

# LT3BC050100-R | DATASHEET

## High-power LED backlights with integrated driver











### **SPECIFICATIONS**

### **Lighting specifications**

Illumination area height	(mm)	50
Illumination area width	(mm)	100
Number of LEDs		72
Light color, peak wavelength		red, 625 nm
Spectral FWHM	(nm)	20
Illuminance, continuos <sup>1</sup>	(klux)	27
Irradiance, continuos <sup>1</sup>	(W/m <sup>2</sup> )	116
Illuminance, boosted <sup>1</sup>	(klux)	54
Irradiance, boosted <sup>1</sup>	(W/m <sup>2</sup> )	239
Illuminance, strobe <sup>1</sup>	(klux)	231
Irradiance, strobe <sup>1</sup>	(W/m <sup>2</sup> )	980
Diffuser		yes
Collimation film		optional

### **Mechanical specifications**

Height	(mm)	58.0
Width	(mm)	126.0
Thickness	(mm)	24.0
Mass	(g)	248
Clamping system		4x M4 threaded holes
Environment		
Operating temperature	(°C)	0-40
Storage temperature	(°C)	0-50
Operating relative humidity	(%)	20-85, non condensing
Installation		Indoor use only
IP rating		IP54

### **KEY ADVANTAGES**

### **High-power light output**

**Built-in driver** for continuous and strobe operations

### **Industry standard 5 PIN M12 Connector**

with PNP/NPN/analog dimming input

**Optional collimating, polarizing and protective filters** Compact & robust design with reduced thickness (24 mm) and thin

Automatic shutdown in case of overheating

The LT3BC series features high-performance LED backlights designed to provide high-power light output, excellent uniformity and contrast thanks to high-efficiency LEDs.

### **Electrical specifications**

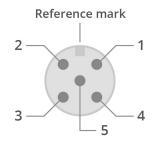
Operating mode		Continuous and strobe
Supply voltage	(V)	24
Current, continuos	(mA)	200
Power consumption, continuos	(W)	4.8
Current, boosted	(mA)	400
Power consumption, boosted	(W)	9.6
Pear current, strobe	(mA)	1600
Peak power consumption, strobe	(W)	38.4
Min pulse duration	(μs)	3
Max pulse duration	(ms)	10
Max duty cycle	(%)	10
Typical pulse delay	(ns)	300
Typical jitter	(ns)	10
		PNP logic input,
I/O interface		NPN dimming input,
		analog dimming input
Connector		M12 straight plug
Connector		male connector
Included cable		1x 20 cm pigtail
Eve safety		

Risk group (CEI EN 62471:2010) Exempt

<sup>&</sup>lt;sup>1</sup> At emitting surface.



### **CONNECTOR PINOUT**



Device side

Pin	Function
1	+24Vdc
2	NPN
3	GND
4	PNP
5	Analogue dimming (0-10V)

# 0.8 0.6 0.2 0.2 0.2 0.2 0.2 0.2 0.3 0.4 0.2 0.2 0.550 0.600 0.650 0.700 Wavelength [nm]

### **COMPATIBLE PRODUCTS**

Full list of compatible products available here.



A wide selection of innovative machine vision components.