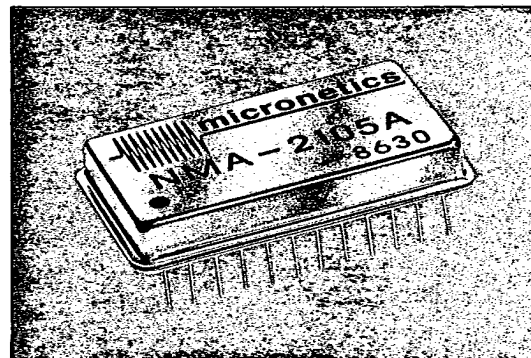



micronetics inc.

A Quantech Company

NMA-2100
SERIES
**μ-NOISE
MODULES**
Features:

- True White Symmetrical Gaussian Noise
- 5:1 Peak Factor (Voltage) 14 dB
- High Level Noise Output
- Ultra Compact Size 1.38" x .80" x .19"
- Hybrid Construction
- 24 Pin DIP


OUTPUT CHARACTERISTICS – 50 OHM LOAD

Model	Frequency Range	Noise Output Level					
		Flatness	mV/band	μV/√Hz	dBm/band	dBm/Hz	ENR(dB)
NMA-2101	*100Hz-100kHz	± .5 dB	150	474	-3.5	- 53.5	120.5
NMA-2102	*100Hz-300kHz	± .5 dB	150	273	-3.5	- 58.3	115.7
NMA-2103	*100Hz-1MHz	± .5 dB	300	300	+2.6	- 57.5	116.5
NMA-2104	*100Hz-3MHz	± .5 dB	300	174	+2.6	- 62.2	111.8
NMA-2105	*100Hz-10MHz	± .5 dB	300	95	+2.6	- 67.5	106.5
NMA-2106	*100Hz-30MHz	± .5 dB	300	55	+2.6	- 72.2	101.8
NMA-2107	1kHz -100MHz	± .75dB	89	8.9	-8.0	- 88.0	86.0
NMA-2108	1kHz -300MHz	±1.0 dB	155	8.9	-3.2	- 88.0	86.0
NMA-2109	1kHz -500MHz	±1.5 dB	200	8.9	-1.0	- 88.0	86.0
NMA-2110	1kHz -1GHz	±2.0 dB	36	1.1	-16	-106.0	68.0

*Low frequency limit of 100 Hz requires a 47 μf capacitor wired between pins 13 and 15.
Low frequency limit is 500 Hz without capacitor. 50 Ohm models only.

OUTPUT CHARACTERISTICS – 600 OHM LOAD

Model	Frequency Range	Noise Output Level					
		Flatness	mV/band	μV/√Hz	dBm/band	dBm/Hz	ENR(dB)
NMA-2101-600	100Hz-100kHz	±.5dB	1000	3164	+2.2	-47.8	126.2
NMA-2102-600	100Hz-300kHz	±.5dB	1000	1825	+2.2	-52.6	121.4
NMA-2103-600	100Hz-1MHz	±.5dB	1000	1000	+2.2	-57.8	116.2
NMA-2104-600	100Hz-3MHz	±.5dB	1000	576	+2.2	-62.6	111.4
NMA-2105-600	100Hz-10MHz	±.5dB	1000	316	+2.2	-67.8	106.2
NMA-2106-600	100Hz-30MHz	±.5dB	1000	182	+2.2	-72.6	101.4

Specifications:

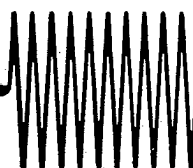
Load Impedance 50 Ohm, 600 Ohm
 Noise Symmetry 95% Typ, 90% Min
 Peak Factor 5:1 Min (Voltage)
 Operating Temperature -55°C to 85°C
 Temp. Coefficient .025 dB/°C Typ.
 Voltage Supply Sensitivity .4 dB/100 mV
 Maximum Storage Temperature -62°C to 150°C

Power Requirements:

NMA 2101-2106 +15V 40 mA
 NMA 2107-2109 +15V 125 mA
 NMA 2110 +15V 25 mA

Same For 600 Ω Modules

Maximum Supply Voltage +18 VDC

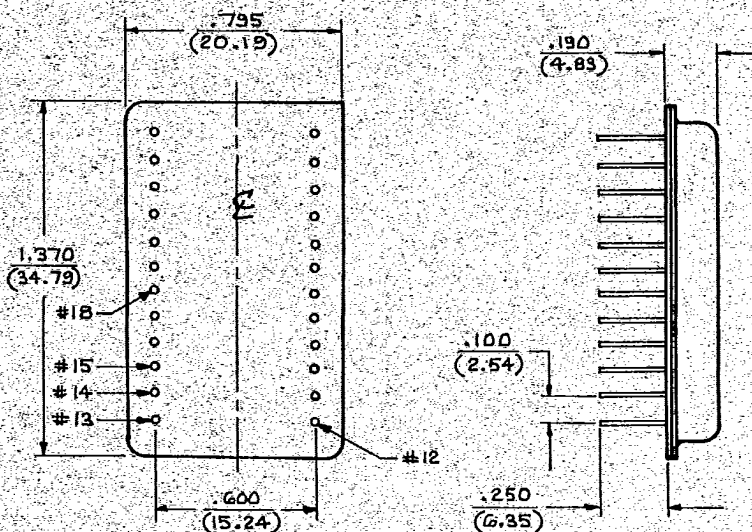

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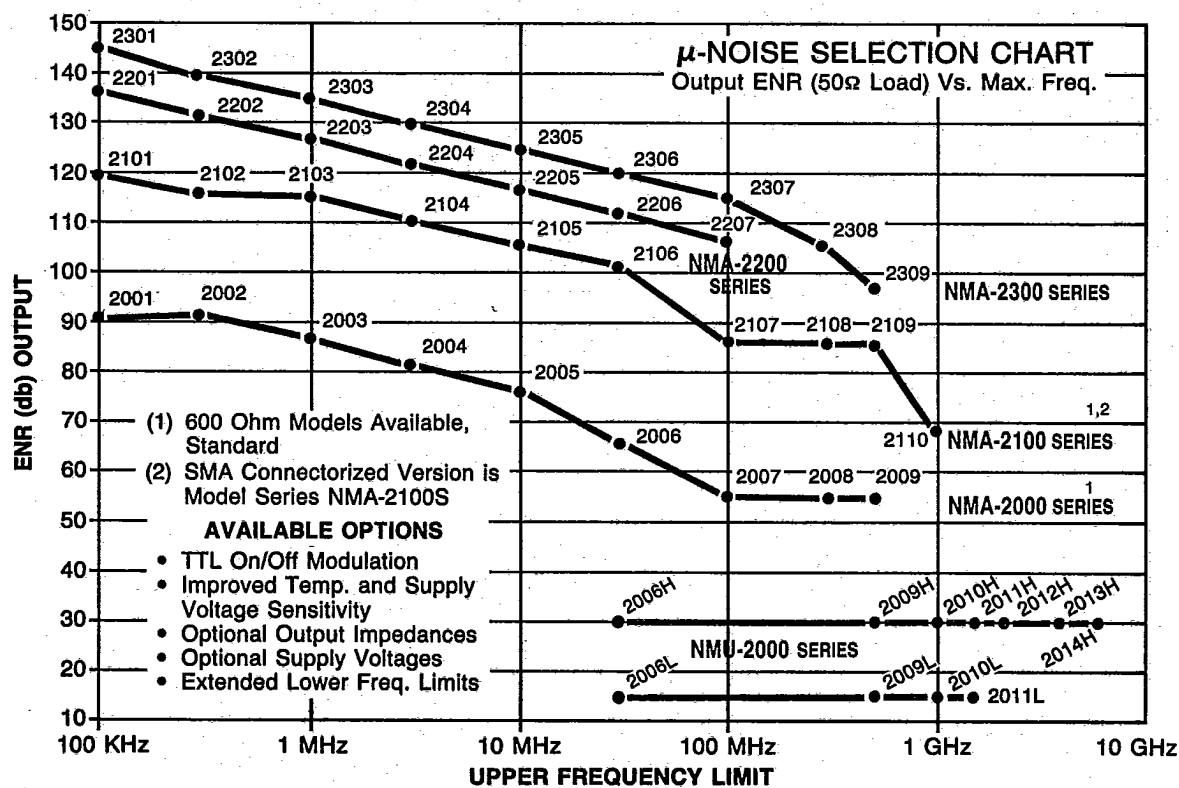
1/87 Preliminary Data Sheet

Outline Dimensions Inches (mm)

PIN	FUNCTION
12	GROUND
13	NOISE OUTPUT
13	(EXT. CAP (-))
14	GROUND
15	(EXT. CAP (+))
18	SUPPLY VOLTAGE(+15)



DIMENSIONS IN PARENTHESES ARE MILLIMETERS



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