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EMPOTRABLE **BRIDGELUX** CHIP

CCT



IP40

3 AÑOS GARANTIA

Ø35MM

DISPONIBLE EN
BLANCO, PERLA,
NEGRO Y ROSE GOLD

INFORMACIÓN DEL PRODUCTO

La nueva luminaria empotrable LED BRIDGELUX CHIP es fiable, segura y asequible. Es una gama de luminarias empotradas diseñadas para reemplazar las luminarias basadas en CFL tradicionales. Se ha mejorado para alcanzar una eficacia mucho más alta, teniendo 115lm/w. Gracias a su diseño encaja en todo tipo de instalaciones de interior.

APLICACIÓN

- Empotrables.
- Se pueden regular añadiéndoles un driver dimmable.
- Diversas aplicaciones: Iluminación general residencial, retail, oficinas, etc.

HOUSING

- Este empotrable está fabricado en Aluminio.
- Medidas: Ø40x55mm.
- No es regulable.
- Rango de temperatura: -20°C ~ +55°C.

bridgelux®

MONTAJE ÓPTICO Y LED

- Un producto de alto rendimiento que utiliza chips LED de BRIDGELUX, que ofrece una confiabilidad excepcional.
- Versión **disponible en CCT (3000L, 4000k y 6000k)** con un CRI de 90.
- Tiene un **ángulo de apertura de 40°**.
- Tiene una vida estimada de 35.000H.

ELÉCTRICA

- 85-265V
- Frecuencia de trabajo: 50-60Hz



bridgelux®
CHIP INSIDE
Bridging Light and Life™



EMPOTRABLE CCT BRIDGELUX CHIP

REFERENCIA: 8051WHITE / 8051PEARL / 8051ROSEGOLD / 8051BLACKCROMO

Potencia nominal: White (6w), Pearl (5w), Rose Gold (5w) y Black (6w)

Tensión Nominal: 85V-265V

Temperatura de Luz: CCT (3000K - 4000K – 6000K)

CRI -Índice Reproducción Cromática: 95

Material de Construcción: Aluminio

Luminosidad-Lm: White (690 Lm), Pearl (575 Lm), Rose Gold (575 Lm) y Black (690 Lm)

Tipo de LEDs: COB Bridgelux Chip 2630 DS-C30

Angulo de Apertura (º): 40º

Eficacia Diodo LED (Lm/W): 130Lm/W

Eficacia luminosa (Lm/W): 115 Lm/W

Luminosidad (Lm): 690Lm

UGR: Ugr11

Certificados: CE - ROHS

Grado de IP: IP40

Vida Estimada Diodo LED (H): 35.000

Medidas (mm): Ø40x55mm

Frecuencia de Trabajo (Hz): 50/60Hz

Rango Temperatura (ºC): -20ºC ~ +55ºC

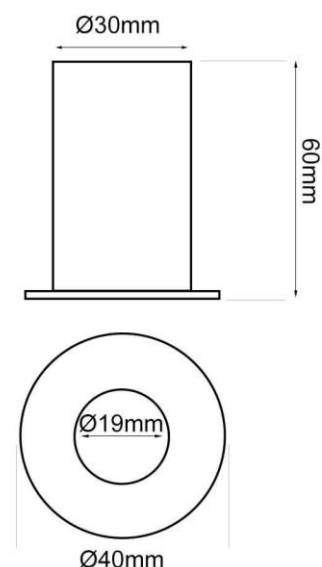
Ciclos de Encendidos: 100.000

Tiempo de Arranque (s): 0,2s

Corte de Techo (mm): Ø 35mm

Driver incluido: SI

Garantía años: 3



MODELOS

WHITE



PEARL



ROSE GOLD



BLACK CROMO



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.

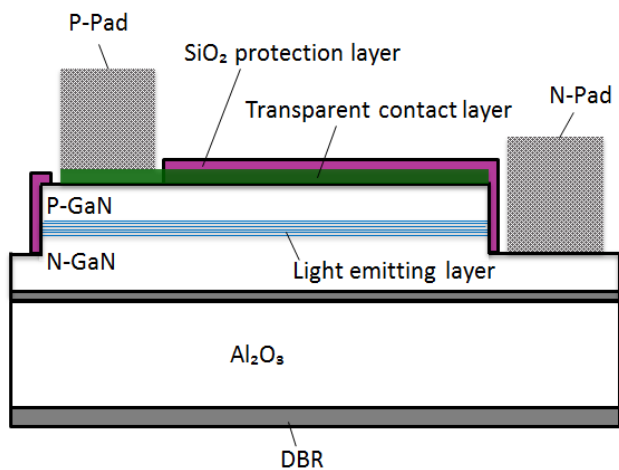
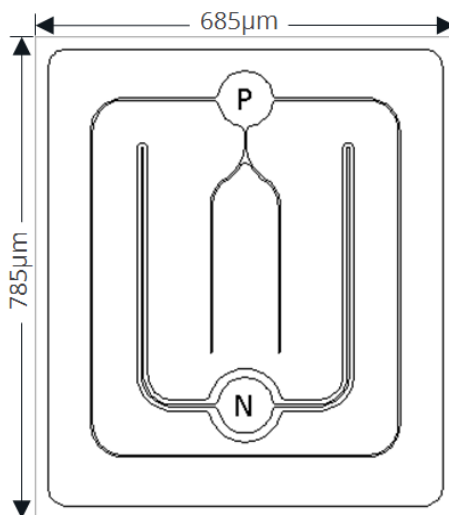
Features

- 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 ×20 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) μm × 785(±50) μm
Wafer thickness	150± 10 μm
Pad Thickness	3.5±0.3 μm
Au Pad Diameter	P: 80 μm / N: 80 μm

Absolute Maximum Ratings

Parameter	Symbol	Maximum Rating	Condition
Forward DC Current	I_f	240 mA ¹	$T_a=25^\circ\text{C}$
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 μA	$V_r = -5 \text{ V}$
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.

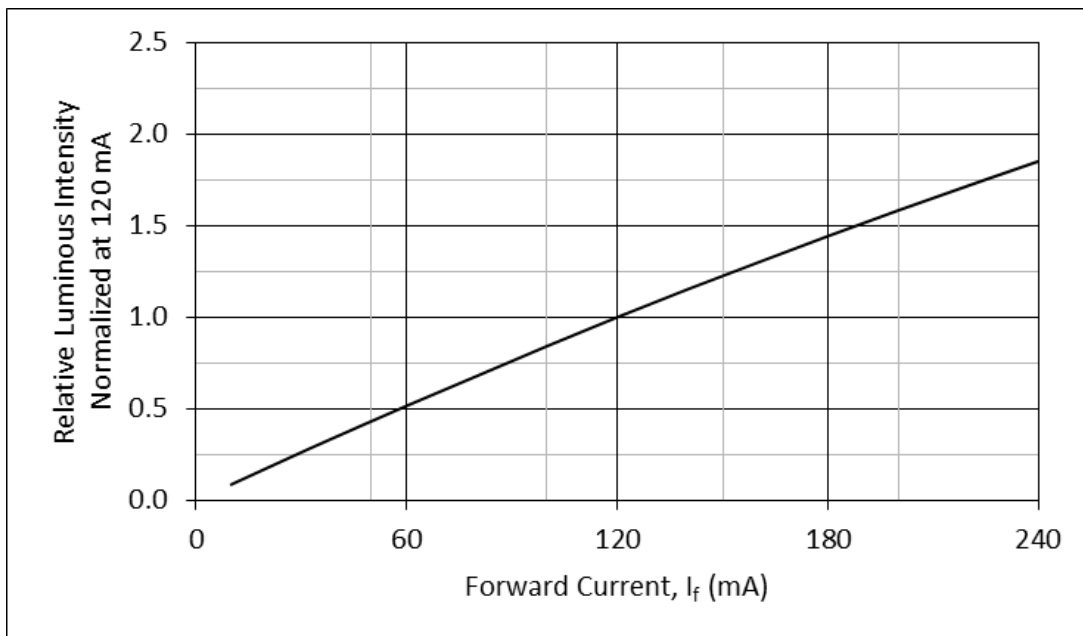


Figure 1: Relative Luminous Intensity vs. Forward Current ($T_j = 25^\circ\text{C}$)

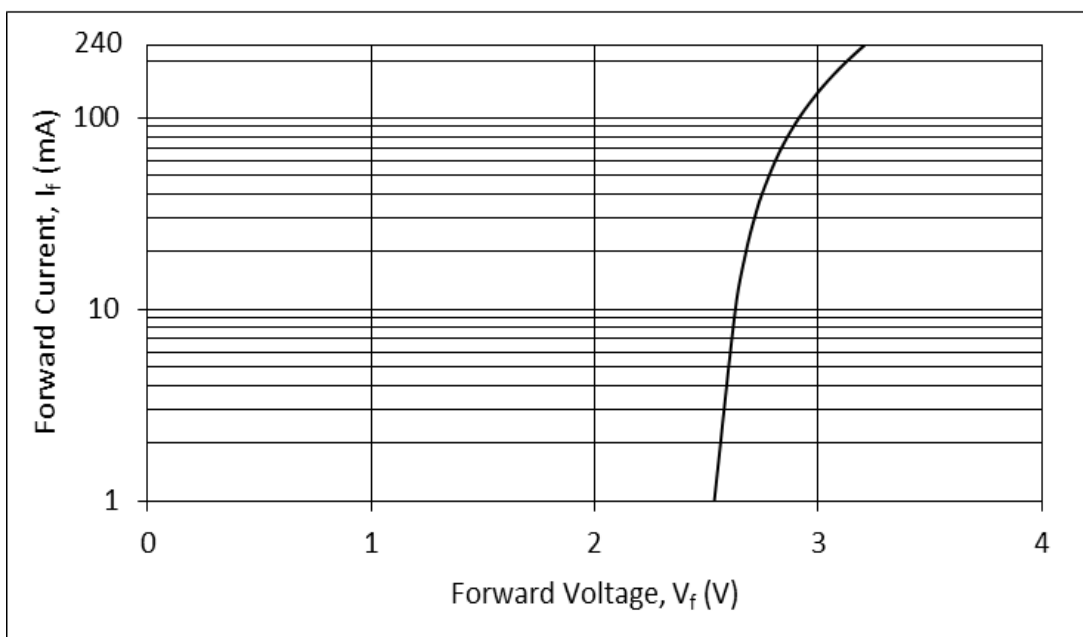


Figure 2: Forward Current vs. Forward Voltage ($T_j = 25^\circ\text{C}$)

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.

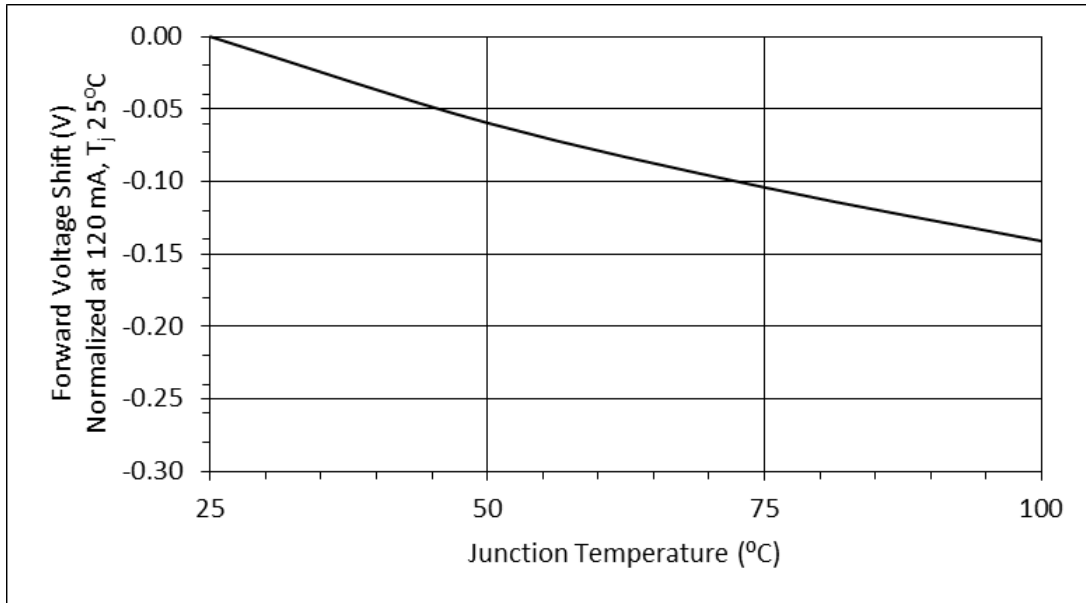


Figure 3: Forward Voltage Shift vs. Junction Temperature

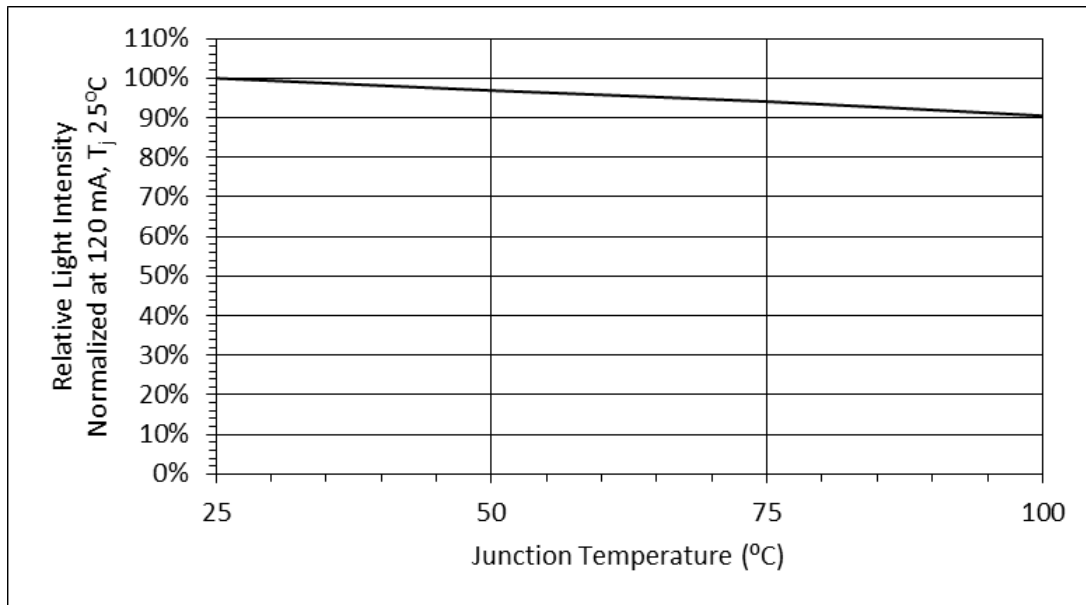


Figure 4: Relative Light Intensity vs. Junction Temperature

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 V_f bins.

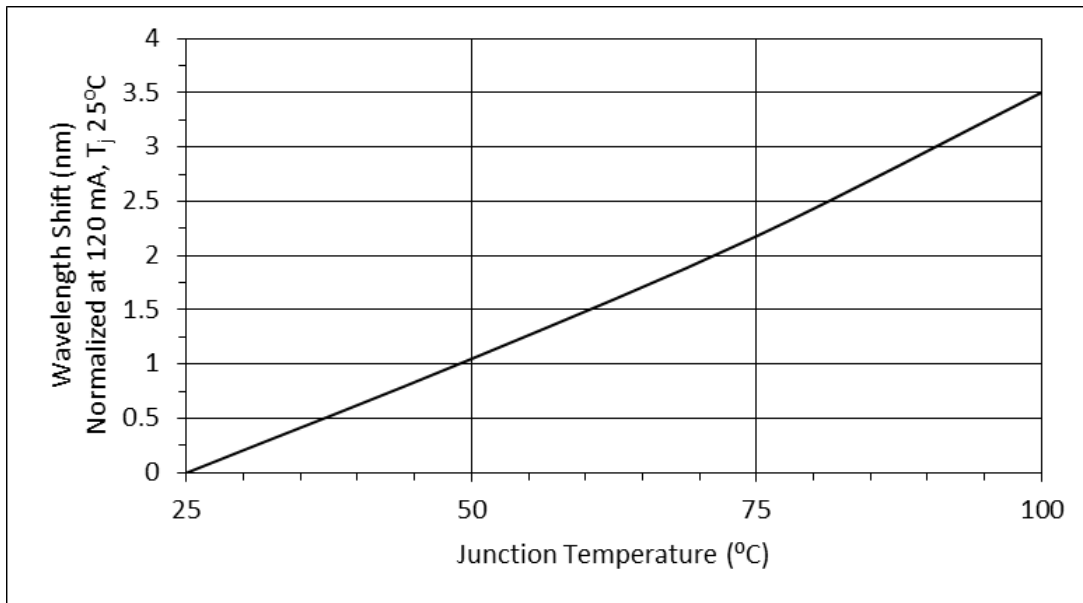


Figure 5: Wavelength Shift vs. Junction Temperature

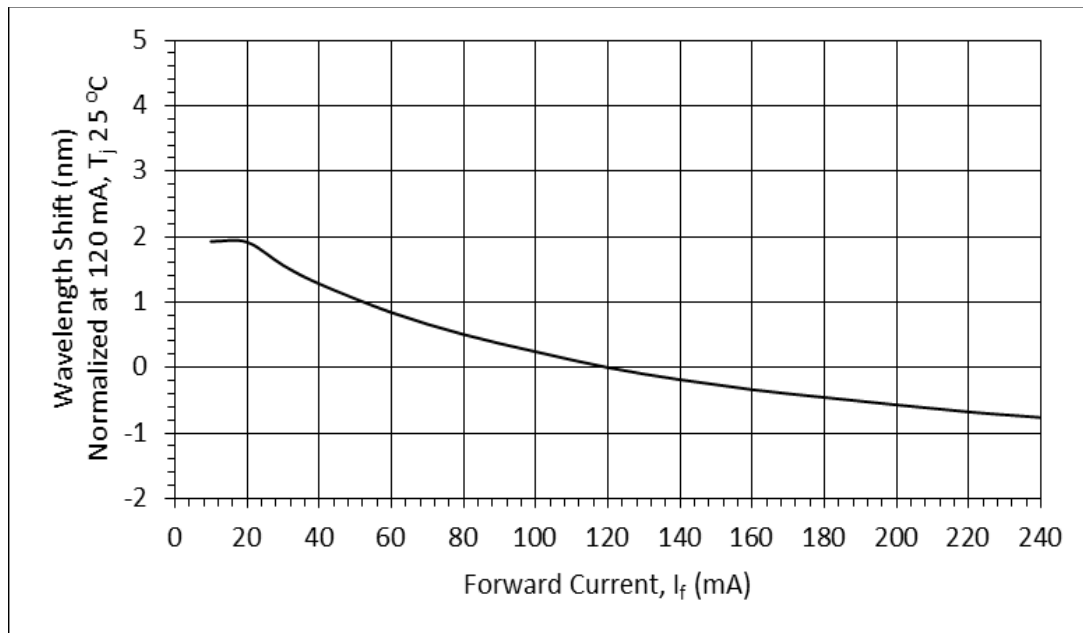


Figure 6: Wavelength Shift vs. Forward Current

BRIDGELUX BLUE POWER DIE

BXCD 26 mil x 30 mil

Typical Radiation Pattern

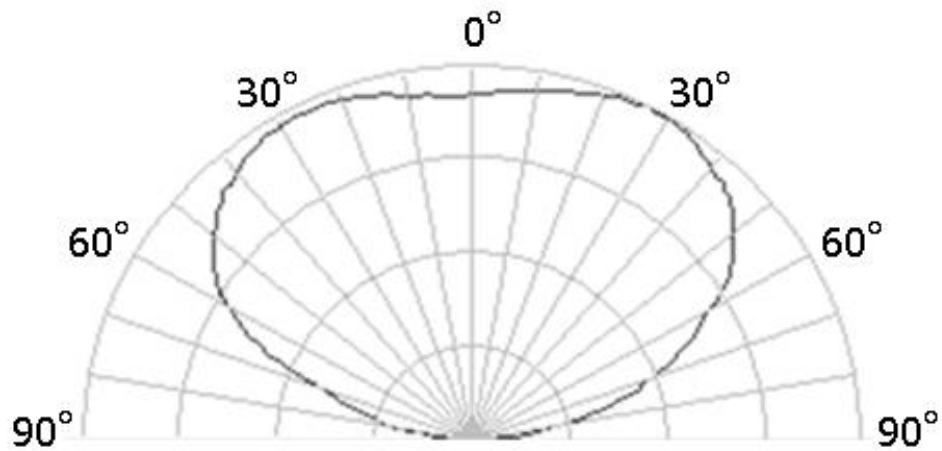


Figure 7: Typical Radiation Pattern (120 mA Operation)

Current De-rating Curves

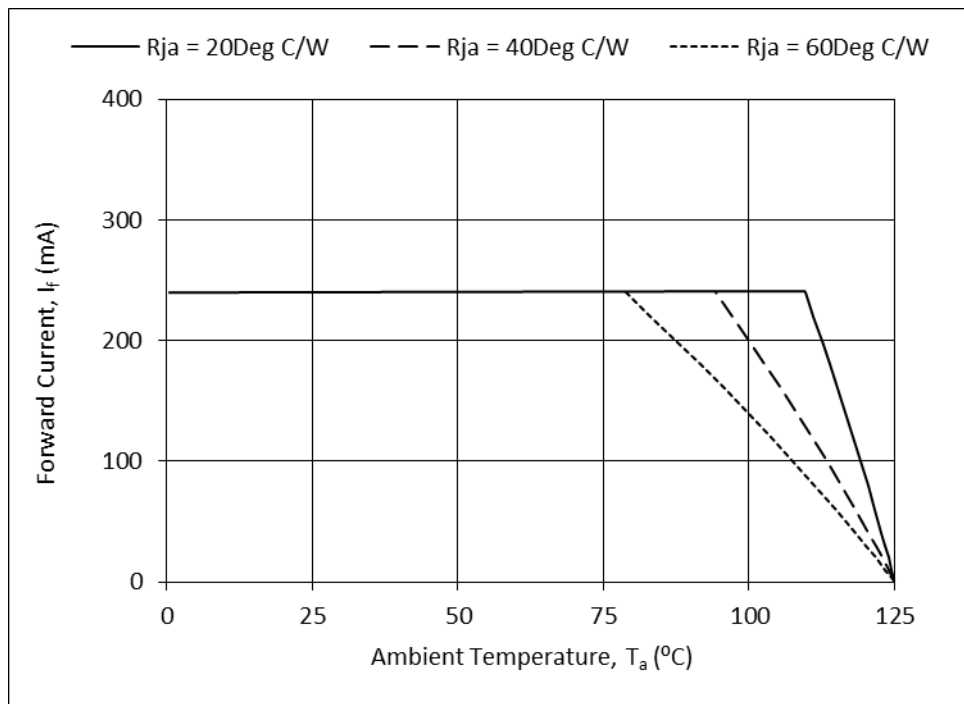


Figure 8: Current Derating Curve vs. Ambient Temperature (derating based on T_j max 125°C)

BRIDGELUX BLUE POWER DIE

BXCD 26 mil x 30 mil

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

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