

*“Finally, the BriLux™ upgraded Master series is a family of high power LED based MR11 lamp that is all right. Right looks, right design, right form factor, excellent performance!”*

BriLux™ **M2** series miniature lamps are designed to fit into standard, low voltage, MR11 fixtures and sockets, and project a 35° well-defined spot light. It is well suited for tracks, rails, cables and pendants in interior architectural, retail, exhibit, display and residential applications.

The lamp features standard MR11 bi-pin connectors and sleek unify pure aluminum housing with anodized silver finish. The BriLux™ **M2** MR11 series is available in 2W power rating. They are also available in two distinct white Kelvin temperatures: 3500K and 6500K. Other colors are also available.

The **M2** series utilizes the Brilliance Technologies' innovative heat management technology specifically developed for the high power (up to 3W power LED) solid state lighting devices. It uniquely allows heat to dissipate properly; making the product thermally stable for long hours of operation and last much longer than conventional LED based MR11.

BriLux™ **M2** series MR11 is equipped with optical grade polycarbonate lens that allows highest light transmission at 35° beam angle.



#### Features

- Light source: 3W Cree XRE LED
- Source life: More than 40,000 hours
- Low heat, no UV or IR light radiation
- Full range of colors
- Homogeneous and well defined illumination
- Optimized heat sink with the right looks and sleek design
- 2W version can achieve directional light output equal to 15W halogen MR11 lamp yet consume 80% less power
- Reverse polarity protection
- Safety Standard: **CE** pending
- 1 year limited warranty (see page 3)
- Works with 12V AC/DC lighting systems

#### Typical Applications

- Spot lighting
- Show Case Lighting
- Display Case Accent
- Artwork Lighting
- Mood Lighting
- Amusement Park Accent



## PRODUCT SPECIFICATIONS

LIGHT SOURCE	1X3W Cree XRE power LED
OPTICS	Optical grade PC collimator
LENS DIAMETER	20 mm
BEAM ANGLE	35° (Wide Spot)
MIN BEAM DISTANCE	15cm (6 inches)
RENDERING INDEX (Ra)	> 70 (for cool white color)
TOTAL LENGTH	34 mm (excluding pins)
WEIGHT	24g
HOUSING	Machined pure aluminum with anodized silver finish, 35 mm diameter
BASE	GX4.0
DIMMABILITY	Not Dimmerble

## ENVIRONMENTAL SPECIFICATIONS

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

## ELECTRICAL SPECIFICATIONS

VOLTAGE REQUIREMENT	12V AC or 12V DC
POWER CONSUMPTION	2W
TRANSFORMER	Low voltage magnetic or switching power supply to provide 12V AC or 12V DC

**DO NOT CONNECT LAMP TO ELECTRONIC TRANSFORMER**

## PRODUCT DIMENSIONS (mm)

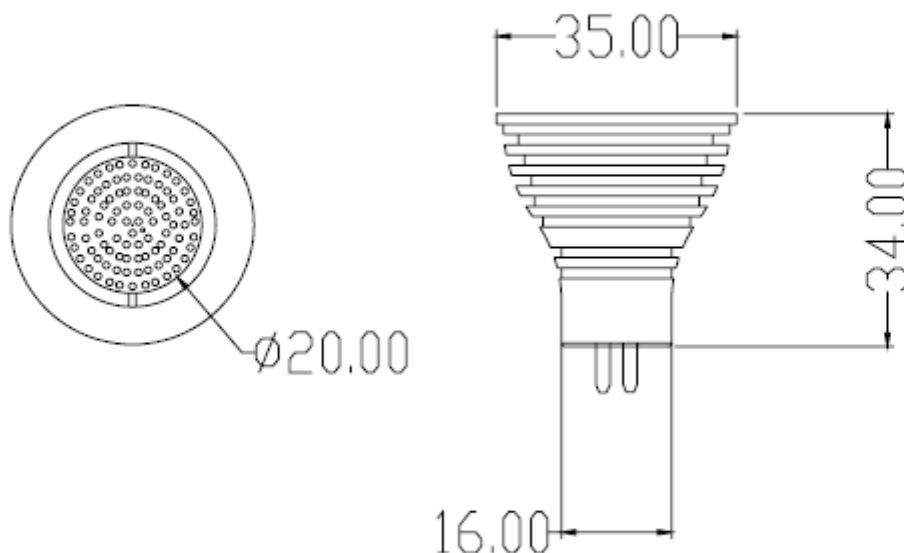
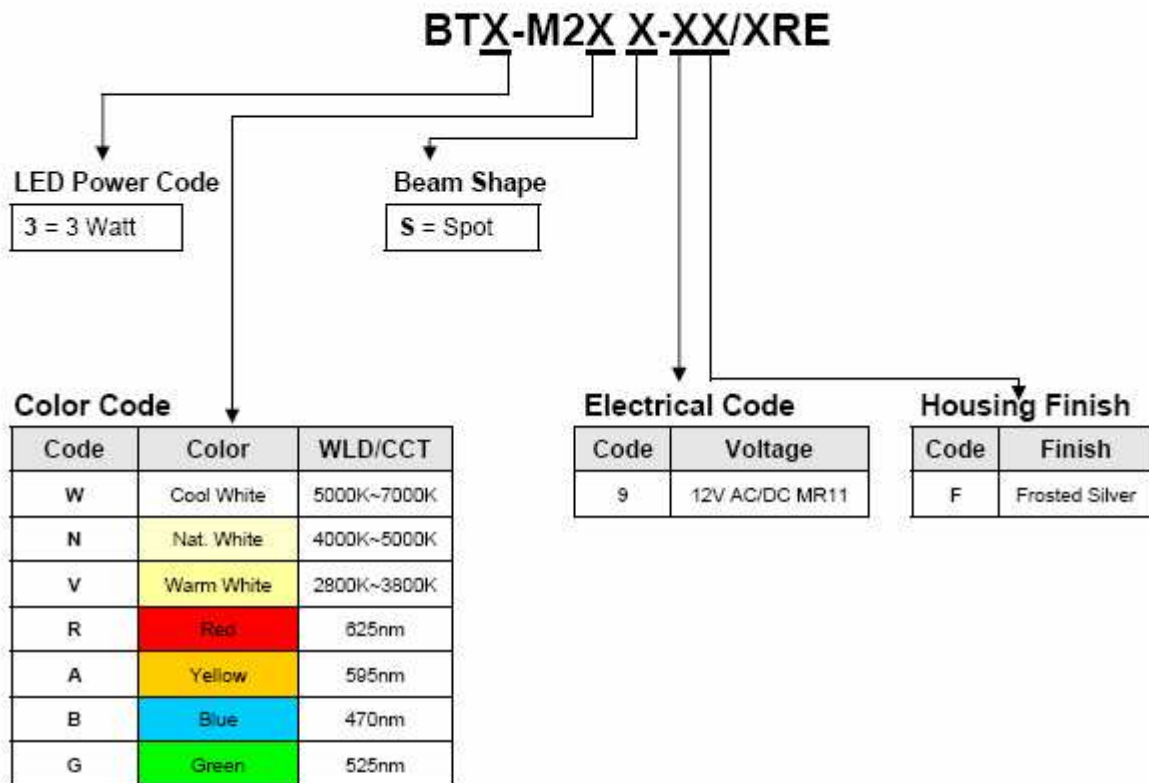


Fig1. Front View

Fig 2. Side View

## PRODUCT ORDERING CODE



## Wide Spot Model (35° Beam Angle)

ORDER CODE	Color	Wavelength or CCT (nm/K)	Operating Voltage (V)	LED Power (W)	Typical Luminous Flux (lm)	Typical Center Illuminance @ 1 m (Lux)	BEAM ANGLE
BT3-M2WS-9F/XRE	Cool White	5000K~7000K	12V AC/DC	1X3W	100 lm		35° ±2°
BT3-M2NS-9F/XRE	Nat. White	4000K~5000K			90 lm	290	
BT3-M2VS-9F/XRE	Warm White	2800K~3800K			75 lm	280	
BT3-M2RS-9F/XRE	Red	625 nm			60 lm		
BT3-M2AS-9F/XRE	Yellow	595 nm			60 lm		
BT3-M2BS-9F/XRE	Blue	470 nm			25 lm		
BT3-M2GS-9F/XRE	Green	530 nm			75 lm		

Typical Electrical Characteristics at  $T_a=25^{\circ}\text{C}$  (For 3W Model)

Parameter	Symbol	Min	Typ	Max	Unit
Input Voltage (AC)	$V_{AC}$	10	12	14	V
Input Voltage (DC)	$V_{DC}$	9	12	14	V
LED Forward Current	$I_f$	—	500	—	mA
Estimated Life <sup>91</sup>		—	40,000	—	Hours
Optimized Body Temperature (3W LED)	T	—	50	58	$^{\circ}\text{C}$

Note: Lamp is optimized for 12V AC input voltage

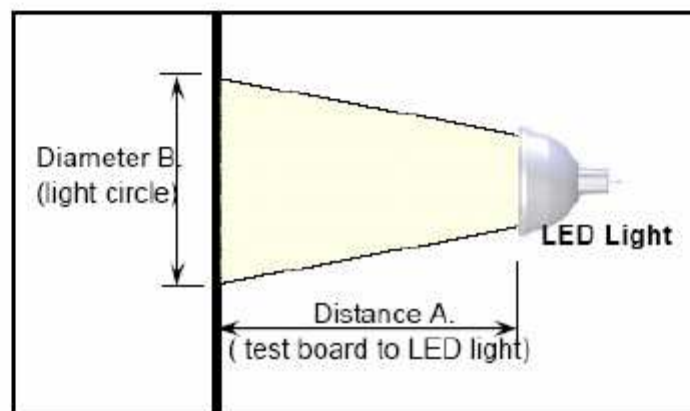
Illumination Characteristics( $T_a=25^{\circ}\text{C}$ )

Fig 1. Set up for Illuminance Measurement

## 2W Wide Spot Model (35° Beam Angle)

Distance		3W Typical Illuminance Measured at Center of Beam (Lux)					
Dist A (cm)	Dia. B (cm)	Cool White	Nat. White	Warm White	Blue	Red	Yellow
30	25						
50	40						
100	90		290	280			
150	140						
200	190						

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

Note: All LED MR11 lamps are burnt in for 72 hours before every order shipment

### Optional Accessories

1) MR11 Connector without clip – Part No.:

Approval: VDE, UL

Rating: 125V 100W/250V 4A

Material: Porcelain



2) MR16 Connector with spring clip – Part No.:

Approval: VDE, UL

Rating: 125V 100W/250V 4A

Material: Porcelain



### Optional Power Supply (Recommended for LED MR11 lamps)

1) 60W Ferro Magnetic Power Supply – Part No.: PS-60W-12

Specifications:

Input: AC110V or AC220V 50/60 Hz

Output Voltage: AC12V

Output Current: 5A max

Power: 60W max

Weight: 1.2Kg

Casing Size: 120X80X65 mm

Remarks: Other wattages is available, please inquire with our sales associates



2) 60W Switching Power Supply – Part No.: SS-60W-12

Specifications:

Input: AC110V or AC220V 50/60 Hz

Output Voltage: DC12V

Output Current: 5A max

Power: 60W max

Weight: 0.5Kg

Casing Size: 150X96X40 mm

Remarks: Other wattages is available, please inquire with our sales associates



Installation Note:

3W MR11 – Maximum 15 lamps connection per power supply