



The BriLux™ V3 is latest member of V series high power LED based MR16 lamp that utilizes the Cool Beam Technology™, offering a more economical, high performance and yet thermally stable spotlight.

BriLux™ V3 series is a member of our “Cool Beam Technology” solutions, specially designed for high performance and maximum light intensity. The V3 series features three pieces of 1W power LED; stylish aluminum housing not only provides a fancy look of the future, but also a sophisticated heat sink as it makes heat dissipating more efficiently. **BriLux™ V3** series MR16 retrofits into standard MR16 fixtures and housings, hence enables immediate replacement without any additional adjustments.

The lamp features standard MR16 bi-pin connectors and molded aluminum housing with chrome or frosted finish. The **BriLux™ V3** series is available in 4W power rating. They are also available in two distinct white Kelvin temperatures: 3500K and 6000K. Other custom colors are also available.

The **V3** series utilizes Cool Beam Technology specifically developed for driving high power (up to 5W) solid state devices. It uniquely allows heat to dissipate efficiently; making the product thermally stable for long hours of operation and last much longer than conventional LED based MR16.

BriLux™ V3 series MR16 is equipped with optical grade polycarbonate LED Lens that allows highest light transmission at 30° beam angle.



Features

- **Light source: 3X1W power LED**
- **Source life: More than 40,000 hours**
- **Low heat, no UV or IR light radiation**
- **Full range of colors**
- **Homogeneous illumination**
- **Sleek designed heat fins with excellent thermal efficiency**
- **4W MR16 can achieve directional light output equal to 25W halogen lamp yet consume 80% less power**
- **Reverse polarity protection**
- **Safety Standard: CE and RoHS**
- **Works with 12V AC/DC lighting systems**


Typical Applications

- **Landscape Accent/Spot lighting**
- **Architectural Lighting**
- **Display Case Accent**
- **Artwork Lighting**
- **Mood Lighting/General lighting**
- **Amusement Park Accent**





PRODUCT SPECIFICATIONS

LIGHT SOURCE	3X1W power LED
OPTICS	3X optical grade Polycarbonate LED Lens
LENS DIAMETER	18.0 mm/each
BEAM ANGLE	30° (Wide Spot)
MIN BEAM DISTANCE	15cm
RENDERING INDEX (Ra)	>80 (for white color)
TOTAL LENGTH	50 mm (including pins)
WEIGHT	65 g
HOUSING	Molded aluminum with silver paint finish, 5 cm (2") diameter
BASE	GX5.3 pins
DIMMABILITY	Not Dimmable 

ENVIRONMENTAL SPECIFICATIONS

TEMPERATURE RANGE	Ambient: -20°C to 40°C; Surface of Lamp: 50°C to 70°C
HUMIDITY RANGE	0 to 95% non-condensing humidity

ELECTRICAL SPECIFICATIONS

VOLTAGE REQUIREMENT	12V AC or DC
POWER CONSUMPTION	4W
TRANSFORMER	Low voltage magnetic to provide 12V AC or 12V DC

DO NOT CONNECT LAMP TO ELECTRONIC TRANSFORMER

PRODUCT DIMENSIONS (mm)

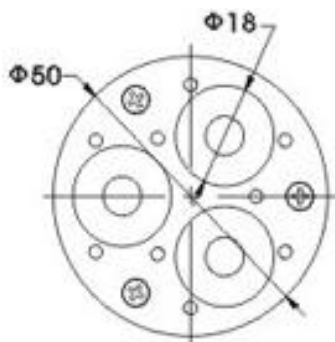


Fig 1. MR16 top view

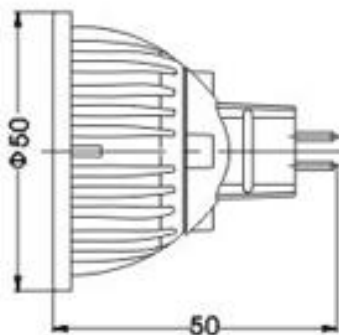
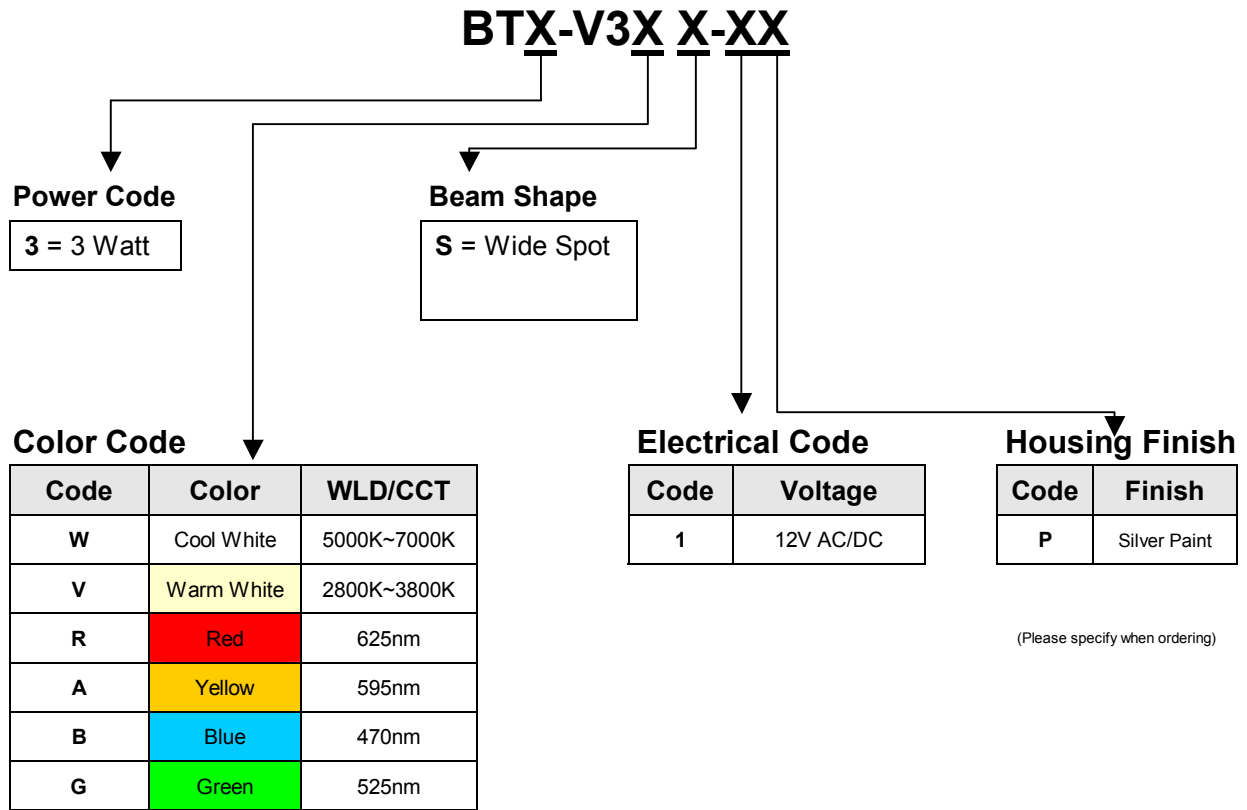


Fig 2. MR16 side view



PRODUCT ORDERING CODE



3W MR16 PRODUCT CODE

ORDER CODE	Color	Wavelength or CCT (nm/K)	Operating Voltage	LED Power (W)	Typ. Luminous Flux (lm)	Typ. Center Illuminance @ 1m (Lux)	BEAM ANGLE
BT3-V3WS-1P	Cool White	5000K~7000K	12V AC/DC	3X1W	150 lm	830	30° ±2°
BT3-V3VS-1P	Warm White	2800K~3800K			105 lm	470	
BT3-V3RS-1P	Red	625 nm			90 lm	1700	
BT3-V3AS-1P	Yellow	595 nm			110 lm	1020	
BT3-V3BS-1P	Blue	470 nm			33 lm	1360	
BT3-V3GS-1P	Green	530 nm			140 lm	780	



Illumination Characteristics ($T_a=25^{\circ}\text{C}$)

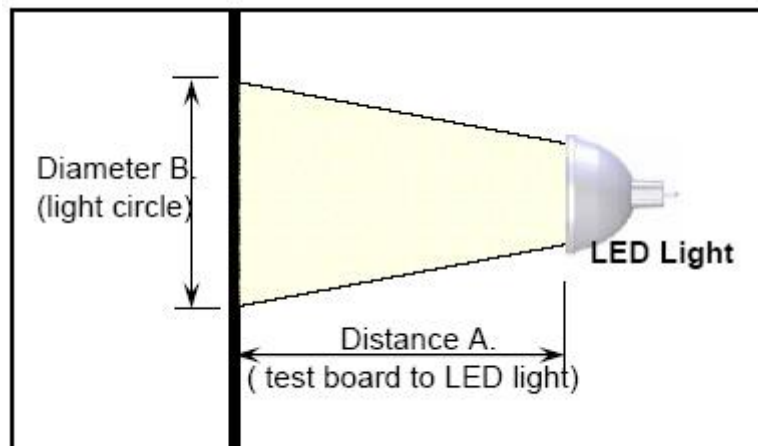


Fig 1. Set up for Illuminance Measurement

3X1W Model

Distance		Typical Illuminance Measured at Center of Beam (Lux)					
Dist A (cm)	Dia. B (cm)	Cool White	Warm White	Green	Blue	Red	Yellow
30	28	-	-	-	-	-	-
50	45	3590	2210	3140	4160	5800	4590
100	86	830	470	780	1360	1780	1020
150	128	-	-	-	-	-	-
200	160	-	-	-	-	-	-

Note: Center beam lux is measured with Digital Lux Meter (Model TES-1334A)

Typical Electrical Characteristics at $T_a=25^{\circ}\text{C}$

3X1W Model

Parameter	Symbol	Min	Typ	Max	Unit
Input Voltage (AC)	V_{AC}	10	12	14	V
Input Voltage (DC)	V_{DC}	9	10	12	V
Individual LED Forward Current	I_F	—	340	—	mA
Estimated Life [□]		—	40,000	—	hours
Optimized Body Temp (3X1W LED)	T	—	55	60	$^{\circ}\text{C}$

Note: Lamp is optimized for 12V AC input voltage