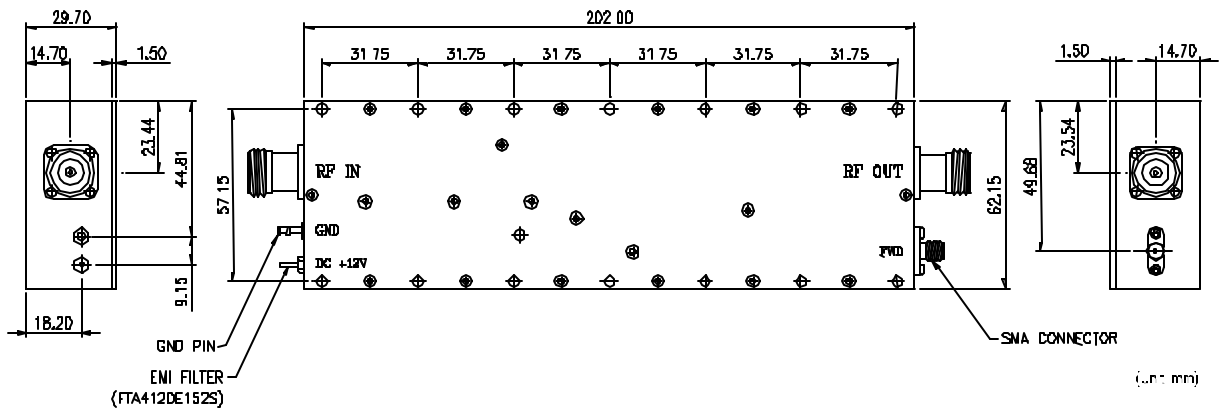
Gain and Return Loss at 25 °C



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*Outline Drawing*



(unit: mm)

*Connector Description*

RFin	RF input signal (N-Type F) Maximum Input Level not to be damaged: -5 dBm
RFout	RF output signal (N-Type F)
DC	DC Supply Voltage (+12 V)
FWD	Forward power detector output 17 dBm (0.4V out) to 38 dBm (4.5 V)

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