

LT2BC096144-R | DATASHEET

High uniformity continuous LED backlight, 96 x 144 mm illumination area, red





SPECIFICATIONS

Lighting specifications

| 0 0 0 1 | | |
|------------------------------|---------------------|-------------|
| Modules | | 2x4 |
| Illumination area width | (mm) | 96 |
| Illumination area height | (mm) | 144 |
| Number of LEDs | | 384 |
| Light color, peak wavelength | | red, 620 nm |
| Spectral FWHM | (nm) | 20 |
| Illuminance ¹ | (klux) | 13 |
| Irradiance ¹ | (W/m ²) | - |
| Diffuser | | yes |
| Collimation film | | no |
| | | |

Electrical specifications

| Electrical specifications | | |
|--------------------------------|------|---------|
| Supply voltage | (V) | 24 |
| Current ² | (mA) | 770 |
| Power consumption ² | (W) | 18.5 |
| Typical pulse voltage | (V) | 35.9 |
| Max pulse current ³ | (mA) | 1700 |
| Peak power consumption | (W) | 61.0 |
| Max duty cycle | (%) | 1 |
| Max pulse duration | (ms) | 1.5 |
| 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 48×36 to 288×216 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) 108.0 Width (mm) 164.0 Height (mm) 26.0 Mass (g) 1000 Clamping system 4x M6 threaded holes | | | |
|--|-----------------|------|-------------------|
| Height (mm) 26.0 Mass (g) 1000 | Length | (mm) | 108.0 |
| Mass (g) 1000 | Width | (mm) | 164.0 |
| | Height | (mm) | 26.0 |
| Clamping system 4x M6 threaded holes | Mass | (g) | 1000 |
| | Clamping system | 4> | M6 threaded holes |

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 |

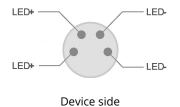
Eye safety

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

- ¹ Minimum value, at max driving current, on emitting surface. Where n.a. is reported data is available upon request.
- ² 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.

