

# **LBL-BI-2820**

## **Product Specification**

## LBL-BI-2820

LBL-BI-2820

Product Specification

<b>Model Name</b>	LBL-BI-2820
<b>Issue Date</b>	2016.10.13



Model Name	Dimension (mm)	CCT (K)	CRI	Ordering Code
LBL-BI-2820	280*20*1.0	2700K & 6500K	80	LBI-2820-82765
		2700K & 4000K	90	LBI-2820-92740

### ■ Feature

- ✓ Excellent flexibility for Linear application design
- ✓ Warm & white color tuning
- ✓ 5 years warranty
- ✓ CRI >90 available
- ✓ 3 SDCM binning
- ✓ Compliant with Zhaga Book 7
- ✓ Narrow width 20mm

### ■ Application

- ✓ Office lighting
- ✓ General Lighting
- ✓ Industry
- ✓ Retail

Characteristic

LBL-BI-2820

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■ Optical Characteristics (Tc=55°C)

**LBI-2820-82765**

Parameter	CCT <sup>(2)</sup>	Min.	Typical	Max.	Unit
Luminous Flux <sup>(1)</sup>	2700K	1030	1130		lm
	6500K	1130	1200		lm

Parameter	Min.	Typical	Max.	Unit
Forward Current		350		mA
Color Rendering Index <sup>(3)</sup>	80			-

**LBI-2820-92740**

Parameter	CCT <sup>(2)</sup>	Min.	Typical	Max.	Unit
Luminous Flux <sup>(1)</sup>	2700K	850	920		lm
	4000K	930	1000		lm

Parameter	Min.	Typical	Max.	Unit
Forward Current		350		mA
Color Rendering Index <sup>(3)</sup>	90			-

Notes:

- (1) Measurement tolerance of luminous flux is  $\pm 7\%$ .
- (2) Correlated Color Temperature is derived from the CIE 1931 Chromaticity diagram.
- (3) Measurement tolerance of CRI is  $\pm 3$ .
- (4) Color consistency is 3 SDCM, measurement tolerance  $\pm 0.005$  on x,y.

### ■ Electrical Characteristics (Tc=55°C)

Parameter	Min	Typ	Max	Unit
Nominal Current		350		mA
Forward Voltage <sup>(1)</sup>	18.1	19.5	20.9	V

Notes:

(1) The forward voltage tolerance is  $\pm 3\%$ , the characteristic is refer to value per chain.

### ■ Max Rating

Parameter	Min	Typ	Max	Unit
Current I <sub>max</sub>			700	mA
Case Temperature T <sub>c</sub> max			85	°C

### ■ Thermal Characteristic (350mA, Tc=55°C)

Parameter	Min	Typ	Max	Unit
Thermal Resistance Junction to heat sink		1.5		°C/W
Thermal Resistance Junction to solder pad <sup>(1)</sup>		17		°C/W

Notes:

(1) The thermal resistance, junction to solder pad, is per LED

### ■ Lifetime

Parameter	Nominal	Life <sup>(1)</sup>	Max <sup>(2)</sup>
T <sub>c</sub> (°C)	55	80	85
Current (mA)	350	600	700

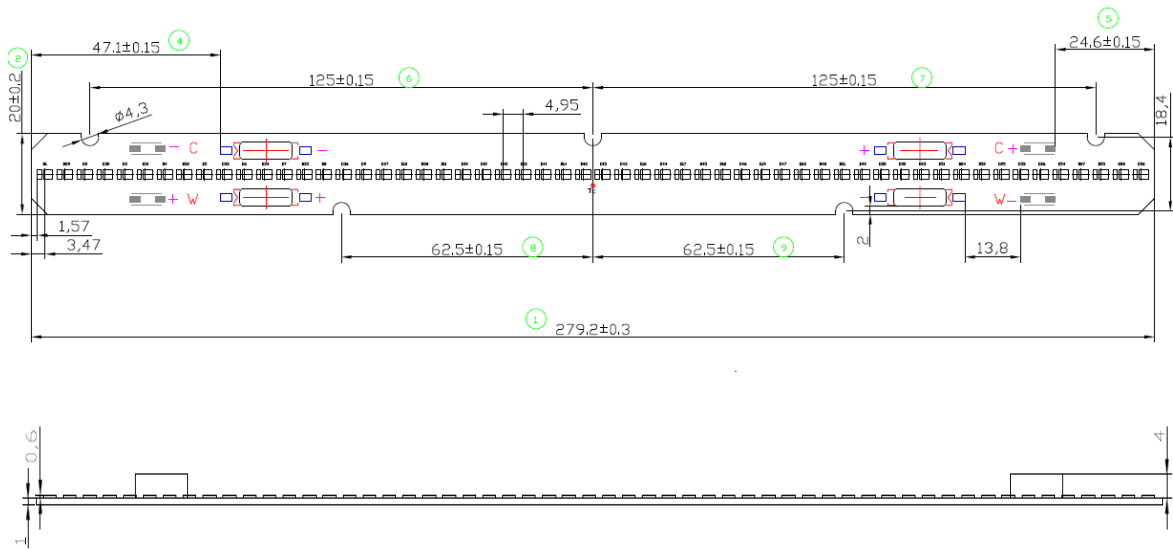
Notes:

(1) Value at which lifetime is specified. (max current for warranty)

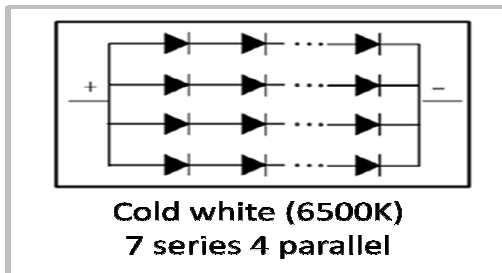
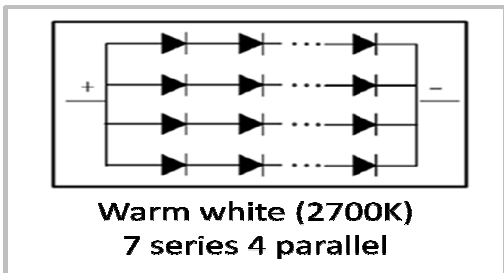
(2) Maximum value for operation.

## ■ Mechanical Characteristic

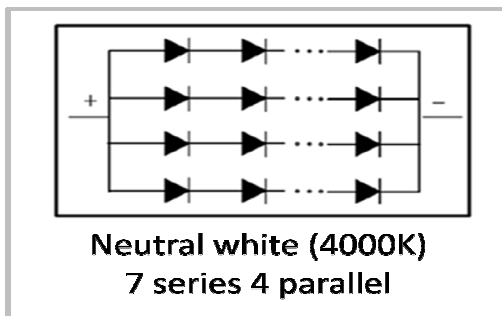
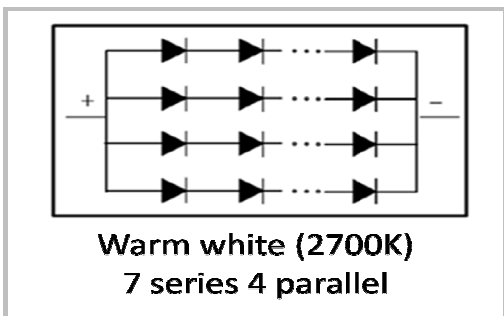
Parameter	Min	Typ	Max	Unit
Length	278.90	279.20	279.50	mm
Width	19.80	20.00	20.20	mm
Height (Exclude Connector)	0.85	1.00	1.15	mm
Height (Include Connector)	4.65	5.00	5.35	mm



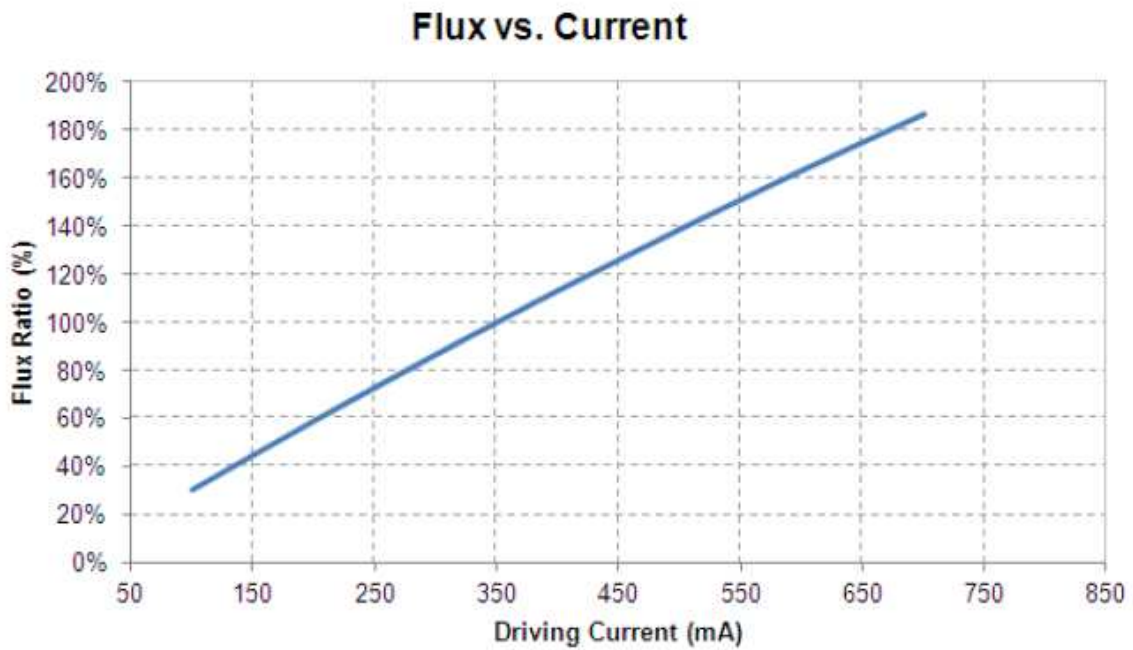
CRI80: 2700K & 6500K



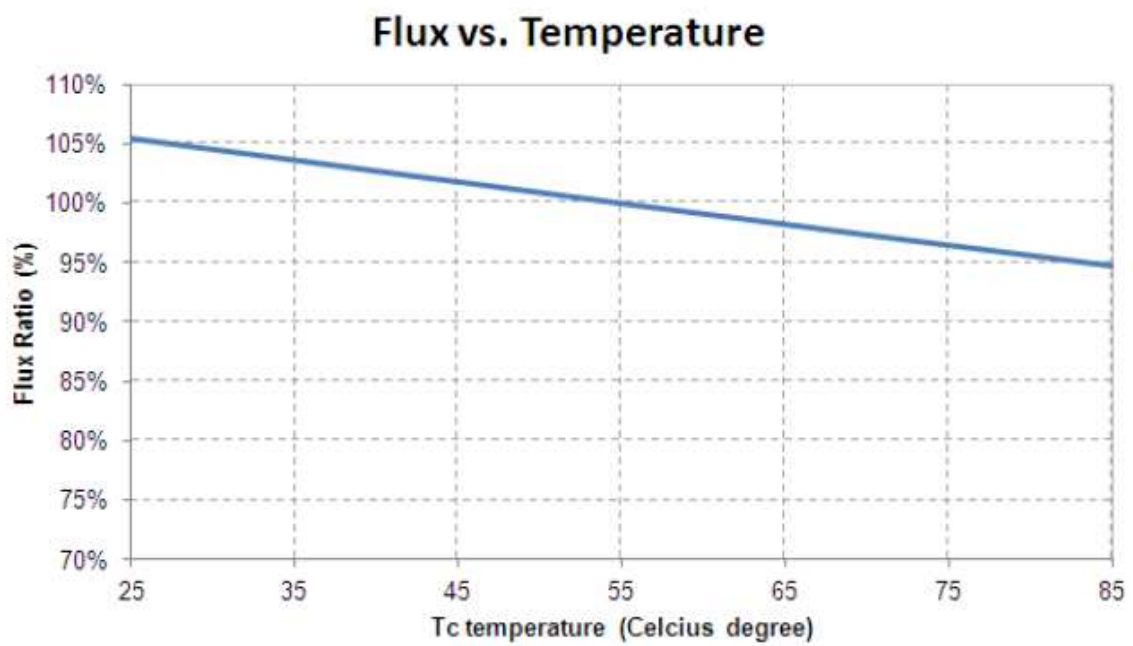
CRI90: 2700K & 4000K



■ Flux vs. Current



■ Flux vs. Temperature (Tc)



## Revision History

LBL-BI-2820

Product Specification

Date	Contents	Writer
2016.09.02	Product Specification version1	Jacqueline
2016.10.13	Product Specification version2	Jacqueline

Lextar Electronics Corp. reserves the right to modify the technical information or data without notification when product improved.