

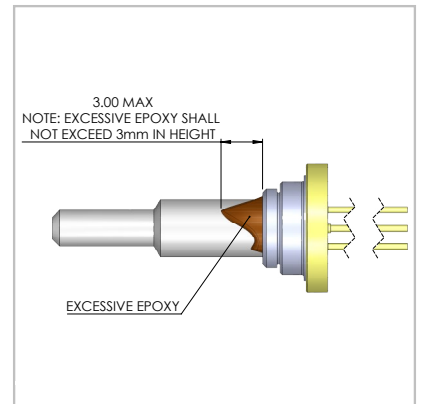
## SQF-Series Pulsed Laser Diodes with Homogenized Beam

### Features

- Homogenized beam
- 905 nm
- Excellent temperature stability
- Proven InGaAs / GaAs high reliability structure
- Custom versions available
- Hermetic and custom designed package

### Applications

- Range finding
- Surveying equipment
- Laser radar
- Medical
- "Friend or foe" identification
- Security barrier
- Weapon simulation



## 905 xx SQF-Series

### Generic Characteristics at $t_{RT} = 21^{\circ}\text{C}$ and $I_{FM}$

	Min	Typ	Max	Units
Wavelength of peak radiant intensity $\lambda$	895	905	915	nm
Spectral bandwidth $\Delta\lambda$ at 50% intensity points		5		nm
Wavelength temperature coefficient		0.28		nm/ $^{\circ}\text{C}$

### Multi Junction Chip

#### Single chip characteristics at $t_{RT} = 21^{\circ}\text{C}$ , $t_W = 150\text{ ns}$ , $P_{rr} = 6.66\text{ kHz}$

Parameter	905D1S3JT06-SQF-14-15
Integrated pulsed laser diode	905D1S3JT06R
$P_o$ ex fiber at $i_{FM}$ (typ.)	30 W
Emitting area	140 x 140 $\mu\text{m}^2$
Divergence NA	0.27
Max peak forward current $i_{FM}$	22 A
$I_{th}$ typ	600 mA
Forward voltage at I max	11.8 V

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Figure 1: Typ. near field emission (2 D view)

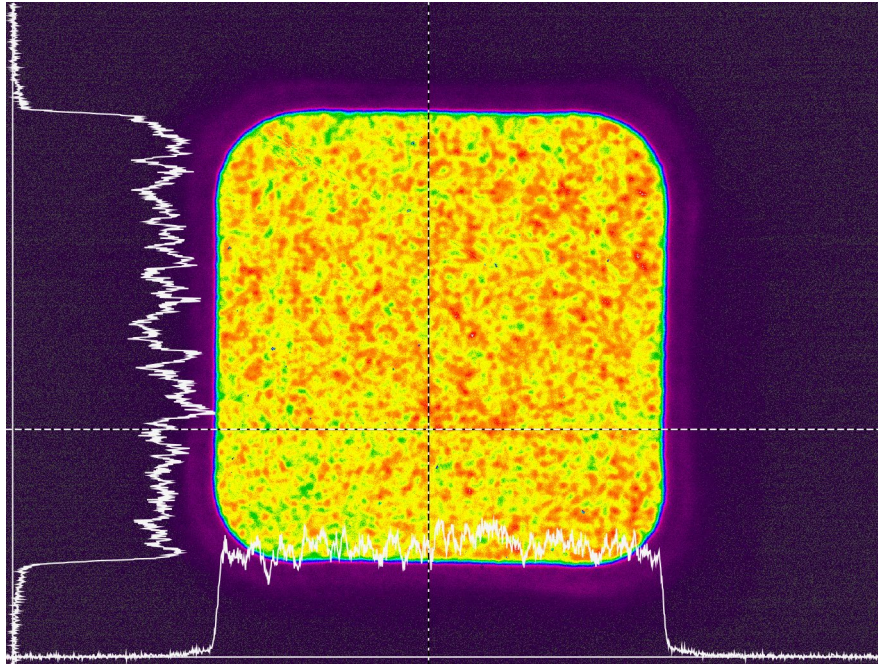
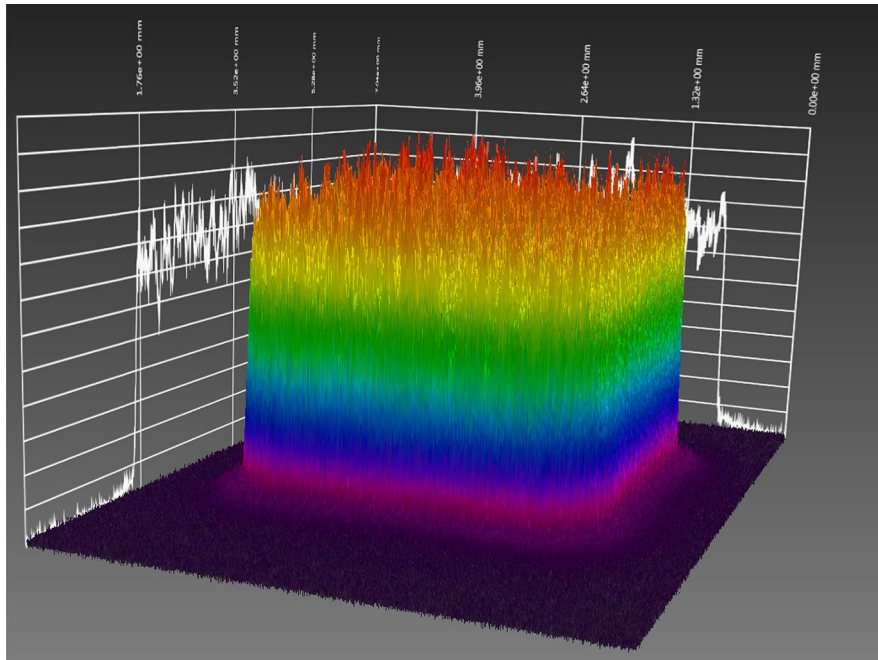


Figure 2: Typ. near field emission uniformity (3D view)

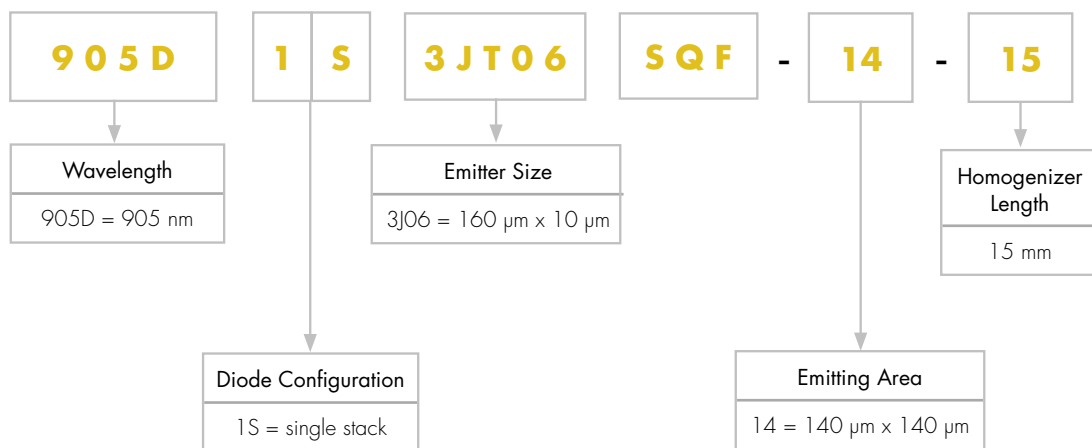


## Absolute Maximum Ratings

Maximum ratings	Limiting values
Peak reverse voltage	36 V
Pulse duration Single element	150 ns
Duty factor	0.1%
Temperature Storage Operating	-55 °C to +85 °C -40 °C to +85 °C
Lead soldering 5 seconds max at	200 °C

**Note:** Further specifications are available on the individual datasheets of the integrated pulsed laser diode.

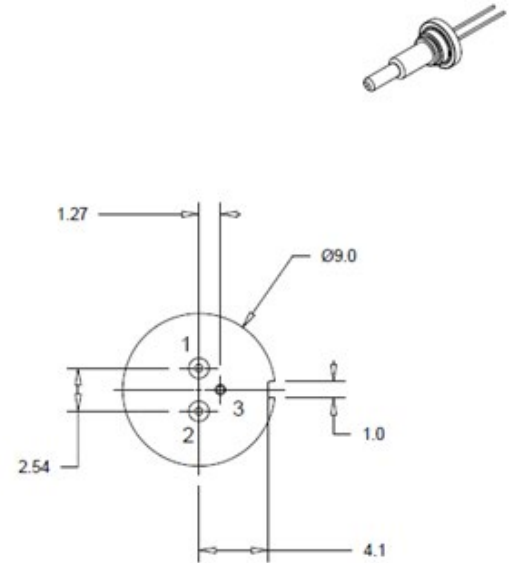
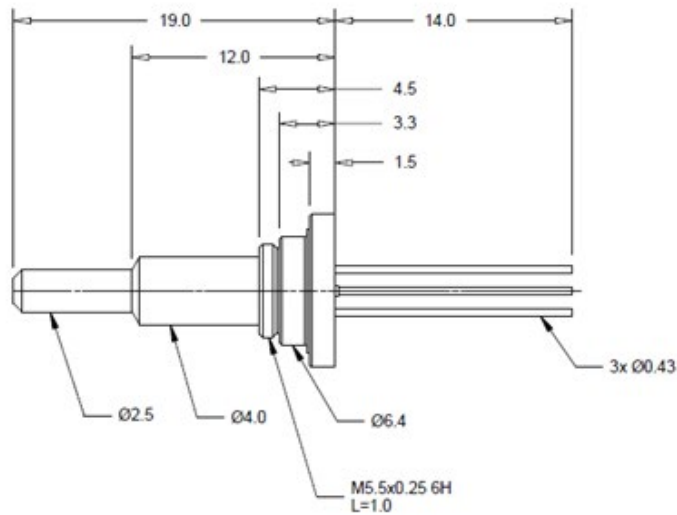
## Product Number Designation



**Note:** other configurations are available upon request.  
Please contact us for further details.

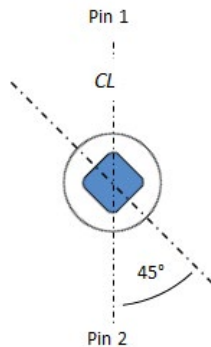
Package SQF-Series

15 mm homogenizer



Pin Out:

- 1- LD Anode (+),
- 2- NC,
- 3- LD Cathode (-) Case.



Core orientation with respect to case

## Product Changes

LASER COMPONENTS reserves the right to make changes to the product(s) or information contained herein without notice. No liability is assumed as a result of their use or application.

## Ordering Information

Products can be ordered directly from LASER COMPONENTS or its representatives. For a complete listing of representatives, visit our website at [www.lasercomponents.com](http://www.lasercomponents.com)

Custom designed products are available on request.

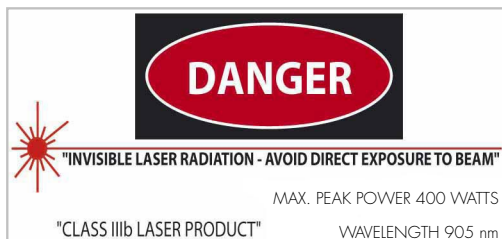
## Laser Safety

### Personal Hazard:

Depending on the mode of operation, these devices emit highly concentrated non visible infrared light which can be hazardous to the human eye. Products which incorporate these devices have to follow the safety precautions given in IEC 60825-1 "Safety of laser products".

### Handling Precautions:

Products are subject to the risks normally associated with sensitive electronic devices including static discharge, transients, and overload.



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