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## FOCO MONOFASICO NEW MAYA BRIDGELUX CHIP

40W-34W

MONOFASICO

DISPONIBLE EN  
BLANCO Y NEGRO

### INFORMACIÓN DEL PRODUCTO

La nueva luminaria LED BRIDGELUX chip es una combinación excepcional de calidad y rendimiento. La gama de este foco ha actualizado para alcanzar una eficacia mucho más alta, teniendo 160 lm/w y teniendo cubierto 5.600 lúmenes. Este foco brinda una luz uniforme excepcional a cualquier espacio donde se requiera una luz confiable y eficiente.

### APLICACIÓN

- Es fácil de entregar, almacenar e instalar en diversas aplicaciones.
- Disponemos del carril monofásico que tiene todo Includo (tapas, grapas, etc)

### MONTAJE

- COLOCACION EN CARRIL MONOFASICO
- Opcional kit suspensión.
  - Opcional base independiente.

### HOUSING

- Este foco está fabricado en Aluminio + PMMA
- Rango de temperatura: -20°C ~ +55°C

bridgelux®

## **MONTAJE ÓPTICO Y LED**

- Un producto de alto rendimiento que utiliza chips LED de Bridgelux.
- Versión disponible en 3000k y 4000k con un CRI de 92.
- Tiene un ángulo de apertura de 24-36°.
- Driver NO FLICK.

## **ELÉCTRICA**

- 85-265V / 50-60Hz
- Factor de potencia: 0.95
- Clase energética E



## FOCO MONOFASICO NEW MAYA BRIDGELUX CHIP

**REFERENCIA:** Blanco (90766-CCT) y Negro (TLBM40W-90769).

Potencia nominal: 34w-40w

Temperatura de Luz: 3000K – 4000k

CRI -Índice Reproducción Cromática: 92

Material de Construcción: Aluminio + PMMA

Clase Energética: E

Luminosidad-Lm: 5.600Lm

Tipo de LEDs: COB Bridgelux 130 Chip 2630 DS-C30

Angulo de Apertura (°): 24°-36°.

Eficacia Diodo LED (Lm/W): 160Lm/W

Eficacia luminosa (Lm/W): 140 Lm/W

Certificados: CE-RoSH-TÜV-ENEC

Índice de Deslumbramiento (UGR): 13

Vida Estimada Diodo LED (H): 30.000

Factor de Potencia (PF): 0,95

Frecuencia de Trabajo (Hz): 50/60Hz

Rango Temperatura (°C): -20°C ~ +55°C

Tiempo de Arranque (s): 0,2s

Driver incluido: Driver GXTRONIC

Garantía: 5 años



# BRIDGELUX BLUE POWER DIE

BXCD 26 mil x 30 mil

## PRODUCT DATA SHEET DS-C30

The Bridgelux family of blue power die enables high performance and cost effective solutions to serve solid state lighting market. This next generation chip technology delivers improved efficiency and performance to enable increased light output for a variety of lighting, signaling and display applications.

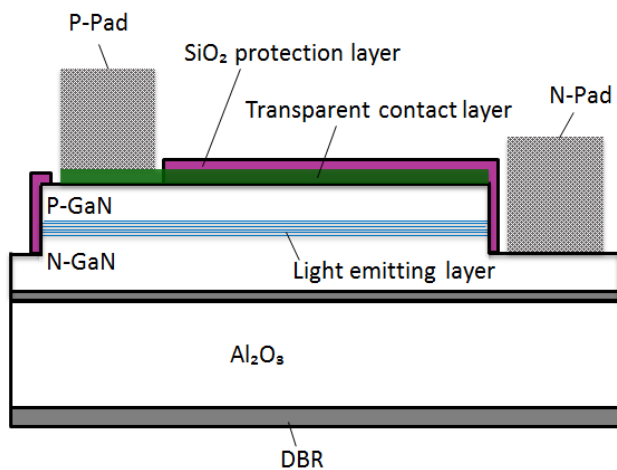
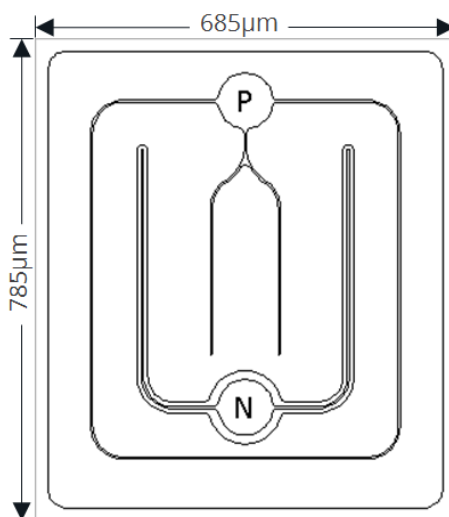
### Features

- High lumen output and efficiency
- Long operating life
- 100% Tested and sorted by wavelength, power and forward voltage
- Lambertian emission pattern
- Compatible with Solder paste, solder preform or silver epoxy die attach
- Delivered on medium tack blue tape (20cm±10mm x20 cm±10mm)

### Applications

- General Illumination
- Portable Lighting
- Architectural Lighting
- Directional Lighting
- Display Backlighting
- Digital Camera Flash
- Automotive Lighting
- White LEDs

### LED Chip Diagram



# BRIDGELUX BLUE POWER DIE

BXCD 26 mil x 30 mil

## Product Nomenclature

**B X C D 2630 X X X – Y – Z**

Where:

- BXCD: Designates product family
- 2630: Designates die size (26 mil x 30 mil)
- XXX: Designates dominant wavelength bin
- Y: Designates radiometric power bin
- Z: Designates forward voltage bin

## Part Numbering and Bin Definitions

Bridgelux LED chips are sorted into the brightness and dominant wavelength bins shown below at  $I_f = 120$  mA. Each blue tape contains die from only one brightness bin and one wavelength bin.

The forward voltage bins are 2.6-2.7 V (K1), 2.7-2.8 V (K2), 2.8-2.9 V (L1), 2.9-3.0 V (L2), 3.0-3.1 V (A1), and 3.1-3.2 V (A2). The maximum forward voltage ( $V_f \text{ max}$ ) = 3.2 V.

Dominant Wavelength	Power Bin D2 (210 – 220 mW)	Power Bin D3 (220 – 230 mW)	Power Bin D4 (230 – 240 mW)
450 to 452.5nm	BXCD2630450-D2-z	BXCD2630450-D3-z	BXCD2630450-D4-z
452.5 to 455nm	BXCD2630452-D2-z	BXCD2630452-D3-z	BXCD2630452-D4-z
455 to 457.5nm	BXCD2630455-D2-z	BXCD2630455-D3-z	BXCD2630455-D4-z
457.5 to 460nm	BXCD2630457-D2-z	BXCD2630457-D3-z	BXCD2630457-D4-z

Dominant Wavelength	Power Bin D5 (240 – 255 mW)	Power Bin D6 (255 – 275 mW)
450 to 452.5nm	BXCD2630450-D5-z	BXCD2630450-D6-z
452.5 to 455nm	BXCD2630452-D5-z	BXCD2630452-D6-z
455 to 457.5nm	BXCD2630455-D5-z	BXCD2630455-D6-z
457.5 to 460nm	BXCD2630457-D5-z	BXCD2630457-D6-z

**Note:** z = "K1" for  $V_f$  bin of 2.6-2.7V; "K2" for  $V_f$  bin of 2.7-2.8V; "L1" for  $V_f$  bin of 2.8-2.9V; z = "L2" for  $V_f$  bin of 2.9-3.0V; z = "A1" for  $V_f$  bin of 3.0-3.1V; z = "A2" for  $V_f$  bin of 3.1-3.2V.

## BRIDGELUX Blue Power Die

BXCD 26 mil x 30 mil

### Mechanical Dimensions

Chip size	685(±50) $\mu\text{m}$ × 785(±50) $\mu\text{m}$
Wafer thickness	150± 10 $\mu\text{m}$
Pad Thickness	3.5±0.3 $\mu\text{m}$
Au Pad Diameter	P: 80 $\mu\text{m}$ / N: 80 $\mu\text{m}$

### Absolute Maximum Ratings

Parameter	Symbol	Maximum Rating	Condition
Forward DC Current	$I_f$	240 mA <sup>1</sup>	$T_a=25^\circ\text{C}$
Forward Voltage	$V_f$	3.2 V	$I_f = 120 \text{ mA}$
Reverse voltage	$V_r$	-5V	$T_a=25^\circ\text{C}$
Reverse Current	$I_r$	2.0 $\mu\text{A}$	$V_r = -5 \text{ V}$
Junction Temperature	$T_j$	125°C	
Assembly Process Temp.		325°C for <5 seconds	
Storage Conditions (chip on tape)		0°C to +40°C ambient, RH < 65%	

#### Notes:

1. Maximum drive current depends on junction temperature, die attach methods/materials, and lifetime requirements of the application.
2. Bridgelux LED chips are Class 1 ESD sensitive.
3. The typical spectra half-width of the BXCD2630 blue power die is < 25 nm.
4. Please consult the Bridgelux technical support team for information on how to optimize the light output of our chips in your package.
5. Brightness values are measured in an integrating sphere using gold plated TO39 headers without encapsulation.
6. Tapes should be stored in a vertical orientation, not horizontally stacked. Stacking of tapes can place excessive pressure on the bond pads of the LED, resulting in reduced wire bonding strength.

## **BRIDGELUX BLUE POWER DIE**

BXCD 26 mil x 30 mil

### **Environmental Compliance**

Bridgelux is committed to providing environmentally friendly products to the solid state lighting market. Bridgelux BXCD2630 blue power die are compliant to the European Union directives on the restriction of hazardous substances in electronic equipment, namely the RoHS directive. Bridgelux will not intentionally add the following restricted materials to BXCD2630 die products: lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB) or polybrominated diphenyl ethers (PBDE).

# BRIDGELUX BLUE POWER DIE

BXCD 26 mil x 30 mil

## Performance vs. Current

The following curves represent typical performance of the BXCD2630 blue power die. Actual performance will vary slightly for different power, dominant wavelength and Vf bins.

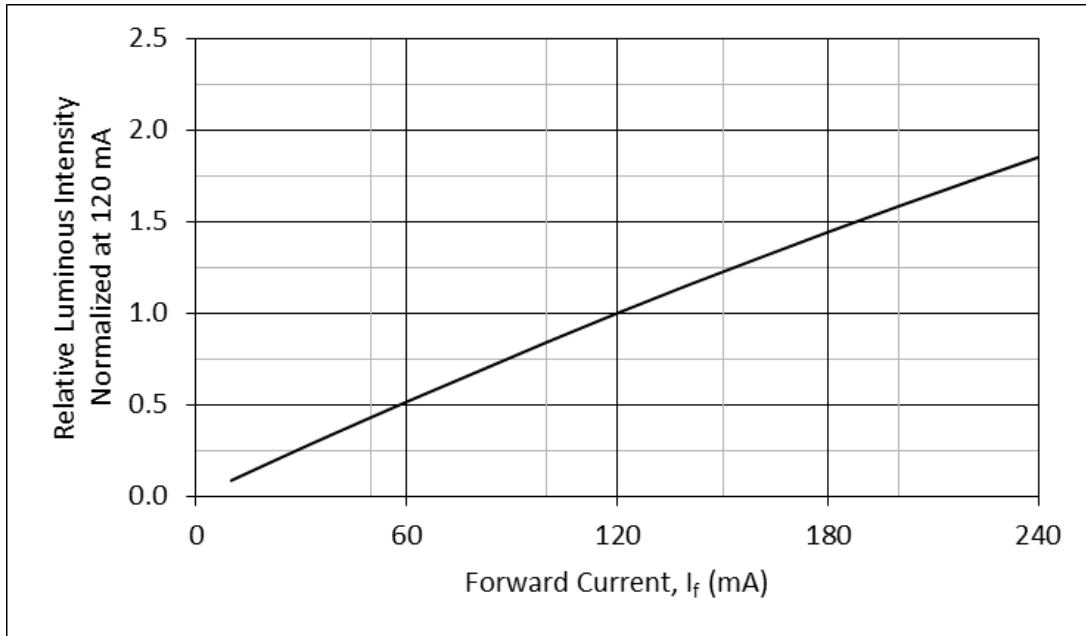


Figure 1: Relative Luminous Intensity vs. Forward Current ( $T_j = 25^\circ\text{C}$ )

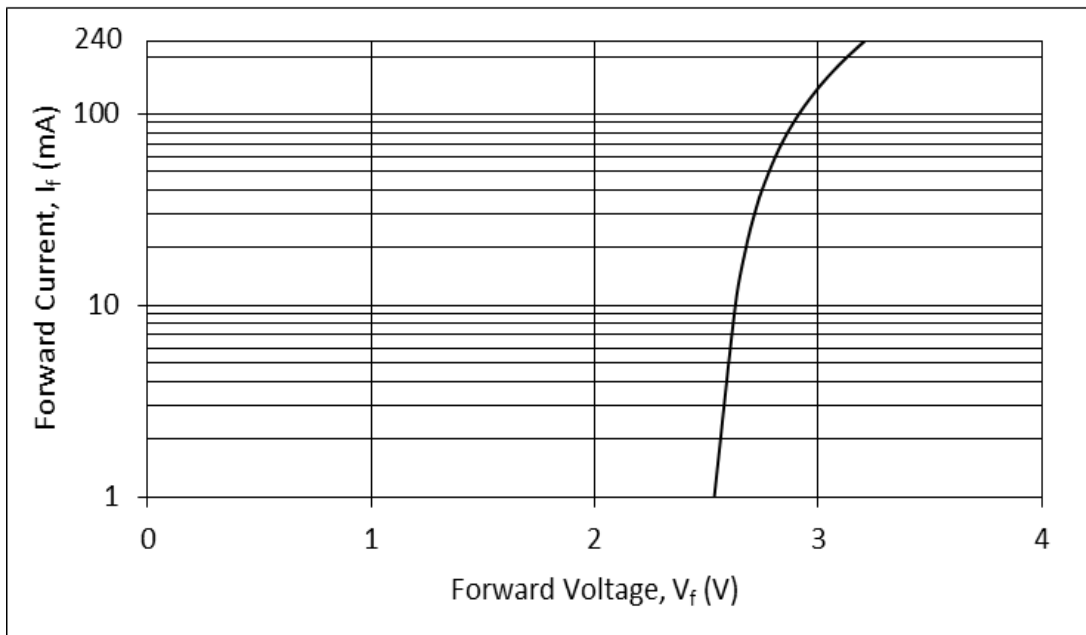


Figure 2: Forward Current vs. Forward Voltage ( $T_j = 25^\circ\text{C}$ )



# BRIDGELUX BLUE POWER DIE

BXCD 26 mil x 30 mil

## Performance vs. Junction Temperature

The following curves represent typical performance of the BXCD2630 blue power die. Actual performance will vary slightly for different power, dominant wavelength and Vf bins.

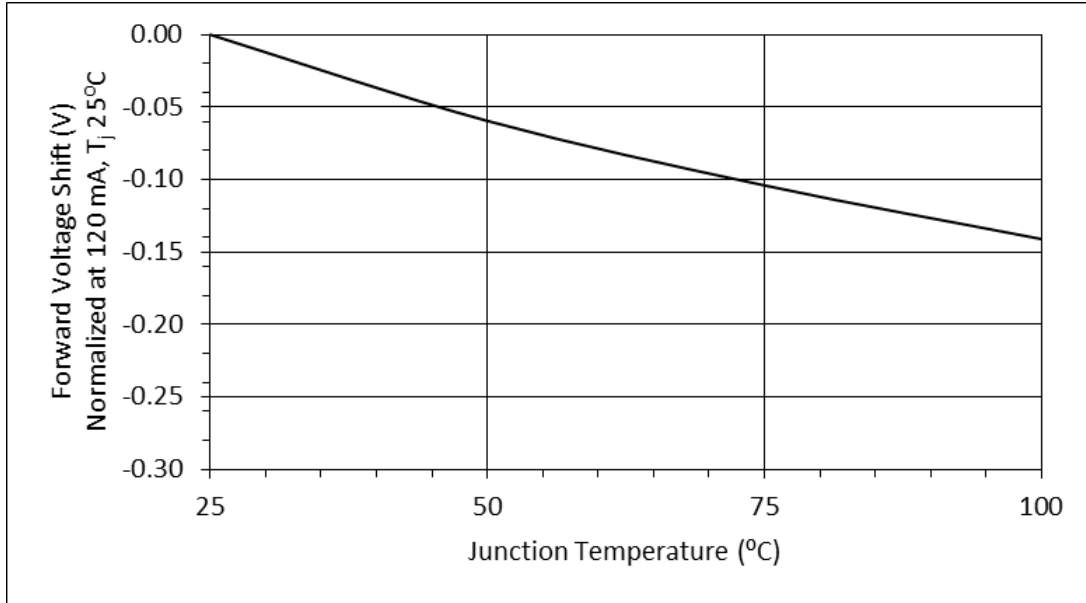


Figure 3: Forward Voltage Shift vs. Junction Temperature

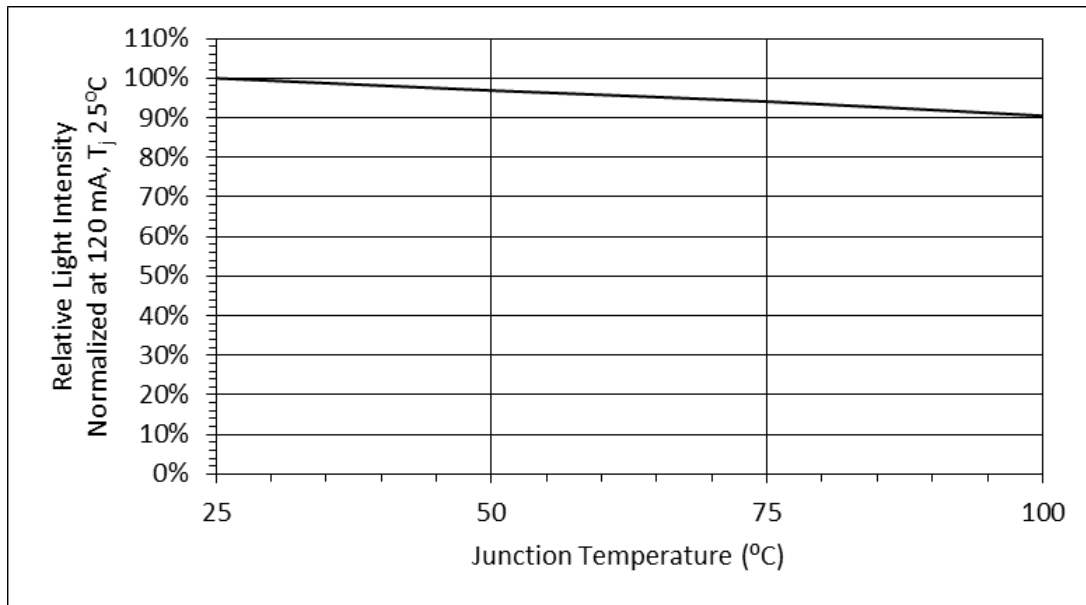


Figure 4: Relative Light Intensity vs. Junction Temperature

# BRIDGELUX BLUE POWER DIE

BXCD 26 mil x 30 mil

## Wavelength Shift

The following curves represent typical performance of the BXCD2630 blue power die. Actual performance will vary slightly for different power, dominant wavelength and Vf bins.

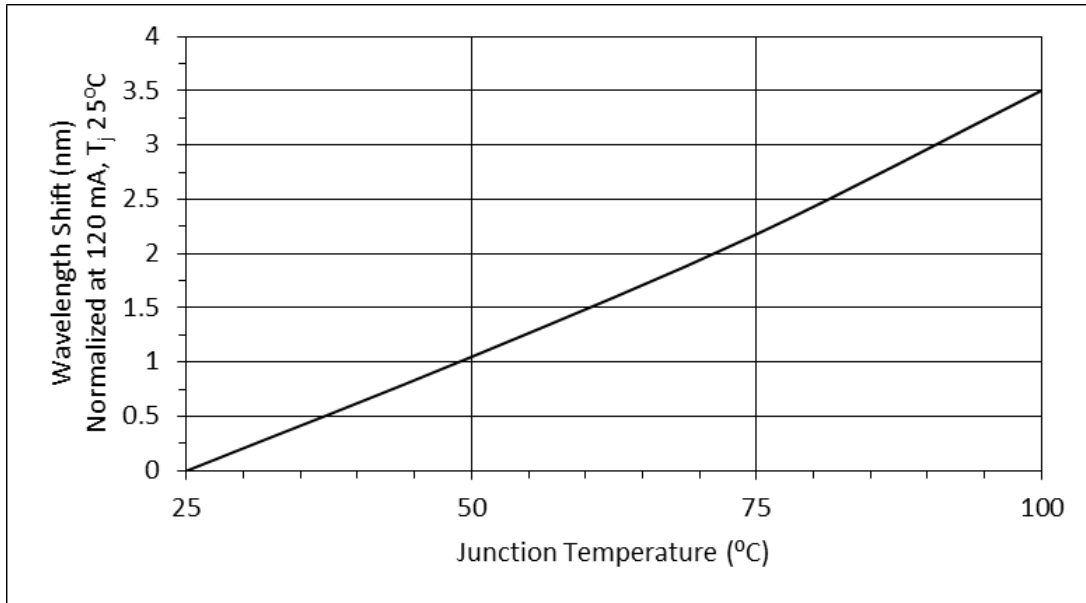


Figure 5: Wavelength Shift vs. Junction Temperature

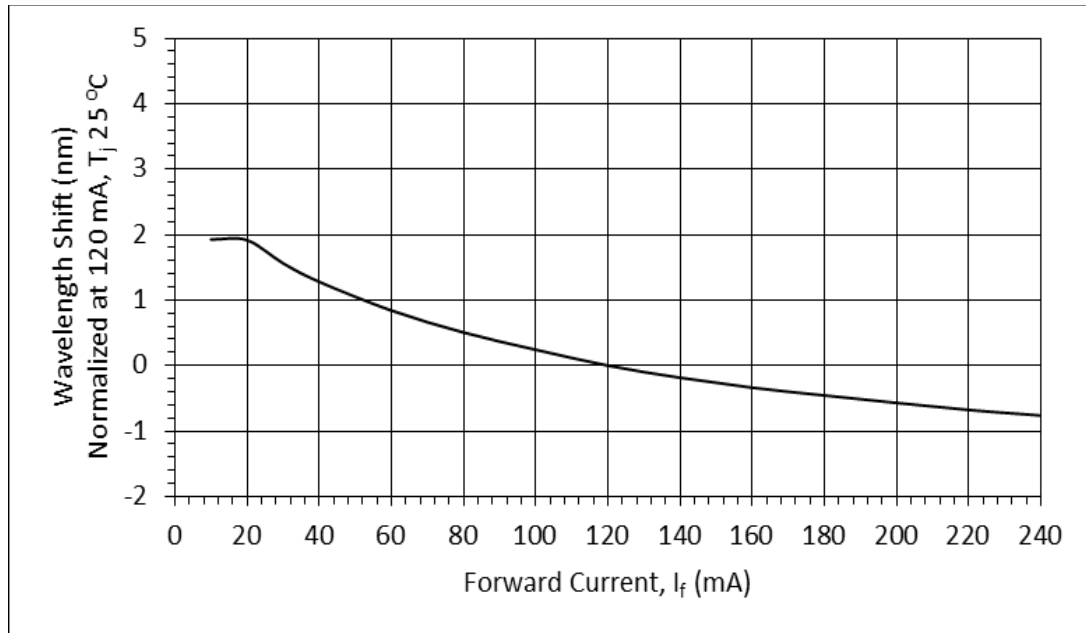


Figure 6: Wavelength Shift vs. Forward Current

# BRIDGELUX BLUE POWER DIE

BXCD 26 mil x 30 mil

## Typical Radiation Pattern

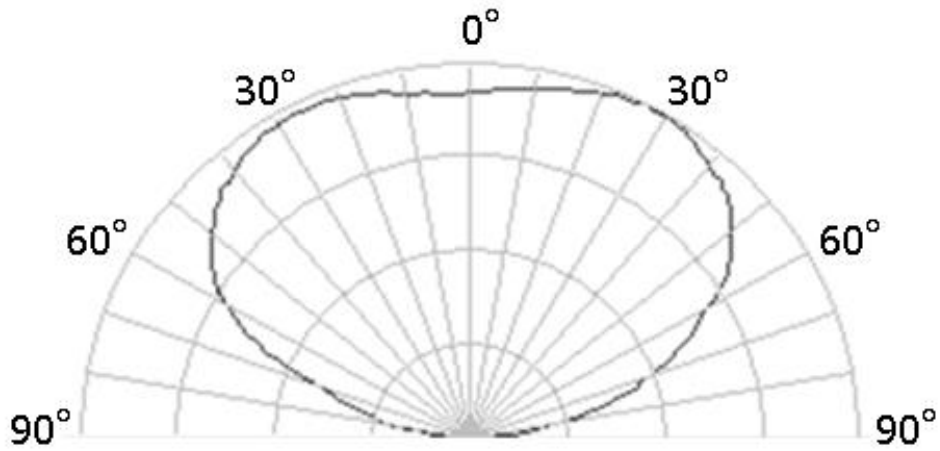


Figure 7: Typical Radiation Pattern (120 mA Operation)

## Current De-rating Curves

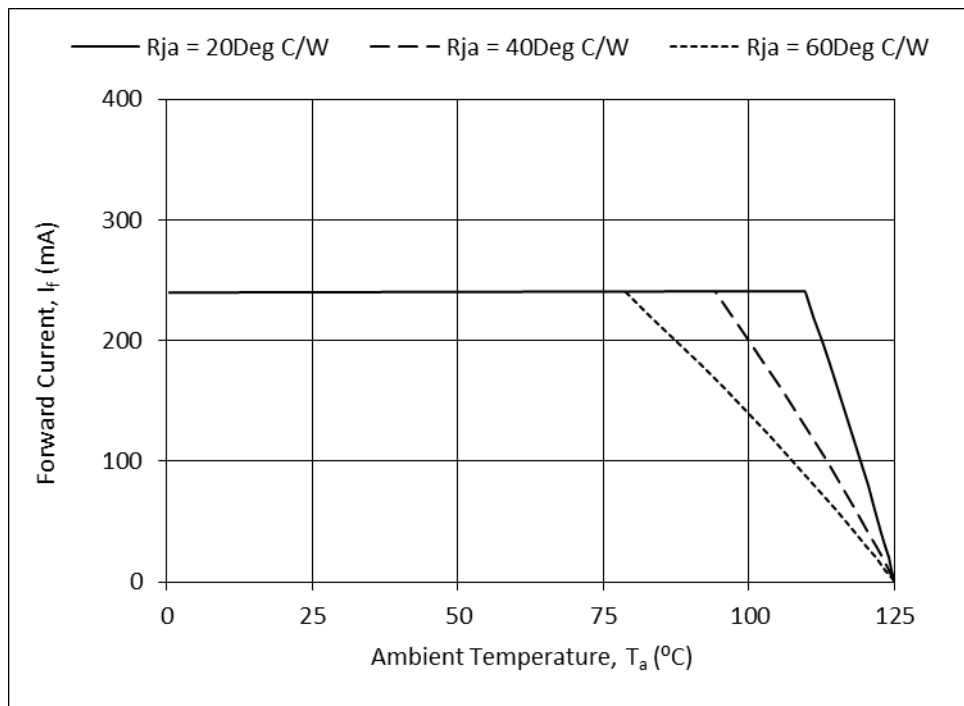


Figure 8: Current Derating Curve vs. Ambient Temperature (derating based on  $T_j$  max 125°C)

## **BRIDGELUX BLUE POWER DIE**

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### About Bridgelux

Bridgelux is a leading developer and manufacturer of technologies and solutions transforming the \$40 billion global lighting industry into a \$100 billion market opportunity. Based in Livermore, California, Bridgelux is a pioneer in solid state lighting (SSL), expanding the market for light emitting diode (LED) technologies by driving down the cost of LED lighting systems. Bridgelux's patented light source technology replaces traditional technologies (such as incandescent, halogen, fluorescent and high intensity discharge lighting) with integrated, solid state lighting solutions that enable lamp and luminaire manufacturers to provide high performance and energy-efficient white light for the rapidly growing interior and exterior lighting markets, including street lights, commercial lighting and consumer applications. Bridgelux is the only vertically integrated LED manufacturer and developer of solid-state light sources that designs its solutions specifically for the lighting industry.

For more information about the company, please visit [www.bridgelux.com](http://www.bridgelux.com)

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