



Features

- Three 1 watt XLamps per strip
- MCPCB mounted package
- On-board 350 mA fixed current circuitry
- Supply 13.2 VDC
- Unit connected via 2 pin connector
- Class II ESD Rating (HBM per Mil-Std-883D)
- Water clear lens
- RoHS compliant - Lead free

Electro/Optical Characteristics White Lamp $T_a = 25^\circ\text{C}$

| Part Number | Emitting Colour | Die Material | Colour Temperature | | Supply Voltage | Luminous Flux typical | Viewing \angle 20½ |
|--------------|-----------------|--------------|--------------------|-------|----------------|-----------------------|----------------------|
| | | | min | max | | | |
| FEL-BG1WWTWC | White | InGaN/SiC | 5000 | 10000 | 13.2 \pm 5% | 52 | 100 |
| Units | | | °K | | VDC | lm / LED | deg |

Electro/Optical Characteristics Coloured Lamps $T_a = 25^\circ\text{C}$

| Part Number | Emitting Colour | Die Material | Wavelength Dom. λ_d | | Supply Voltage | Luminous Flux typical | Viewing \angle 20½ |
|-----------------|-----------------|--------------|-----------------------------|-----|----------------|-----------------------|----------------------|
| | | | min | max | | | |
| FEL-BG1WRTWC | Red | AlGaInP | 620 | 635 | 13.2 \pm 5% | 40 | 100 |
| FEL-BG1WRDOTWC | Red orange | AlGaInP | 610 | 620 | 13.2 \pm 5% | 49 | 100 |
| FEL-BG1WYTWTC | Amber | AlGaInP | 585 | 595 | 13.2 \pm 5% | 42 | 100 |
| FEL-BG1WGTWC | Green | InGaN/SiC | 520 | 535 | 13.2 \pm 5% | 52 | 100 |
| FEL-BG1WCTWC | Cyan | InGaN/SiC | 500 | 510 | 13.2 \pm 5% | 45 | 100 |
| FEL-BG1WBTWC | Blue | InGaN/SiC | 465 | 475 | 13.2 \pm 5% | 19 | 100 |
| FEL-BG1WROYTWTC | Royal blue | InGaN/SiC | 455 | 465 | 13.2 \pm 5% | 255 mW | 100 |
| Units | | | nm | | VDC | lm / LED | deg |

Maximum Ratings $T_a = 25^\circ\text{C}$

| Characteristic | Symbol | Rating | Units |
|--------------------------|-----------|---------------|-------|
| LED Junction Temperature | | 125 | °C |
| Operating Temperature | T_{opr} | - 20 to + 80 | °C |
| Storage Temperature | T_{stg} | - 20 to + 100 | °C |

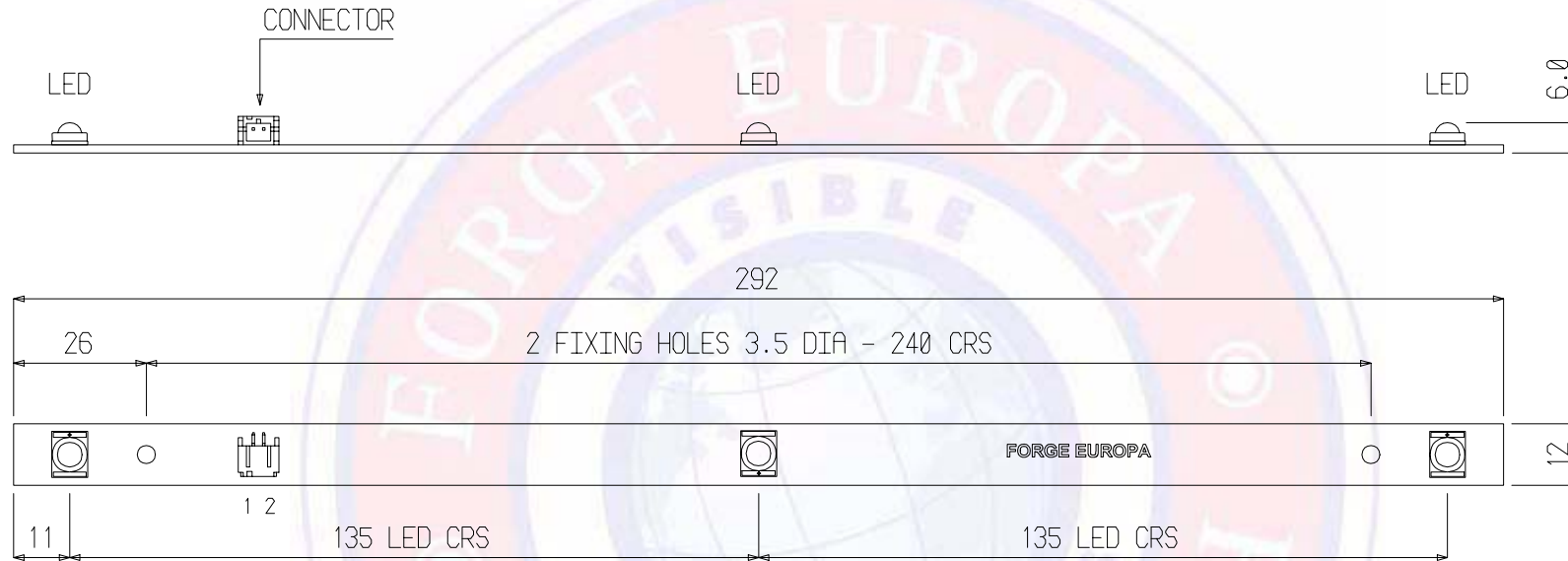
It is the responsibility of the customer to verify the suitability of the product for the application.

Notes:

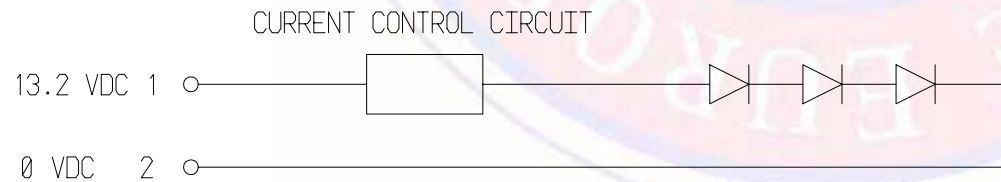
Industry standard procedures regarding static must be observed when handling product with InGaN/SiC die.
 Consideration must be given to thermal design such that the maximum LED junction temperature is not exceeded.
 Female connector (not supplied) JST part PHR-2
 Connector crimps JST part SPH-002T-PO.5S suitable for 24-30 AWG wire.

Package Outline

Dimensions in mm
Tol ± 0.25 mm unless stated



Connection Diagram



| | |
|--------------------|-----------|
| Colour | White |
| Die Material | InGaN/SiC |
| Test Current I_F | 350 mA |
| Test Temperature | 25°C |

Note

Information is collated from testing carried out in the Forge Europa laboratory using its custom-built automated LED test and measurement system. This unique facility measures the total luminous flux of discrete LEDs with great precision.

This information provided by the Life Test Laboratory gives vital data for any design team committed to total quality.

Forge Europa operates a policy of continuous development and reserves the right to make changes and improvements without prior notice.

Intensity variation over test duration

