

Absolute Maximum Ratings at Ta=25°C

| Parameters | Symbol | Max. | Unit |
|-------------------------------------|-----------|---------------------|------|
| Power Dissipation | P_d | 60 | mW |
| Peak Forward Current ^(a) | I_{FP} | 100 | mA |
| DC Forward Current ^(b) | I_F | 25 | mA |
| Reverse Voltage | V_R | 5 | V |
| Operating Temperature Range | T_{opr} | -40°C to +80°C | |
| Storage Temperature Range | T_{stg} | -40°C to +85°C | |
| Soldering Temperature | T_{sld} | 260°C for 5 Seconds | |

Notes:

- a. Derate linearly as shown in derating curve.
- b. Duty Factor = 10%, Frequency = 1 kHz.

Electrical Optical Characteristics at Ta=25°C

| Parameters | Symbol | Min. | Typ. | Max. | Unit | Test Condition |
|------------------------------------|-----------------|------|------|------|---------|----------------|
| Luminous Intensity ^(a) | I_v | 160 | 270 | --- | mcd | IF=20mA |
| Viewing Angle ^(b) | $2\theta_{1/2}$ | --- | 80 | --- | deg. | IF=20mA |
| Peak Emission Wavelength | λ_p | --- | 632 | --- | nm | IF=20mA |
| Dominant Wavelength ^(c) | λ_d | --- | 624 | --- | nm | IF=20mA |
| Spectral Line Half-Width | $\Delta\lambda$ | --- | 20 | --- | nm | IF=20mA |
| Forward Voltage | VF | 1.6 | 2.0 | 2.4 | V | IF=20mA |
| Reverse Current | IR | --- | --- | 10 | μ A | VR=5V |

Notes:

- a. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
- b. $2\theta_{1/2}$ is the o-axis angle where the luminous intensity is 1/2 the peak intensity.
- c. The dominant wavelength (λ_d) is derived from the CIE chromaticity diagram and represents the single wavelength which defines the color of the device.

Typical Electrical / Optical Characteristics Curves (25°C Ambient Temperature Unless Otherwise Noted)

