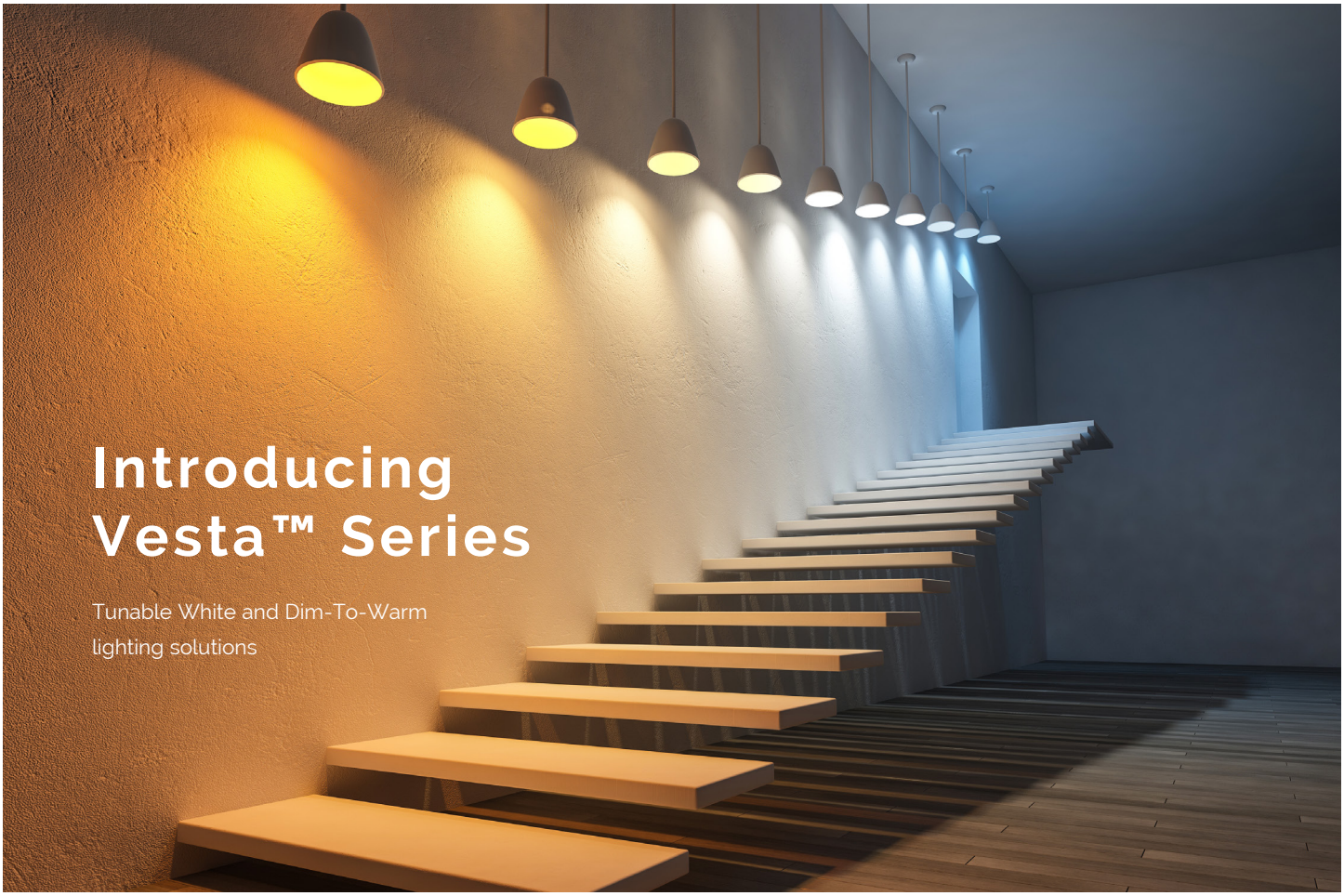
Vesta™ Series

Dim-To-Warm Quick Start Guide



Features

- Single channel array
- Color tuning capability with dimming
- Superior incandescent-like dimming

Benefits

- High-quality, true color reproduction
- Drop in compatible with existing dim-to-warm solutions

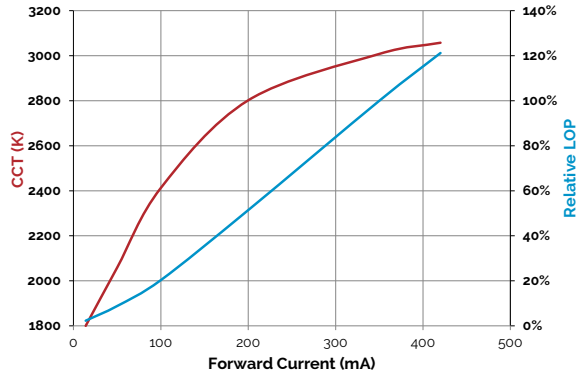
Product Specifications

Part Number	LES (mm)	Typical Power (W)	CCT	Typical Pulsed Flux (lm)[1]	Minimum CRI[1]	Nominal Current[2] (mA)	V_f (V)	Peak Effcacy (lm/W)[1]	Max. Drive Current[2] (mA)
BXRV-DR-1830H-1000-A-13	9	6.0	3000	570	95	350	17.0	96	420
		0.2	1800	13	95	14	11.2	83	
BXRV-DR-1830H-1000-B-13	9	11.8	3000	1150	95	350	33.8	97	
		0.4	1800	31	95	14	26.9	82	
BXRV-DR-1830H-3000-A-13	15	32.4	3000	3300	95	950	34.1	102	1050
		0.5	1800	47	95	20	26.4	89	

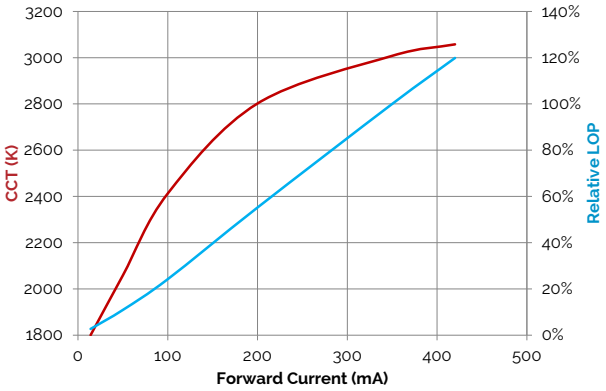
Notes:
1. Typical values at nominal drive current, 25°C
2. Do NOT operate these units at drive currents greater than the maximum use conditions included in the table above

Dim-To-Warm Dimming Curves

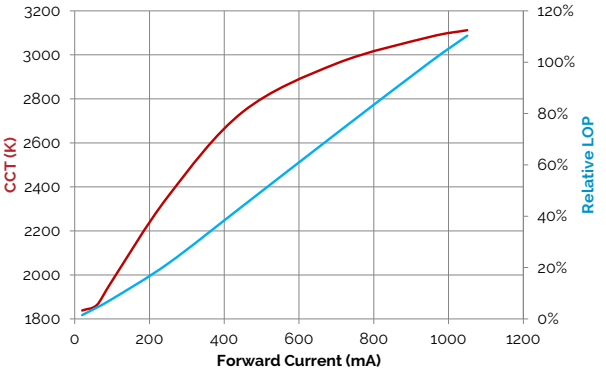
9mm 6W



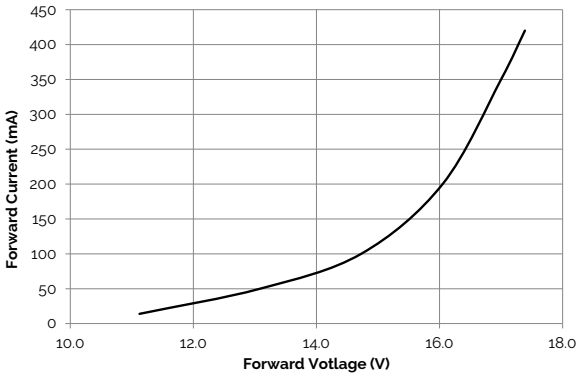
9mm 12W

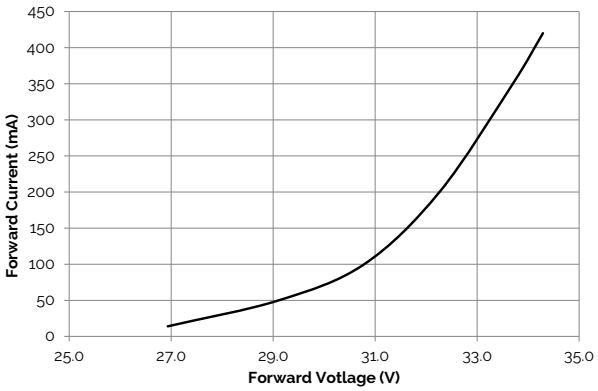


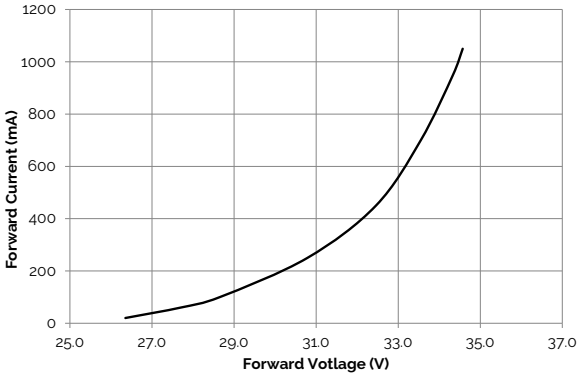
15mm 33W



Dim-To-Warm V_f Curves



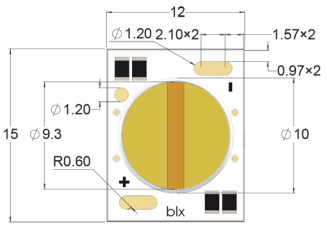




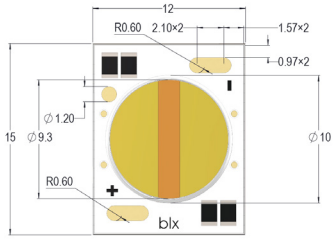
Mechanical Drawings

Differences between Beta samples and final products

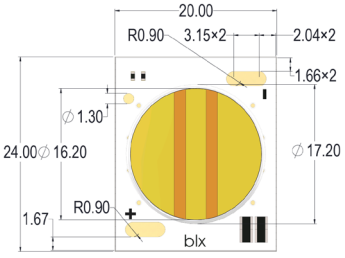
- Larger resister on substrate: caution for holder designs
- Cosmetic improvements: laser markings & brand fonts



9mm
6W



9mm
12W



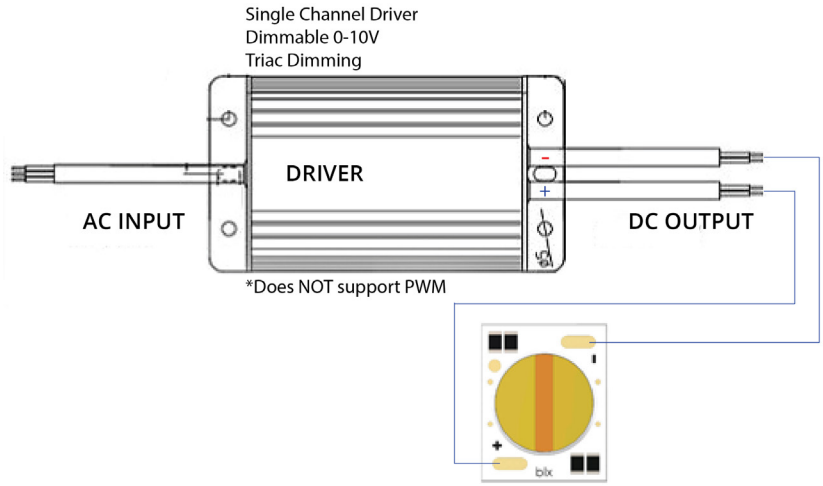
15mm
33W

Dim-To-Warm Product Construct

- 2 LES sizes (15mm, 9mm)
- 3 wattage packages (33W, 12W, 6W)
- MCPCB substrate
- Phosphor dispensed
- Lateral chip
- Single channel
- Resistor controlled

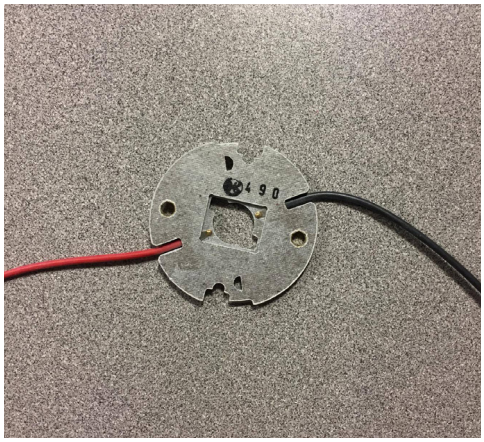
Three dimensional CAD models depicting the product outline of all Bridgelux Vesta Series LED arrays are available in both IGES and STEP formats. Please contact your Bridgelux sales representative for assistance or visit bridgelux.com/products/vesta-series.

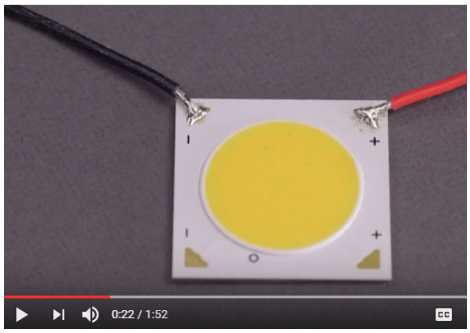
CAUTION: Avoid touching the LES to prevent inadvertent damage to wire bonds.



Vesta Series Array: Electromechanical Holder

Bender+Wirth holders are available for Vesta Series Dim-To-Warm arrays. For a complete list of compatible holder part numbers, please contact Bridgelux Sales.





Visit our YouTube channel for a detailed video of manual soldering procedures*
https://youtu.be/47yWEOPZQ7c

*Bridgelux LED Arrays: Soldering' YouTube video applies to V Series, Vero Series and Vesta Dim-To-Warm arrays.

Handling & Installation

- Bridgelux encourages mounting the Vesta Series array to a suitably sized heatsink using an appropriate electromechanical holder
- Vesta Series arrays require a thermal interface material between the array and the heatsink
- Detailed testing for compatibility of Vesta Series products with ecopartners is ongiong

THERMAL INTERFACE

Use a suitable TIM between the array and heat sink. Grease is recommended for optimal testing. TIM pad material can also be used. Do not exceed 0.5mm TIM pad thickness and ensure material covers full extent of the substrate. The silk screen application methods work best.

HOLDER USE INSTRUCTIONS:

- Because B+W holders do not have mechanical clips to hold onto the array, B+W recommends flipping the assembly upside down during assembly process
- Use only M3 flat head screws to mount the holder/array onto the heat sink using through holes on the holder
- Maximum fixing torque is 0.3 nm. Use a torque screw driver to tighten screws
- Electrical connections are made through contacts on the holder
- For detailed holder instructions, please refer to Bender+Wirth's Technical Guide for LED Holder Series 430

Ecosystem Partners & Support

Bridgelux Part Number	Drivers	Holders	Optics
BXRV-DR-1830H-1000-A-13 Dim-To-Warm Array 9mm (6W)	**Osram** (OT 9/200, 240/350 DIM) **Lumotech** (L05016CI) **Inventronics** (LUC-010S035DSM) **Harvard Engineering** (CL350A-240-A, B, C) **Recom** (RACD20-350D, RACD20-350D-US)	**BJB** (47.319.618x) **Bender+Wirth** (490)	**Ledil** (Ronda, Zorya, Mirella, Brooke)
BXRV-DR-1830H-1000-B-13 Dim-To-Warm Array 9mm (12W)	**Lumotech** (L05049) **Thomas Research** (LED25W-40-C0350-D, LED20W-48-C0350-D) **Inventronics** (LUC-024S050DSP) **Harvard Engineering** (CL350D2-240-A/B/C) **Tridonic** (LCAI 20W 150mA–400mA ECO lp) **Moons** (MU030I180AQI1, MU030I180AQI2)		
BXRV-DR-1830H-3000-A-13 Dim-To-Warm Array 15mm	**Thomas Research** (TRC-040S105DS) **Recom** (RCD-48-1.00/RCD-48-1.20) **Lumotech** (L05060)	**BJB** (47.319.2xxx) **Bender+Wirth** (491)	**Ledil** (Ronda, Zorya, Brooke)

Product Ray Trace files are available upon request: **rayfiles@bridgelux.com**

Contact

At Bridgelux, we help companies, industries and people experience the power and possibility of light. Since 2002, we've designed LED solutions that are high performing, energy efficient, cost effective and easy to integrate. Our focus is on light's impact on human behavior, delivering products that create better environments, experiences and returns—both experiential and financial. And our patented technology drives new platforms for commercial and industrial luminaires.

For more information about the company, please visit
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facebook.com/Bridgelux
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Your feedback is appreciated!
Please take this 3 minute online survey to provide valuable feedback on Vesta Series products
surveymonkey.com/r/vesta_series

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