

0.3 mW 632.8nm (RED) HELIUM NEON LASER

MODEL: 05-LSC-708-540

OUTPUT SPECIFICATIONS

CW Power Output (mW)	0.07 min 0.39 max
Wavelength (nm)	[640nm line shall not be present] 632.8
Transverse Mode	> 90% TEM ₀₀
Polarization	[See drawing for orientation] > 500:1
Beam Diameter at 1/e ² Points	6.50 ± .50
Beam Divergence (mrad)	< .40
Longitudinal Mode Spacing (MHz)	1039
Mode Sweeping	< 20%
Long Term Power Drift (8 hrs)	< 5%
Amplitude Noise, 30 Hz to 30 MHz (peak-to-peak)	< 2.8%
Warmup to > 95% of Maximum Power (minutes)	15
Beam Concentricity with Respect to Housing (mm)	± 0.25
Beam Parallelism with Respect to Housing (mrad)	< 1

ELECTRICAL SPECIFICATIONS

Input Voltage (Vdc)	12 ± .5
Input Power (W)	≤ 20

ENVIRONMENTAL SPECIFICATIONS

	OPERATING	NON-OPERATING
Temperature (°C)	+ 10 to + 40	- 29 to + 60
Altitude (meters)	0 to 3000	0 to ∞
Relative Humidity (% , non-condensing)	0 to 99%	0 to 99%
Mechanical Shock (g)	< 1 for < 11 msec	< 25 for < 11 msec < 100 for < 1 msec

0.3 mW 632.8nm (RED) HELIUM NEON LASER

MODEL: 05-LSC-708-540

LASER CLASSIFICATION

US 21 CFR 1040.10	Non-compliant [See Conditions of Acceptability Below]	Class II
IEC 60825-1:2014	Non-compliant [See Conditions of Acceptability Below]	Class 2
US FDA Accession Number		8010237

REGULATORY COMPLIANCE

Laser	See Conditions of Acceptability Below	IEC 60825-1:2014
Electrical Safety	See Conditions of Acceptability Below	IEC 61010-1:2010 + A1
Certifying Body		TUV Rheinland
RoHS 3		EU 2015/863
Product Markings		CE, cTUVus, WEEE

EXPORT INFORMATION

ECCN	EAR99
HTTS	9013.20.0000
Country of Origin	United States

*THESE PRODUCTS ARE SOLD IN ACCORDANCE WITH UNITED STATES EXPORT ADMINISTRATION REGULATIONS.
DIVERSION CONTRARY TO U.S. LAWS IS PROHIBITED.*

CONDITIONS OF ACCEPTABILITY :

1. For component type devices, the following requirements shall be followed at end use.
2. The laser power supply at end use shall have negative output terminal reliably connected to earth. The maximum output current of the power supply shall not exceed 2.5A under normal and fault conditions.
3. Safety interlock switch, key switch, controls, laser housing and laser beam attenuator, as appropriate for each laser Class, must be present in accordance with Laser safety standards, IEC/EN 60825-1:2014.
4. A visual or audio indicator, in accordance to Laser safety standards, shall be provided in the end product.
5. The unit's thermal circuitry shall be evaluated in the end product.
6. The end user must provide their own safety monitoring mechanism to shut down a power supply if it fails to start the laser after several seconds.
7. IEC/EN 60825-12 shall be considered if the end system is a free space optical communication system used for transmission of information.

Information contained herein, in its entirety, is for reference only and subject to change without notice.

NOTES (UNLESS OTHERWISE SPECIFIED):

1. DIMENSIONS IN MILLIMETERS (mm) ARE IN BRACKETS.
2. BARCODE FORMAT: CODE 39
BARCODE CONTENT: SERIAL NUMBER AND BUILD NUMBER (1234AB.12)
3. BARCODE FORMAT: CODE 39
BARCODE CONTENT: POWER IN MILLIWATTS (.XX)
4. HOUSING TO BE ISOLATED FROM POWER SUPPLY GROUND WITH A 1Ω, 1/6W RESISTOR.
5. ANODIZING OPTIONAL.
6. BARCODE FORMAT: CODE 128
BARCODE CONTENT: SERIAL NUMBER

