



- Features**
- Two 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-BG1WWDWC	White	InGaN/SiC	5000	10000	13.2 ±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. $\lambda_d$		Supply Voltage	Luminous Flux typical	Viewing $\angle$ 20½
			min	max			
FEL-BG1WRDWC	Red	AlGaInP	620	635	13.2 ±5%	40	100
FEL-BG1WRDODWC	Red orange	AlGaInP	610	620	13.2 ±5%	49	100
FEL-BG1WYDWC	Amber	AlGaInP	585	595	13.2 ±5%	42	100
FEL-BG1WGDWC	Green	InGaN/SiC	520	535	13.2 ±5%	52	100
FEL-BG1WCDWC	Cyan	InGaN/SiC	500	510	13.2 ±5%	45	100
FEL-BG1WBDWC	Blue	InGaN/SiC	465	475	13.2 ±5%	19	100
FEL-BG1WROYDWC	Royal blue	InGaN/SiC	455	465	13.2 ±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

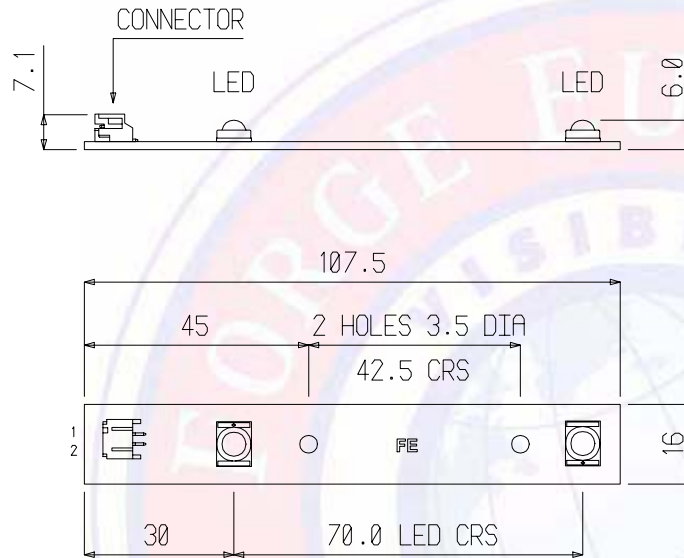
It is the responsibility of the customer to verify the suitability of the product for the application.

### Notes:

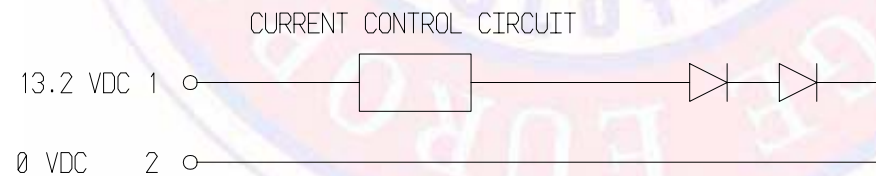
Industry standard procedures regarding static must be observed when handling product with InGaN/SiC die.  
 Consideration must be given to thermal design such that the maximum LED junction temperature is not exceeded.  
 Female connector (not supplied) JST part PHR-2  
 Connector crimps JST part SPH-002T-PO.5S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

