



HUGHES

LF Series Model 3121H-02

Helium-Neon Lasers

PROVEN OEM PERFORMANCE

- Hughes hardseal construction
- Rugged coaxial internal mirror construction
- Specially developed hard glass
- Random and linear polarization available
- Less than 8-inch overall length

OEMs depend on the LF Series stable performance, long trouble-free operation and high reliability.

Hughes LF Series lasers are backed by a 12-month warranty (18 months for qualified OEMs).

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HUGHES AIRCRAFT COMPANY

INDUSTRIAL PRODUCTS DIVISION
CARLSBAD, CALIFORNIA

LASER SPECIFICATIONS

INTERNAL MIRROR PLASMA TUBE MODELS

3121H-02

3121H-P-02

- Minimum output power TEM_{00} at 632.8 nm (mW)
- Beam diameter $1/e^2$ (mm)
- Beam divergence (mrad)
- Longitudinal mode spacing (c2L)(MHz)
- Operating voltage ($V_{dc} \pm 100$)
- Recommended series anode ballast ($k\Omega$)
- Polarization

1.0 nom., 0.5 mW min.

.91

.89

781

990 ± 100

60 to 75

Random

1.0 nom., 0.5 mW min.

.91

.89

781

990 ± 100

60 to 75

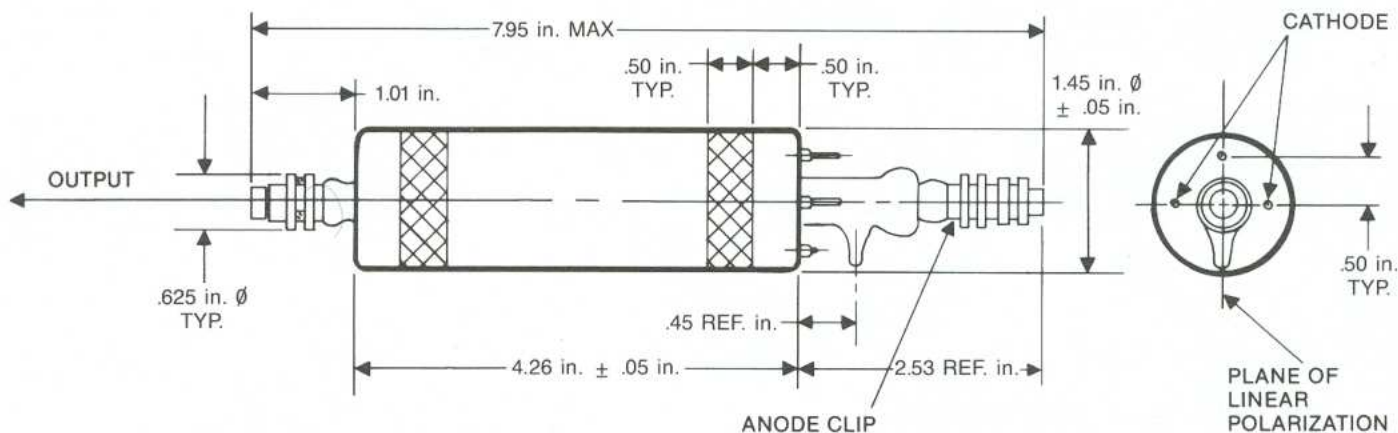
Linear, 500:1 min.
extinction ratio

COMMON SPECIFICATIONS

- Amplitude noise (30 Hz-10 Mhz) < 2% rms
Note: Ripple is generally higher with dc power supply
- Long term drift $\pm 5\%$ (in any 8-hr. period following 15-min. warm-up)
- Starting voltage < 8.0 kVdc
- Optimum operating current 5.0 ± 1.0 mA
- Angular drift < 0.2 mrad from cold start at 25°C < 0.03 mrad after 15-minute warm-up

COMMON ENVIRONMENTAL SPECIFICATIONS

	OPERATING	NON-OPERATING
Temperature	-20°C to 50°C	-40°C to 80°C
Altitude	0-10,000 ft.	0-70,000 ft.
Relative humidity without condensation	0-100%	0-100%
Shock		50g for 1 ms 15g for 11 ms



RECOMMENDED MOUNTING AREAS

NATIONAL CENTER FOR DEVICES & RADIOLOGICAL HEALTH

Laser models on this data sheet are sold only on an OEM or export basis and have not been certified relative to NCDRH performance standard 21CFR1040. It is the user's responsibility to certify product compliance where applicable.

Specifications are subject to change without notice

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