

# LT2BC144072-R | DATASHEET

# High uniformity continuous LED backlight, 144 x 72 mm illumination area, red





#### **SPECIFICATIONS**

## **Lighting specifications**

| 0 01                         |                     |             |
|------------------------------|---------------------|-------------|
| Modules                      |                     | 3x2         |
| Illumination area width      | (mm)                | 144         |
| Illumination area height     | (mm)                | 72          |
| Number of LEDs               |                     | 288         |
| Light color, peak wavelength |                     | red, 620 nm |
| Spectral FWHM                | (nm)                | 20          |
| Illuminance <sup>1</sup>     | (klux)              | 14          |
| Irradiance <sup>1</sup>      | (W/m <sup>2</sup> ) | -           |
| Diffuser                     |                     | yes         |
| Collimation film             |                     | no          |
|                              |                     |             |

#### **Electrical specifications**

| Electrical specifications      |      |         |
|--------------------------------|------|---------|
| Supply voltage                 | (V)  | 24      |
| Current <sup>2</sup>           | (mA) | 640     |
| Power consumption <sup>2</sup> | (W)  | 15.4    |
| Typical pulse voltage          | (V)  | 35.5    |
| Max pulse current <sup>3</sup> | (mA) | 1400    |
| Peak power consumption         | (W)  | 49.7    |
| Max duty cycle                 | (%)  | 1.5     |
| Max pulse duration             | (ms) | 1       |
| Connector                      |      | M8      |
| Included cable                 |      | CBLT003 |
|                                |      |         |

#### **KEY ADVANTAGES**

#### **Excellent uniformity**

Test report with measured uniformity

## Ultra high-power light output and strobe mode operation

For inspection and measurement of fast moving objects and an extended LED lifetime

## Suitable for frequent cleaning

Thanks to the optical grade and scratch resistant protective cover

### Wide selection and modular design

Size options range from  $48 \times 36$  to  $288 \times 216$  mm available in red, white, green, blue and infrared

Compact design with reduced thickness (26 mm)

Special continuous alignment mode

**Optional integrated collimation film** 

**The LT2BC series** offers high power LED backlights designed to provide exceptional illumination performances and excellent uniformity.

## **Mechanical specifications**

| Length          | (mm) | 156.0            |    |
|-----------------|------|------------------|----|
| Width           | (mm) | 92.0             |    |
| Height          | (mm) | 26.0             |    |
| Mass            | (g)  | 626              |    |
| Clamping system | 4x   | M6 threaded hole | es |

#### **Environment**

| Operating temperature       | (°C) | 0-40                 |
|-----------------------------|------|----------------------|
| Storage temperature         | (°C) | 0-50                 |
| Operating relative humidity | (%)  | 20-85 non condensing |
| IP rating                   |      | IP40                 |
| Installation                |      | Indoor use only      |

#### **Eye safety**

| Risk group (CEI EN 62471:2010) Exempt |  |
|---------------------------------------|--|
|---------------------------------------|--|

- <sup>1</sup> Minimum value, at max driving current, on emitting surface. Where n.a. is reported data is available upon request.
- <sup>2</sup> Tolerance ±10%
- $^{3}$  At 25°C. At max pulse width (1 ms), max pulse frequency = 15 Hz.



## **CONNECTOR PINOUT**



| Function | Cable color |
|----------|-------------|
| LED +    | Brown       |
| LED +    | White       |
| LED -    | Blue        |
| LED -    | Black       |

## **COMPATIBLE PRODUCTS**

Full list of compatible products available here.



A wide selection of innovative machine vision components.



