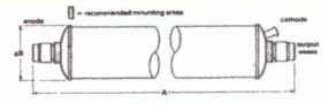
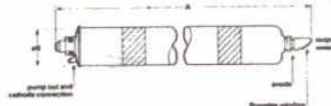


He-Ne LASER PLASMA TUBES

BEAM ANALYSIS
COLOR PRINT OUT
IS AVAILABLE FOR
YOUR LASER.
(SEE BACK COVER)



BREWSTER WINDOW TUBE

OMEGA PLASMA TUBE

ITEM NUMBER	POWER RANGE (mW)	BEAM DIAMETER (mm) ± 1%	BEAM DIVERGENCE (mrad) typical	VOLTAGE (WITH BALLAST)	CURRENT (mA)	LENGTH (A) (mm / in)	DIAMETER (B) (mm / in)
WAVELENGTH: 632.8 NANOMETERS (RED) RANDOM POLARIZATION							
R 640	.4 - 1	0.46	1.70	1240	4.5	127.0 / 5.00	25.4 / 1.00
R 690	.4 - 1	0.50	1.61	1240	4.5	152.4 / 6.00	28.4 / 1.12
R 410	.7 - 1.5	0.85	0.95	1240	4.5	7	1.45
R 680	.5 - .9	0.55	1.47	1790	4.5	6.5	1.12
R 900	.7 - 1.5	0.53	1.51	1390	4.5	177.8 / 7.00	28.4 / 1.12
R 020	.5 - 1.5	0.59	1.35	1890	6.5	226.1 / 8.90	28.4 / 1.12
R 060	.8 - 1.2	1.10	1.61	1890	6.5	8.5	1.12
R 088	.8 - 1.5	0.63	1.40	1790	4.5	9.5	1.12
R 340	1.5 - 2	0.98	2.30	1910	5.5	10.6	1.12
R 120	.5 - 1	0.59	1.35	1890	6.5	226.8 / 8.90	36.8 / 1.45
R 320	1.5 - 2.5	0.79	1.00	1990	6.5	269.2 / 10.60	36.8 / 1.45
P+R 240	1.75 - 3	0.77	1.03	1890	6.5	13	1.12
R 040	3 - 4	0.80	1.00	2400	6.5	13.9	1.45
R 140	3 - 4.5	0.80	1.00	2390	6.5	350.5 / 13.80	36.8 / 1.45
R 150	4 - 6.0	0.80	1.00	2390	6.5	350.5 / 13.80	36.8 / 1.45
R 160	6 - 8.0	1.75	2.50	1890	6.5	350.5 / 13.80	36.8 / 1.45
R 170	2 - 4	1.02	0.79	2930	7.0	410.2 / 16.15	36.8 / 1.45
R 980	12 - 17	1.47	1.40	2530	7.0	465.0 / 18.31	36.8 / 1.45
R 550	4 - 6.0	1.75	2.50	2390	6.5	350.5 / 13.80	36.8 / 1.45
LINEAR POLARIZATION							
P 900	.7 - 1.5	0.53	1.51	1390	4.5	177.8 / 7.00	28.4 / 1.12
P 020	.5 - 1.5	0.59	1.35	1890	6.5	226.1 / 8.90	28.4 / 1.12
P 120	1.5 - 2.5	0.59	1.35	1890	6.5	226.1 / 8.90	36.8 / 1.45
P 320	1.5 - 2.5	0.79	1.00	1990	6.5	269.2 / 10.60	36.8 / 1.45
P 140	3 - 4.5	0.80	1.00	2390	6.5	350.5 / 13.80	36.8 / 1.45
P 150	2 - 4	0.80	1.00	2390	6.5	350.5 / 13.80	36.8 / 1.45
P 170	2 - 4	1.02	0.79	2390	7.0	410.2 / 16.15	36.8 / 1.45
WAVELENGTH: 632.8 NANOMETERS (RED) OMEGA SERIES							
R 007	.4 - 1	0.34	2.40	1260	3.2	118.4 / 4.66	24.1 / 0.95
R 006 ¹	.5 - 1	0.47	1.70	1290	3.7	147.3 / 5.80	25.4 / 1.00
R 099 ¹	.7 - 1.5	0.76	2.07	1230	3.7	243.1 / 9.57	28.4 / 1.12
R 008	1 - 2	0.53	1.50	1840	4.5	177.8 / 7.00	25.4 / 1.00
R 009	1 - 2.5	0.57	1.47	1890	4.5	190.5 / 7.50	25.4 / 1.00

MELLES GRIOT HELIUM NEON LASER PLASMA TUBES

Product Number	Min. Power (mW)	Beam Diameter (mm)	Beam Divergence (mrad)	Max. Mode Sweep (%)	Mode Spacing (MHz)	Operating Voltage (Tube Only) (V)	Rec. Ballast Resistor (ohm)	Operating Voltage w/Ballast (V)	Current (mA)	Length (A) (mm/in)	Diameter (B) (mm/in)	Recommended Power Supply Module	
												(115 / 230 VAC)	(12 VDC)
LINEAR POLARIZATION													
* 05 LHP 660	0.50	0.47	1.70	20	1219	840	68K	1150	4.5	130.3 / 5.13	25.4 / 1.00	05 LPM 900-045	05 LPM 800-045
* 05 LHP 720	0.50	0.47	1.70	20	1074	900	68K	1210	4.5	147.8 / 5.82	28.5 / 1.12	05 LPM 900-045	05 LPM 800-045
* 05 LHP 022 ¹³	0.50	0.48	1.70	15	1070	990	75K	1290	4.0	158.8 / 6.25	19.1 / 0.75	05 LPM 900-040	05 LPM 800-040
05 LHP 600	0.50	0.50	1.61	20	1039	930	68K	1240	4.5	152.4 / 6.00	25.4 / 1.00	05 LPM 900-045	05 LPM 800-045
05 LHP 604	0.50	0.50	1.61	10	1039	950	68K	1250	4.5	152.4 / 6.00	36.8 / 1.45	05 LPM 900-045	05 LPM 800-045
05 LHP 700	0.50	0.50	1.61	20	1039	870	68K	1180	4.5	152.4 / 6.00	28.5 / 1.12	05 LPM 900-045	05 LPM 800-045
05 LHP 410	0.60	0.85	0.95	5	787	980	68K	1290	4.5	199.89 / 7.87	36.8 / 1.45	05 LPM 900-045	05 LPM 800-045
05 LHP 900	1.00	0.53	1.51	10	883	1100	68K	1410	4.5	177.8 / 7.00	28.5 / 1.12	05 LPM 900-045	05 LPM 800-045
05 LHP 010	1.00	0.59	1.35	5	687	1290	68K	1730	6.5	226.1 / 8.90	28.5 / 1.12	05 LPM 911-065	05 LPM 830-065
05 LHP 110	1.00	0.59	1.35	5	687	1340	68K	1790	6.5	226.1 / 8.90	36.8 / 1.45	05 LPM 911-065	05 LPM 830-065
05 LHP 100 ¹	1.00	0.67	1.18	5	638	1050	68K	1300	3.7	242.8 / 9.56	28.5 / 1.12	05 LPM 900-037	05 LPM 800-037
05 LHP 070	1.60	0.76	1.06	5	636	1290	68K	1650	5.0	244.4 / 9.62	28.5 / 1.12	05 LPM 901-050	05 LPM 804-050
05 LHP 122	1.80	0.63	1.28	5	687	1300	68K	1750	6.5	228.35 / 8.99	36.8 / 1.45	05 LPM 911-065	05 LPM 830-065
* 05 LHP 630	2.00	0.58	1.39	5	722	1390	68K	1730	5.0	215.9 / 8.50	25.4 / 1.00	05 LPM 901-050	05 LPM 804-050
* 05 LHP 020	2.00	0.59	1.35	5	687	1290	68K	1730	6.5	226.1 / 8.90	28.5 / 1.12	05 LPM 911-065	05 LPM 830-065
05 LHP 120	2.00	0.59	1.35	5	687	1340	68K	1790	6.5	228.35 / 8.99	36.8 / 1.45	05 LPM 911-065	05 LPM 830-065
* 05 LHP 080	2.00	0.72	1.11	5	607	1370	68K	1810	6.5	255.0 / 10.04	28.5 / 1.12	05 LPM 911-065	05 LPM 830-065
05 LHP 320	2.00	0.79	1.00	5	574	1370	68K	1810	6.5	271.3 / 10.68	36.8 / 1.45	05 LPM 911-065	05 LPM 830-065
05 LHP 090 ¹	2.50	0.72	1.11	5	607	1510	68K	1860	5.0	255.0 / 10.04	28.5 / 1.12	05 LPM 901-050	05 LPM 804-050
05 LHP 060 ²	3.50	(1.10)	(1.61)	5	N/A	1040	68K	1480	6.5	226.1 / 8.90	28.5 / 1.12	05 LPM 939-065	05 LPM 830-065
05 LHP 140	4.00	0.80	1.00	2	438	1850	68K	2290	6.5	352.55 / 13.88	36.8 / 1.45	05 LPM 902-065	05 LPM 820-065
05 LHP 340 ²	4.50	(0.98)	(1.85)	2	N/A	1430	68K	1810	5.5	269.2 / 10.60	28.5 / 1.12	05 LPM 901-055	05 LPM 804-055
05 LHP 360 ²	5.00	(2.00)	(8.00)	2	N/A	1000	68K	1440	6.5	269.1 / 10.60	36.8 / 1.45	05 LPM 939-065	05 LPM 179-065
05 LHP 050	5.00	0.80	1.00	5	438	1900	68K	2340	6.5	350.5 / 13.80	28.5 / 1.12	05 LPM 902-065	05 LPM 820-065
05 LHP 150	5.00	0.80	1.00	2	438	1850	68K	2290	6.5	352.55 / 13.88	36.8 / 1.45	05 LPM 902-065	05 LPM 820-065
05 LHP 180 ¹	5.00	0.80	1.00	2	438	1840	68K	2290	6.5	350.5 / 13.80	36.8 / 1.45	05 LPM 902-065	05 LPM 820-065
05 LHP 200	5.00	0.80	1.00	2	438	1860	68K	2310	6.5	350.5 / 13.80	36.8 / 1.45	05 LPM 902-065	05 LPM 820-065
05 LHP 160 ²	7.00	(1.75)	(2.50)	2	N/A	1400	68K	1840	6.5	350.5 / 13.80	36.8 / 1.45	05 LPM 911-065	05 LPM 830-065
05 LHP 170	7.00	1.02	0.79	2	373	2100	78K	2700	7.0	410.2 / 16.15	36.8 / 1.45	05 LPM 903-070	05 LPM 824-070

¹ Anode Output

² Multimode

³ Dual Output

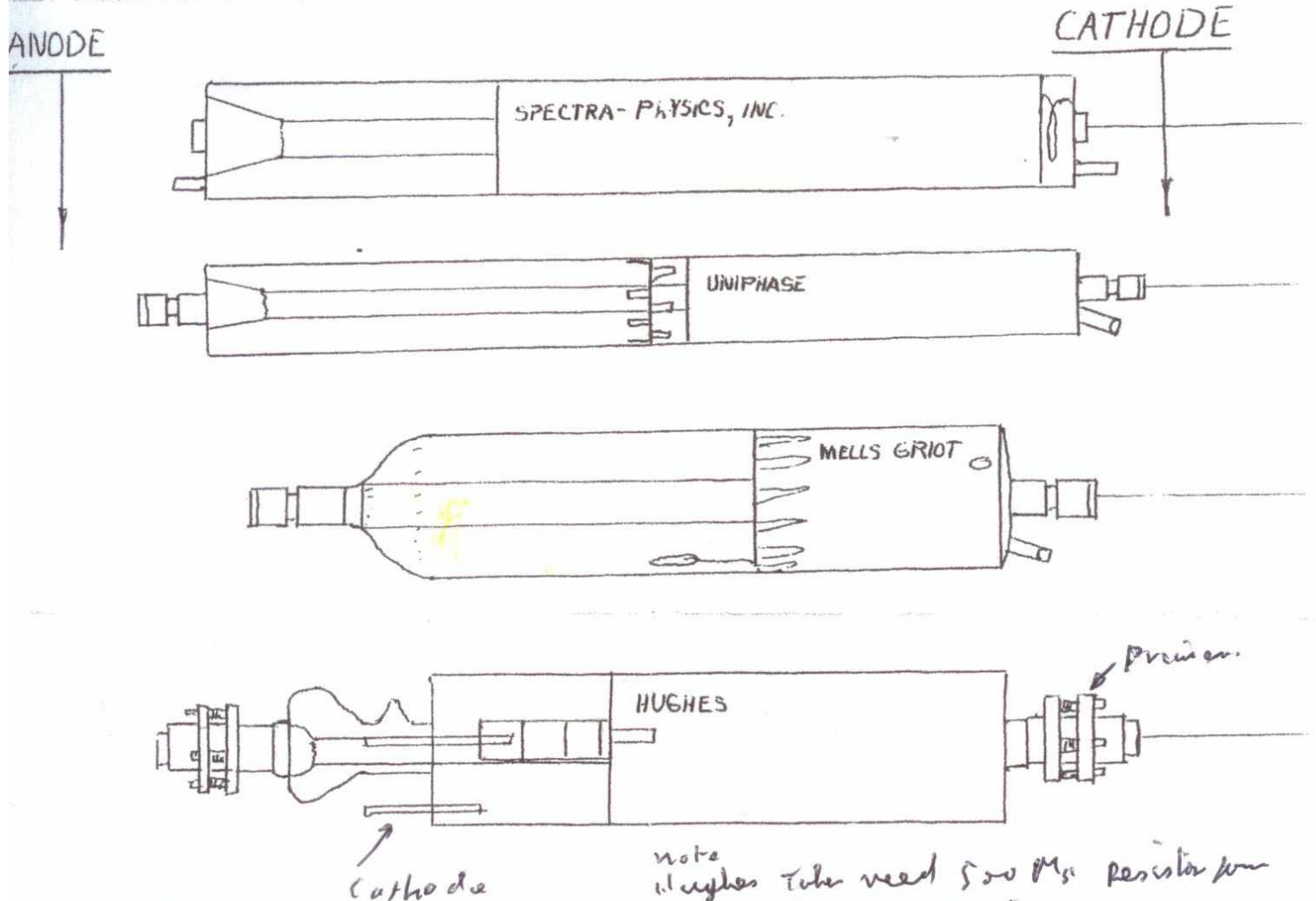
¹³ Includes endcap with potted ballast assembly (75K ohm)

Note: () are reference specifications.

Typical extinction ratios are >500:1 on linear polarization.

LASER HE-NE TUBE

ELECTRODE HOOK UP INST.



NOTES:

1. USE 75K Ω BALLAST RESISTOR IN LINE WITH ANODE (2 WATT RESISTOR)
2. WRAP RESISTOR LEAD TO ANODE, OR SOLDER RESISTOR LEAD A CLIP THAT WILL BE CLIPPED ON THE ANODE.
3. DO NOT SOLDER DIRECTLY TO THE ELECTRODE, DAMAGE MAY RESULT!







