

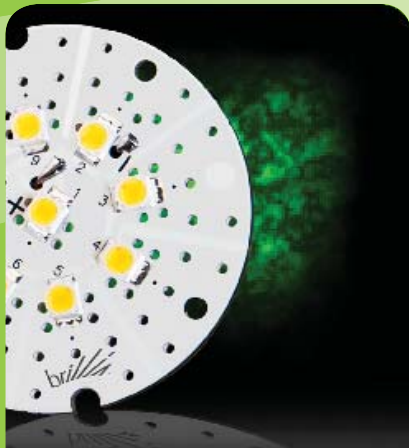
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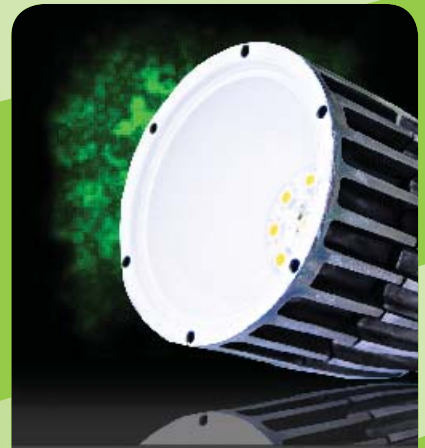
A Permlight brand



**LED
Drivers**



**LED
Modules**



**LED
Light
Engines**



BRILLIANT DESIGNS BROUGHT TO LIGHT. THAT'S BRILLIA.

Brillia offers an extensive line of solid-state lighting products and engineering services for Original Equipment Manufacturers (OEM) of luminaires and other lighting systems. Providing a range of solutions from components to complete systems, Brillia enables its customers to quickly and simply create beautiful, high-performance luminaires. Products offered by Brillia include:

- "Off the shelf" LED light engines
- Custom LED light engines
- LED light engine components










Our role is to be an extension of our customers' in-house engineering team to share more than a decade of experience, inventiveness and know-how to seamlessly integrate complex solid-state lighting systems into world-class finished luminaires. Work with Brillia and you are assured of a product line that is:


- Fastest to market
- Conservatively designed for long life
- Highest performance with low cost




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BRILLIA LED PRODUCT OVERVIEW





LED Modules								
	Product	# of LEDs	Lumens (@3500K, nominal)	DC Power Consumption (nominal)	DC Current/Voltage (max.)	LED Driver Type	Dimensions	Driver Required
	PZ Series	2	94 lm	3.5W	350mA	Constant Current	1.0"L x 1.0"W	AI1220-0
	BB03 AE Series	3	178 lm	3.5W	350mA	Constant Current	1.0"L x 1.0"W	AI1220-0
	PX Series	3	194 lm	4.5 - 5.0W	350mA	Constant Current	1.7"L x 0.7"W	AI1250 Series BL25 Series
	BB09 AD Series	9	729 lm	10W	350mA	Constant Current	2.4" Dia.	BL26-DIM Series
	BB18 AF Series	18	1225 lm	17.5W	700mA	Constant Current	3.4" Dia.	Magtech LP1025-36-C-620
	BB36 AG Series	36	3077 lm	35W	700mA per channel	Constant Current	6.0" Dia.	(2 units) Magtech LP1025-36-C-620
	BB03 AJ Series	3	225 lm	3.6W	12.3VDC	Constant Voltage	1.7"L x 0.7"W	12-12DC-B Series 30-12DC-B Series 100-12DC-B Series
	BB03 AV Series With Thermadjust™	3	225 lm	3.6W	12.3VDC	Constant Voltage	1.7"L x 0.7"W	12-12DC-B Series 30-12DC-B Series 100-12DC-B Series
	BB03 BC Series	3	250 lm	3.6W	12.3VDC	Constant Voltage	8.8"L x 0.6"W	12-12DC-B Series 30-12DC-B Series 100-12DC-B Series


LED Festoon Lamp								
	Product	# of LEDs	Lumens (@6500K, nominal)	DC Power Consumption (nominal)	DC Voltage (max.)	LED Driver Type	Dimensions	Driver Required
	ENBF Series	2	35 lm	1.5W	12VDC	Constant Voltage	1.7"L x 1.0"W x 0.4"H	12-12DC-B Series 30-12DC-B Series 100-12DC-B Series

LED Drivers								
	Product	Voltage	Dimmable	AC Power Consumption (nominal)	DC Current/Voltage (nominal)	LED Driver Type	Dimensions	LED Module Required
	AI1220-0	120	Yes	3.5W	350mA	Constant Current	1.3" Dia. X 1.1"H	PZ Series BB03AE Series
	AI1250 Series	12-24VAC/DC 120V 90-240V	No Yes No	5.0W 4.5W 4.5W	350mA	Constant Current	2.0"L x 1.7"W x 0.9"H	PX Series
	BL25 Series	120V 90-240V 277V	Yes No No	14.5W 14.5W 14.5W	350mA	Constant Current	2.3"L x 2.2"W x 1.3"H	PX Series

LED Drivers								
	Product	Voltage	Dimmable	AC Power Consumption (nominal)	DC Current/Voltage (nominal)	LED Driver Type	Dimensions	LED Module Required
	BL26 Series	120V	Yes	10W 12W	300mA 340mA	Constant Current	2.5"L x 2.3"W x 1.4"H	BB09 AD Series
	Magtech LP1025-36-C-620	100-277V	No	25W	620mA	Constant Current	3.2"L x 3.1.0"W x 1.0"H	BB18AF, BB36AG Series
	12-12DC-B Series	120V	Yes	12W	12VDC	Constant Voltage	4.45"L x 1.2"W x 0.8"H	Any Brillia 12VDC Constant Voltage LED Module
	30-12DC-B Series	120V	Yes	30W	12VDC	Constant Voltage	7.95"L x 1.2"W x 0.825"H	Any Brillia 12VDC Constant Voltage LED Module
	100-12DC-B Series	120V 240V 277V	No No No	100W	12VDC	Constant Voltage	6.4"L x 3.4"W x 1.0"H 6.4"L x 3.4"W x 1.0"H 7.8"L x 3.4"W x 1.0"H	Any Brillia 12VDC Constant Voltage LED Module

Available Soon!

LED Light Engines "Sandwich" Design									
	Product	# of LEDs	Lumens (@3500K, nominal)	AC Power Consumption (nominal)	DC Current/Voltage (nominal)	LED Driver Type	Dimensions	Voltages Available	Dimmable
	BEP02 AB Series	2	94 lm	3.5W	350mA	Constant Current	1.3" Dia. X 1.9"H	120V	Yes
	BEP03 AE Series	3	178 lm	3.5W	350mA	Constant Current	1.3" Dia. X 1.9"H	120V	Yes
	BEP03 AA Series	3	194 lm	4.5 - 5.0W	350mA	Constant Current	2.0"L x 1.7"W x 1.8"H	12-24VAC/DC 120V 90-240V	No Yes No
	BEP09 AA Series	9	514 lm	14.5W	350mA	Constant Current	2.3"L x 2.2"W x 2.1"H	120V 90-240V 277V	Yes No No

LED Light Engines, Integral Reflector and Heatsink									
	Product	# of LEDs	Lumens (@3500K, nominal)	AC Power Consumption (nominal)	DC Current/Voltage (nominal)	LED Driver Type	Dimensions	Voltages Available	Dimmable
	BEH09 AD Series	9	656 lm	12W	340mA	Constant Current	3.5" Dia x 3.2"H	120V	Yes

SANDWICH DESIGN LED MODULES

The PZ, BB03 AE, and PX Series LED Modules are part of Brilia's patented Sandwich Design series of products and feature intelligent thermal engineering using a metal core board. The modules are designed only for use with the drivers shown, and must be used with a heat sink "sandwiched" between the LED module and driver.



PZ Series

# of LEDs:	2
Lumens (@3500K, nominal):	94 lm
DC Power consumption (nominal):	3.5W
DC Current (max.):	350mA
LED Driver Type:	Constant Current
Dimensions:	1.0"L x 1.0"W
Driver Required:	AI1220-0
Catalog Numbers:	PZ-WW-A (2700K) PZ-HW-A (3500K) PZ-CW-A (5100K)



BB03 AE Series

# of LEDs:	3
Lumens (@3500K, nominal):	178 lm
DC Power consumption (nominal):	3.5W
DC Current (max.):	350mA
LED Driver Type:	Constant Current
Dimensions:	1.0"L x 1.0"W
Driver Required:	AI1220-0
Catalog Numbers:	BB03AE-20201-0000XX-01 (2700K) BB03AE-21201-0000XX-01 (3500K) BB03AE-C0201-0000XX-01 (5100K)



PX Series

# of LEDs:	3
Lumens (@3500K, nominal):	194 lm
DC Power consumption (nominal):	4.5 – 5.0W
DC Current (max.):	350mA
LED Driver Type:	Constant Current
Dimensions:	1.7"L x 0.7"W
Driver Required:	AI1250 Series, BL25 Series
Catalog Numbers:	PX-WW-A (2700K) PX-HW-A (3500K) PX-CW-A (5100K)

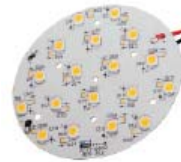
CONSTANT CURRENT ROUND LED MODULES

These LED modules feature a constant current design and patented thermal engineering on an FR4 board. These modules are designed to be used with the companion constant current drivers.



BB09 AD Series

# of LEDs:	9
Lumens (@3500K, nominal):	729 lm
DC Power consumption (nominal):	10W
DC Current (max.):	350mA
LED Driver Type:	Constant Current
Dimensions:	2.4" Dia.
Driver Required:	BL26 Series
Catalog Numbers:	BB09AD-20201-120020-01 (2700K) BB09AD-21201-120020-01 (3500K) BB09AD-C0201-120020-01 (5100K)



BB18 AF Series

# of LEDs:	18
Lumens (@3500K, nominal):	1225 lm
DC Power consumption (nominal):	17.5W
DC Current (max.):	700mA
LED Driver Type:	Constant Current
Dimensions:	3.4" Dia.
Driver Required:	Magtech LP1025-36-C-620
Catalog Numbers:	BB18AF-20201-120020-01 (2700K) BB18AF-21201-120020-01 (3500K) BB18AF-C0201-120020-01 (5100K)



BB36 AG Series

# of LEDs:	36
Lumens (@3500K, nominal):	3077 lm
DC Power consumption (nominal):	35W
DC Current (max.):	700mA (per channel)
LED Driver Type:	Constant Current
Dimensions:	6.0" Dia.
Driver Required:	Magtech LP1025-36-C-620 (2 Units)
Catalog Numbers:	BB36AG-20201-120020-01 (2700K) BB36AG-21201-120020-01 (3500K) BB36AG-C0201-120020-01 (5100K)

CONSTANT VOLTAGE LED MODULES

These LED modules feature a constant voltage design and intelligent thermal engineering. The design allows these modules to be combined together with a single Brillia LED constant voltage driver (up to the maximum wattage of the driver) resulting in unparalleled design flexibility for luminaire manufacturers.

BB03 AJ Series



# of LEDs:	3
Lumens (@3500K, nominal):	225 lm
DC Power consumption (nominal):	3.6W
DC Voltage (max.):	12.3VDC
LED Driver Type:	Constant Voltage
Dimensions:	1.7"L x 0.71"W
Driver Required:	12-12DC-B Series, 30-12DC-B Series, 100-12DC-B Series
Catalog Numbers:	BB03AJ-20201-120020-01 (2700K) BB03AJ-21201-120020-01 (3500K) BB03AJ-C0201-120020-01 (5100K)

BB03 AV Series Thermostat™



# of LEDs:	3
Lumens (@3500K, nominal):	250 lm
DC Power consumption (nominal):	3.6W
DC Voltage (max.):	12.3VDC
LED Driver Type:	Constant Voltage
Dimensions:	1.71"L x 0.7"W
Driver Required:	12-12DC-B Series, 30-12DC-B Series, 100-12DC-B Series
Catalog Numbers:	BB03AV-20201-120020-01 (2700K) BB03AV-21201-120020-01 (3500K) BB03AV-C0201-120020-01 (5100K)

BB03 BC Series



# of LEDs:	3
Lumens (@3500K, nominal):	250 lm
DC Power consumption (nominal):	3.6W
DC Voltage (max.):	12.3VDC
LED Driver Type:	Constant Voltage
Dimensions:	8.8"L x 0.6"W
Driver Required:	12-12DC-B Series, 30-12DC-B Series, 100-12DC-B Series
Catalog Numbers:	BB03BC-20201-090098-01 (2700K) BB03BC-21201-090098-01 (3500K) BB03BC-C0201-090098-01 (5100K)

LED FESTOON LAMPS

These LED Festoon lamps are designed to be used as an efficient low heat, low-power, and long-life solution to replace traditional halogen festoon lamps in existing track designs. These lamps feature an integral heat sink and can each be individually aimed for cove lighting applications. These lamps must be used with a Brillia LED driver.

ENBF Series



# of LEDs:	2
Lumens (@6500K, nominal):	35 lm
DC Power Consumption (nominal):	1.5W
DC Voltage (max.):	12.3VDC
LED Driver Type:	Constant Voltage
Dimensions:	1.7"L x 1.0"W x 0.4"H
Driver Required:	12-12DC-B Series, 30-12DC-B Series, 100-12DC-B Series
Catalog Numbers:	ENBF-INCAN (2850K) ENBF-HW (3500K) ENBF-WHT (6500K)

SANDWICH DESIGN LED DRIVERS

Brillia patented Sandwich Design series of products feature an innovative design that greatly simplifies LED installation into luminaires. The drivers are designed only for use with the LED modules shown, and must be used with a heat sink “sandwiched” between the LED module and driver.

AI1220-0



Voltage:	120V
Dimmable:	Yes
AC Power Consumption (nominal):	3.5W
DC Current (nominal):	350mA
LED Driver Type:	Constant Current
Dimensions:	1.3"Dia. x 1.1"H
LED Module Required:	PZ Series BB03 AE Series
Catalog Numbers:	AI1220-0

AI1250 Series



Voltage:	12-24VAC/DC, 120V, 90-240V
Dimmable:	120V model only
AC Power Consumption (nominal):	4.5W (12V model is 5.0W)
DC Current (nominal):	350mA
LED Driver Type:	Constant Current
Dimensions:	2.0"L x 1.7"W x 0.9"H
LED Module Required:	PX Series
Catalog Numbers:	AI1250LV (12-24VAC/DC) AI1250-90240 (90-240V) AI1250-DIM (120V)

BL25 Series



Voltage:	120V, 90-240V, 277V
Dimmable:	120V model only
AC Power Consumption (nominal):	14.5W
DC Current (nominal):	350mA
LED Driver Type:	Constant Current
Dimensions:	2.3"L x 2.2"W x 1.3"H
LED Module Required:	PX Series
Catalog Numbers:	BL25-90240 (90-240V) BL25-DIM (120V) BL25-277 (277V)

CONSTANT CURRENT LED DRIVERS

These LED drivers feature a constant current design in a compact case. The drivers are designed to be used with the companion Brillia LED modules.

BL26 Series



Voltage:	120V
Dimmable:	Yes
AC Power Consumption (nominal):	10 - 12W
DC Current (nominal):	300 - 340mA
LED Driver Type:	Constant Current
Dimensions:	2.5"L x 2.3"W x 1.4"H
LED Module Required:	BB09 AD Series
Catalog Numbers:	BL26-120-DIM-300 (300mA) BL26-120-DIM-340 (340mA)

Magtech® LP1025



Voltage:	120-277V
Dimmable:	No
AC Power Consumption (nominal):	25W
DC Current (nominal):	620mA
LED Driver Type:	Constant Current
Dimensions:	3.2"L x 3.1"W x 1.0"H
LED Module Required:	BB18 AF Series BB36 A6 Series
Catalog Numbers:	LP 1025-36-C-620

CONSTANT VOLTAGE LED DRIVERS

These LED drivers feature a constant voltage design in a compact case. The design allows these drivers to be combined with multiple Brillia LED modules (up to the maximum wattage of the driver) resulting in unparalleled design flexibility for luminaire manufacturers.

Available Soon!



12-12DC-B Series

Voltage:	120V
Dimmable:	Yes
AC Power Consumption (nominal):	12W
DC Voltage (nominal):	12VDC
LED Driver Type:	Constant Voltage
Dimensions:	4.45"L x 1.2"W x 0.8"H
LED Module Required:	Any Brillia Constant Voltage LED Module
Catalog Numbers:	12-12DC-B

Available Soon!



30-12DC-B Series

Voltage:	120V
Dimmable:	Yes
AC Power Consumption (nominal):	30W
DC Voltage (nominal):	12VDC
LED Driver Type:	Constant Voltage
Dimensions:	7.95"L x 1.2"W x 0.825"H
LED Module Required:	Any Brillia Constant Voltage LED Module
Catalog Numbers:	30-12DC-B

100-12DC-B Series



Voltage:	120V, 240V, 277V
Dimmable:	No
AC Power Consumption (nominal):	100W
DC Voltage (nominal):	12VDC
LED Driver Type:	Constant Voltage
Dimensions:	6.4"L x 3.4"W x 1.0"H (120, 240V) 7.8"L x 3.4"W x 1.0"H (277V)
LED Module Required:	Any Brillia Constant Voltage LED Module
Catalog Numbers:	100-12DC-B (120V) 100-12DC-B-240 (240V) 100-12DC-B-277 (277V)

INTEGRATED HEAT SINK AND REFLECTOR LED LIGHT ENGINE

Brillia's BEH09 AD series LED Light Engine includes a specially-engineered die-cast heat sink and integral smooth white reflector that is designed to maximize the output of the LED devices. The housing is designed to conceal the LED driver inside of the lower portion of the heat sink to provide a more compact and flexible engine.



BEH09 AD Series

# of LEDs:	9
Lumens (@3500K, nominal):	656 lm
DC Power consumption (nominal):	13W
DC Current (nominal):	340 mA
LED Driver Type:	Constant Current
Dimensions:	3.5"Dia x 3.2"H
Voltages Available:	120V
Dimmable:	Yes
Catalog Numbers:	BEH09AD120FDE27-001 (2700K) BEH09AD120FDE35-001 (3500K) BEH09AD120FDE51-001 (5100K)

SANDWICH DESIGN LED LIGHT ENGINES

Brillia's Sandwich Design light engines are a simplified package of products that include LED Modules and LED Drivers together with all of the necessary hardware. The modules and drivers must be used with each other, and must be used with a heat sink "sandwiched" between the LED module and driver.



BEP02 AB Series

# of LEDs:	2
Lumens (@3500K, nominal):	94 lm
DC Power consumption (nominal):	3.5W
DC Current (nominal):	350mA
LED Driver Type:	Constant Current
Dimensions:	1.3" Dia. X 1.9"H
Voltages Available:	120V
Dimmable:	Yes
Catalog Numbers:	BEP02AB120FDA27-001 (2700K) BEP02AB120FDA35-001 (3500K) BEP02AB120FDA51-001 (5100K)



BEP03 AE Series

# of LEDs:	3
Lumens (@3500K, nominal):	178 lm
DC Power consumption (nominal):	3.5W
DC Current (nominal):	350mA
LED Driver Type:	Constant Current
Dimensions:	1.3" Dia. X 1.9"H
Voltages Available:	120V
Dimmable:	Yes
Catalog Numbers:	BEP03AE120FDA27-001 (2700K) BEP03AE120FDA35-001 (3500K) BEP03AE120FDA51-001 (5100K)



BEP03 AA Series

# of LEDs:	3
Lumens (@3500K, nominal):	194 lm
DC Power consumption (nominal):	4.5 – 5.0W
DC Current (nominal):	350mA
LED Driver Type:	Constant Current
Dimensions:	2.0"L x 1.7"W x 1.8"H
Voltages Available:	12-24VAC/DC, 120V, 90-240V
Dimmable:	120V model only
Catalog Numbers:	BEP03AA024MNB27-001 (2700K) BEP03AA024MNB35-001 (3500K) BEP03AA024MNB51-001 (5100K) BEP03AA120FDB27-001 (2700K) BEP03AA120FDB35-001 (3500K) BEP03AA120FDB51-001 (5100K) BEP03AA240MNB27-001 (2700K) BEP03AA240MNB35-001 (3500K) BEP03AA240MNB51-001 (5100K)



BEP09 AA Series

# of LEDs:	9
Lumens (@3500K, nominal):	514 lm
DC Power consumption (nominal):	14.5W
DC Current (nominal):	350mA
LED Driver Type:	Constant Current
Dimensions:	2.3"L x 2.2"W x 2.1"H
Voltages Available:	120V, 90-240V, 277V
Dimmable:	120V model only
Catalog Numbers:	BEP09AA120FDC27-001 (2700K) BEP09AA120FDC35-001 (3500K) BEP09AA120FDC51-001 (5100K) BEP09AA240MNC27-001 (2700K) BEP09AA240MNC35-001 (3500K) BEP09AA240MNC51-001 (5100K) BEP09AA277FNC27-001 (2700K) BEP09AA277FNC35-001 (3500K) BEP09AA277FNC51-001 (5100K)

JUST THE RIGHT SOLUTION.

Brillia has a large offering of off-the-shelf proven engines that include all of the necessary components that a luminaire manufacturer would need to build an LED-based luminaire. These products either use the metal fixture housing as a heat sink, or Brillia can assist the luminaire manufacturer to design an appropriate heat sink.

Benefits and features of Brillia's off-the-shelf solutions:

- UL recognized
- Allows fixture to quickly and easily achieve required listing
- In stock and readily available
- Greater speed to market
- Proven design
- Competitive costing

For products that require a custom-designed approach to LED integration, Brillia can provide the resources and extensive experience to collaboratively develop an intelligent solution for the LED luminaire. No matter your challenge, vision, or goal, we will work with you to develop the best approach to suit your customized need.

A HISTORY OF INNOVATION.

Brillia is a brand of Permlight Products, Inc., an innovator since 1995 in the development of high-powered LED systems for signs, and luminaries for residential and commercial applications. Permlight Products' inventive LED light engine designs are offered through two divisions: Brillia, which is dedicated to expanding the boundaries of general illumination by partnering with the world's leading brands and manufacturers of luminaires, and Permlight for Signs, which develops high-power LED systems for illuminated signs.



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