



405nm, 600mW Free-Space Laser Diode Module

RLS / 405NM-600MW-FS

OPTICAL SPECIFICATIONS

- Center Wavelength (typ): 402 nm \pm 3 nm
- Output Power: 600 mW
- Typ. Beam Size [@ 1/e²]: 3 mm vertical x 3 mm horizontal
- Typ. Full Angle Beam Divergence [@ 1/e]: 0.2 x 0.6 mrad
- Typ. Spectral Linewidth [@ FWHM]: 1 nm
- Polarization State: TE
- Min. Polarization Extinction Ratio: 1:100
- Peak-to-peak Power Stability Over 8h: 0.9% (note 1)
- RMS Power Stability Over 8h: 0.13% (note 1)
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- Note 1: Test performed in 22°C \pm 2 ambient temperature using an optical power meter with an input bandwidth of 100 Hz. Power was measured every 6 seconds

ELECTRICAL SPECIFICATIONS

- Modulation Input [Analog]: 0 - 5 V
- -3 dB Bandwidth Modulation: 600 kHz
- Rise Time: 250 ns (note 2)
- Fall Time: 150 ns (note 2)
- Signal To Rise Start Delay: 400 ns
- Softstart Time: 2000 ms
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- Note 2: Measurement performed at 100kHz frequency.

GENERAL SPECIFICATIONS

- Lifetime: 10,000 h
- Laser Diode ESD Protection Included
- Cooling: Active, Internal TEC
- Operating Temperature: 10°C - 25°C
- Overheating Protection Included
- Power Dissipation [@ Bottom Surface]: < 20 W
- Max Power Consumption: 7.5 V x 7 A
- Module dimensions [L x W x H]: 129 mm x 59 mm x 41 mm

