

# **ROITHNER LASERTECHNIK**

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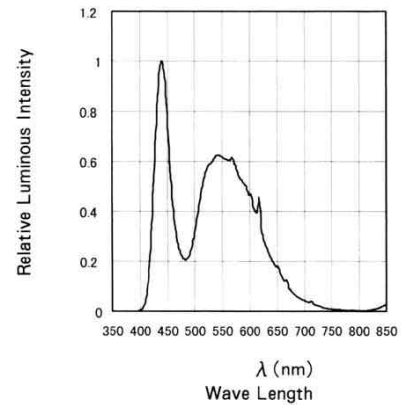
## **NSPW510S TECHNICAL DATA**

### **WHITE GaN LED**

Wavelength: 420 .. 650 nm typ.  
Output power: 2.0 mW, cw  
Package: 5 mm clear plastic



Luminous Spectrum  
Ta = 25°C, If = 20mA



#### **Absolute Maximum Ratings (Tc=25°C)**

| CHARACTERISTIC            | SYMBOL           | RATING      | UNIT |
|---------------------------|------------------|-------------|------|
| DC Forward Current        | I <sub>F</sub>   | 30          | mA   |
| Pulse Forward Current *)  | I <sub>FP</sub>  | 100         | mA   |
| Allowable Reverse Current | I <sub>R</sub>   | 5           | mA   |
| Power Dissipation         | P <sub>D</sub>   | 120         | mW   |
| Operating Temperature     | T <sub>OP</sub>  | -20 .. +80  | °C   |
| Storage Temperature       | T <sub>STG</sub> | -30 .. +100 | °C   |

\*) Pulse width ≤ 10 ms, duty cycle ≤ 0.1

#### **Optical-Electrical Characteristics (Tc = 25°C)**

| CHARACTERISTIC       | SYMBOL         | TEST CONDITION       | MIN | TYP | MAX | UNIT |
|----------------------|----------------|----------------------|-----|-----|-----|------|
| DC Forward Voltage   | V <sub>F</sub> | I <sub>F</sub> =20mA | -   | 3.6 | 4.0 | V    |
| DC Reverse Current   | I <sub>R</sub> | V <sub>R</sub> =5V   |     |     | 50  | μA   |
| Optical Output Power | P <sub>O</sub> | I <sub>F</sub> =20mA | -   | 2.0 | -   | mW   |
| Peak Wavelength      | λ <sub>P</sub> | I <sub>F</sub> =20mA | -   | 440 | -   | nm   |
| Divergence           | θ              | I <sub>F</sub> =20mA |     | 15  |     | °    |