



# Internal Gratings Single Emitters

## Applications

- Laser Pumping
- Raman Spectroscopy

## Features

- Accurate 785 nm and 808 nm  $\pm$  1.0 nm
- Narrow linewidth
- Stable 0.08 nm/ $^{\circ}$ C

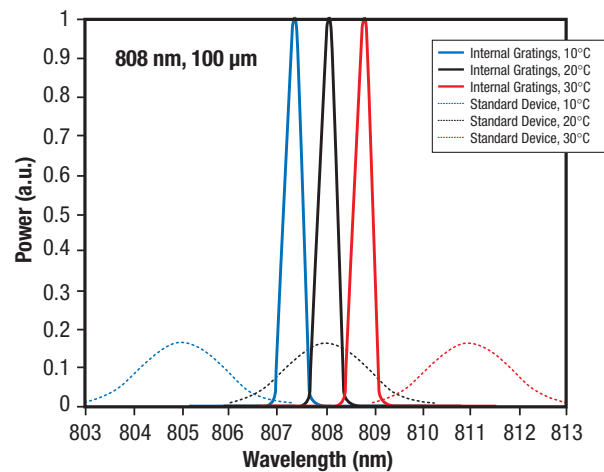
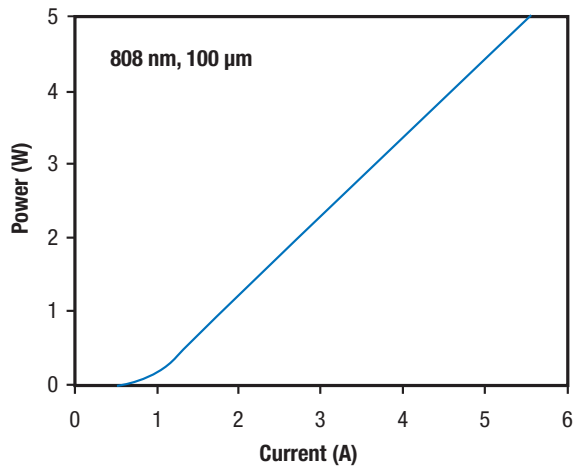
## Benefits

- Increased pumping efficiency
- Reduction in thermal requirements



| Product Specifications                | ES-4716-D             | ES-157                |
|---------------------------------------|-----------------------|-----------------------|
| Center Wavelength                     | 785 nm                | 808 nm                |
| Wavelength Tolerance                  | $\pm$ 1 nm            | $\pm$ 1 nm            |
| Spectral Width (FWHM)                 | < 0.2 nm              | < 0.5 nm              |
| Output Power                          | 750 mW                | 2.5 W                 |
| Operating Current                     | < 1.5 A               | < 3.5 A               |
| Operating Voltage                     | < 2.2 V               | < 2.2 V               |
| Threshold Current                     | $\leq$ 650 mA         | < 0.9 A               |
| Slope Efficiency (@ I <sub>th</sub> ) | > 0.85 W/A            | 1 W/A                 |
| Conversion Efficiency                 | 25%                   | 30%                   |
| Temperature tuning coefficient        | 0.08 nm/ $^{\circ}$ C | 0.08 nm/ $^{\circ}$ C |
| Slow axis divergence (FWHM)           | < 10 degrees          | $\leq$ 10 degrees     |
| Fast axis divergence (FWHM)           | < 25 degrees          | $\leq$ 25 degrees     |
| Emitter width                         | 50 $\mu$ m            | 100 $\mu$ m           |
| Polarization                          | TE                    | TE                    |
| Mount Type                            | C-mount               | C-mount               |
| Chip bonding                          | p-down                | p-down                |

Operating conditions at 20 degrees Celsius unless otherwise noted



## BRIGHTNESS and POWER

Breaking Performance Barriers through Semiconductor Laser Innovation

QPC Lasers, Inc.

15632 Roxford Street • Sylmar, CA 91342 • Phone: +1 (818) 986-0000 • Fax: +1 (818) 698-0428

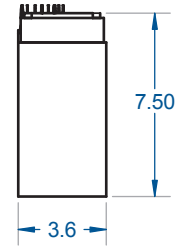
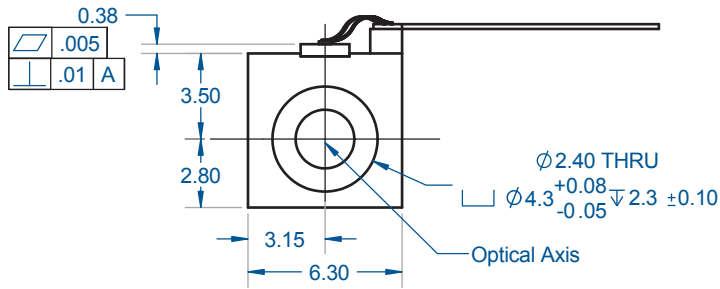
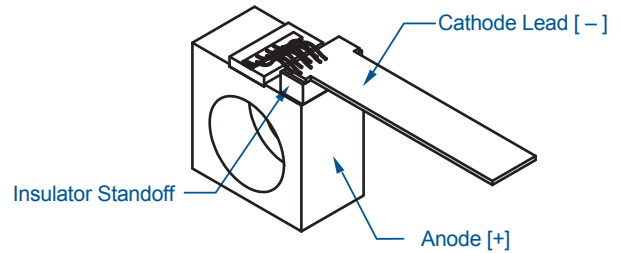
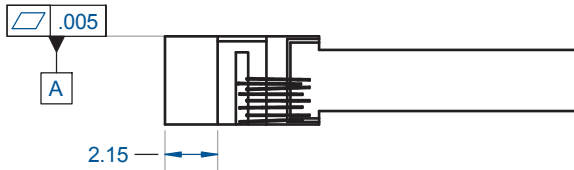
www.QPClasers.com • email: info@QPClasers.com





# Internal Gratings Single Emitters

## C-Mount



光技術をサポートする

株式会社オプトサイエンス

<http://www.optoscience.com>

東京本社 〒160-0014 東京都新宿区内藤町1番地 内藤町ビルディング  
TEL:03(3356)1064 FAX:03(3356)3466 E-mail:info@optoscience.com  
大阪支店 〒532-0011 大阪市淀川区西中島7-7-2 新大阪ビル西館  
TEL:06(6305)2064 FAX:06(6305)1030 E-mail:osk@optoscience.com  
名古屋営業所 〒450-0002 名古屋市中村区名駅2-37-21 東海ソフトビル  
TEL:052(569)6064 FAX:052(569)8064 E-mail:ngo@optoscience.com

**BRIGHTNESS and POWER**  
**Breaking Performance Barriers through Semiconductor Laser Innovation**

QPC Lasers, Inc.

15632 Roxford Street • Sylmar, CA 91342 • Phone: +1 (818) 986-0000 • Fax: +1 (818) 698-0428  
[www.QPCLasers.com](http://www.QPCLasers.com) • email: info@QPCLasers.com