FEL- F115XV12

LED Lamp Fascia Illuminator

Features

- Designed to push fit into a round hole in a Vac Form cavity or fascia plate
- Fitted with an Insulation Displacement Connector for ease of wiring
- High intensity White illuminator for incandescent bulb replacement
- Range of decorative colours for special effects without filters
- Low power consumption
- Fitted with reverse voltage protection diode
- · Water clear epoxy
- Class II ESD Rating



Patent pending

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

| Part Number | Emitting Colour | Die Material | Chromaticity Coordinates | | Supply | Current | Luminous |
|----------------|--------------------|-----------------|--------------------------|------|---------|-------------|------------|
| | | | X | у | Voltage | Consumption | Flux |
| FEL-F115W15V12 | White | InGaN/SiC | 0.31 | 0.32 | 12 | 30 | 2.82 |
| Units | | | typical | | VDC | mA typical | Im typical |

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

| Part Number | Emitting Colour | Die Material | Wavelength | | Supply | Current | Luminous |
|------------------|--------------------|-----------------|---------------------|----------------------|---------|-------------|------------|
| | | | Peak λ _P | Dominant λ_d | Voltage | Consumption | Flux |
| FEL-F115R2112V12 | Red | AlGaInP | 650 | 635 | 12 | 35 | 3.30 |
| FEL-F115Y1512V12 | Yellow | AlGaInP | 591 | 589 | 12 | 35 | 3.20 |
| FEL-F115G16V12 | Green | InGaN/SiC | 518 | 527 | 12 | 35 | 2.97 |
| FEL-F115G11V12 | Green | InGaN/SiC | 502 | 505 | 12 | 35 | 1.69 |
| FEL-F115B15V12 | Blue | InGaN/SiC | N/A | 460 ±5 | 12 | 35 | 0.85 |
| Units | | | 1 | nm | VDC | mA typical | Im typical |

Temperature Characteristics for all Illuminators

| Characteristic | Symbol | Rating | Units |
|-----------------------|------------------|--------------|-------|
| Operating Temperature | T _{opr} | - 25 to + 80 | ° C |
| Storage Temperature | T _{stg} | - 30 to + 85 | ° C |

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



Connection Diagram Package Outline TILLUMTNATTNG AREA 9.5 A/F 11.0 DIA 8.0 DIA LED -Ve IDC CONNECTION BLOCKING DIODE RESISTOR DTODE **APPROX** CURRENT EUROPA LIMITING IDC CONNECTOR FORGE RESISTOR WITH CABLE GRIPS 24/26 AWG +Ve IDC CONNECTION R21 DIE COLOUR SUPPLY +Ve -Ve REFERENCE REFERENCE Tol \pm 0.25 mm unless stated, Dimensions in mm



Mounting Detail





The design diameter for the mounting hole is 8.0 mm.

The matrix material must be of a consistency suitable to allow the splines of the product to produce an interference fit in the mounting hole when the product is assembled.

Depending upon the material type and thickness of the mounting matrix the hole size should be adjusted by the user to obtain the required level of push fit force / component retention.

Assembly Method

Place the nose of the LED into the mounting hole.

Rotate the product to achieve the required orientation of the connector.

Press the assembly into the mounting hole until the shoulder of the LED is in full contact with the rear of the mounting matrix.





