



3Northway Lane North Latham, New York 12110.

Tollfree:1.800.984.5337

Phone:1.518.956.2980

Fax:1.518.785.4725

Http://www.marktechopto.com

SPECIFICATION

PART NO. : MTBL3G11-UYG

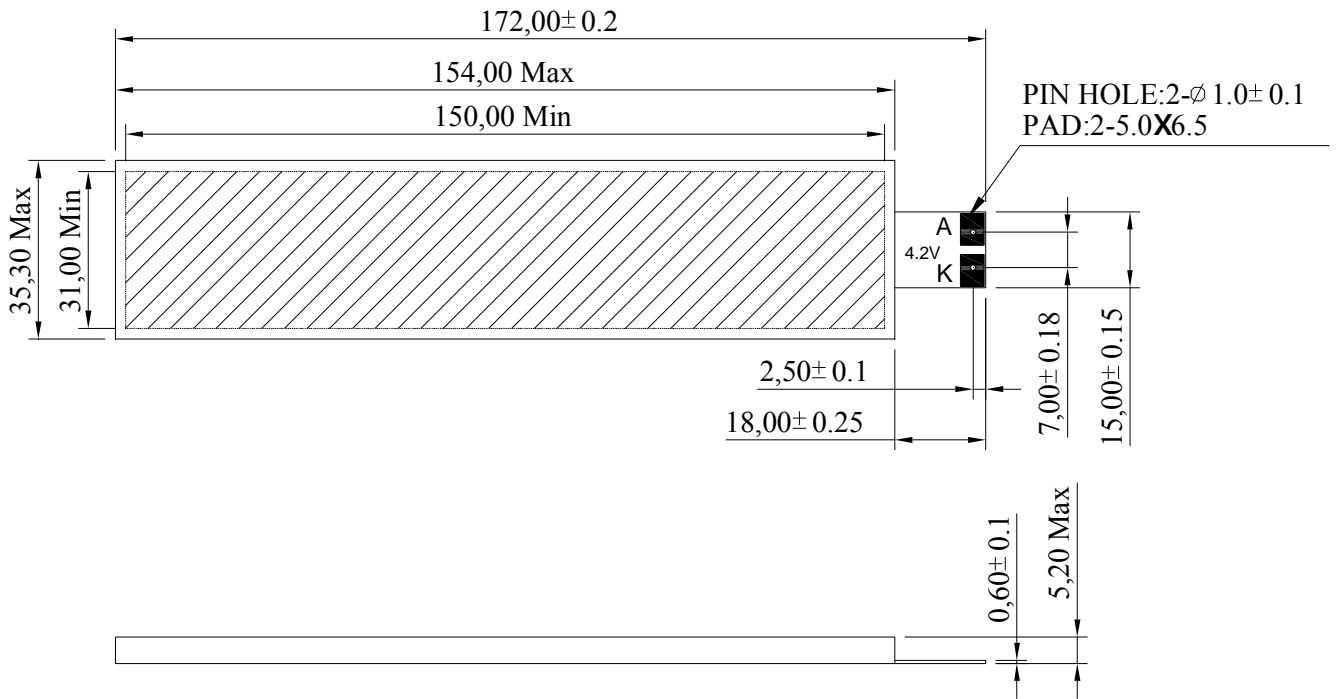
LED BACKLIGHT



ATTENTION

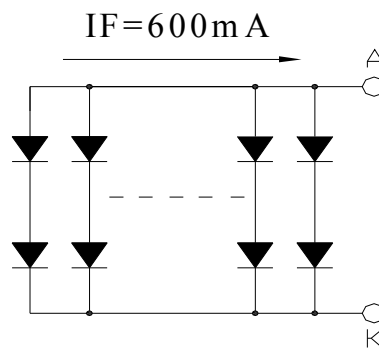
**OBSERVE PRECAUTION
FOR HANDLING
ELECTRO STATIC
SENSITIVE
DEVICES**

Dimensions



1. All dimensions are in millimeters.
2. Tolerance is ± 0.30 mm unless otherwise noted.

Internal Circuit Diagram



A: ANODE / K: CATHODE
LED NUMBERS: 120PCS

Description

Part No.	LED Chip	
	Material	Emitting Color
MTBL3G11-UYG	GaP/GaP	Green(HE)

Absolute Maximum Ratings at Ta=25 °C

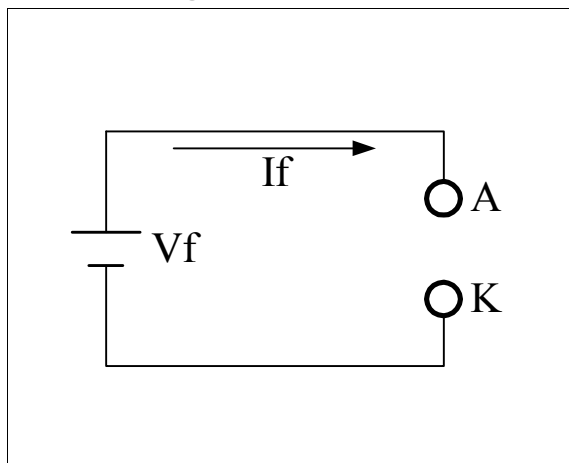
Parameter	Symbol	Rating	Unit
Power Dissipation	PD	8.1	W
Pulse Current(1/10Duty Cycle,0.1ms Pulse Width.) Per LED	IFP	100	mA
Forward Current Per LED	IF	30	mA
Reverse (Leakage)Current Per LED	Ir	10	uA
Reverse Voltage Per LED	VR	5	V
Operating Temperature Range	Topr.	-20 to +70	°C
Storage Temperature Range	Tstg.	-30 to +80	°C
Soldering Iron Temp.(1.6mm from seating plane)		350 for 3s MAX.	°C

Electrical and Optical Characteristics:

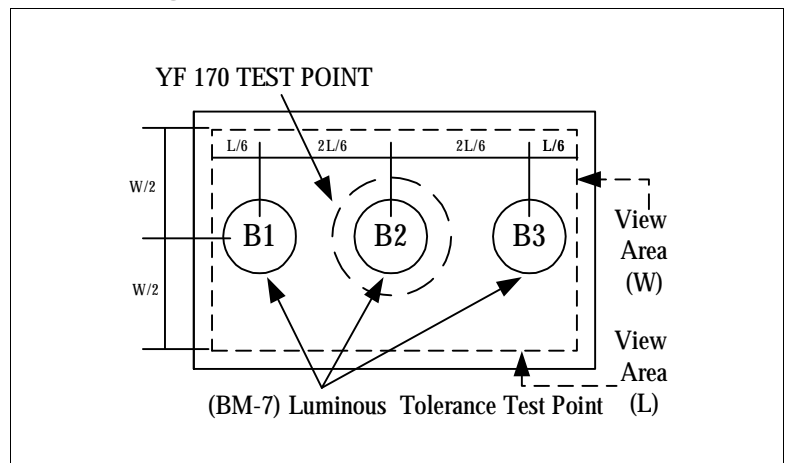
Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit	Remark
Forward Voltage	Vf	If=600mA	3.8	4.2	4.5	V	★1
Luminous Intensity	Iv	If=600mA	130	300	-	cd/m ²	★2
Luminous Uniformity		If=600mA	75	-	-	%	★2, ★3
Dominant Wavelength	λd	If=20mA/per chip	-	572	-	nm	
Reverse Current Per Chip (Leakage Current Per Chip)	Ir	Vr=5V	-	-	10	μA	
Spectrum Line Halfwidth	Δλ	If=20mA/per chip	-	30	-	nm	

Remark

★1. Testing Method



★2. Brightness Measured Point



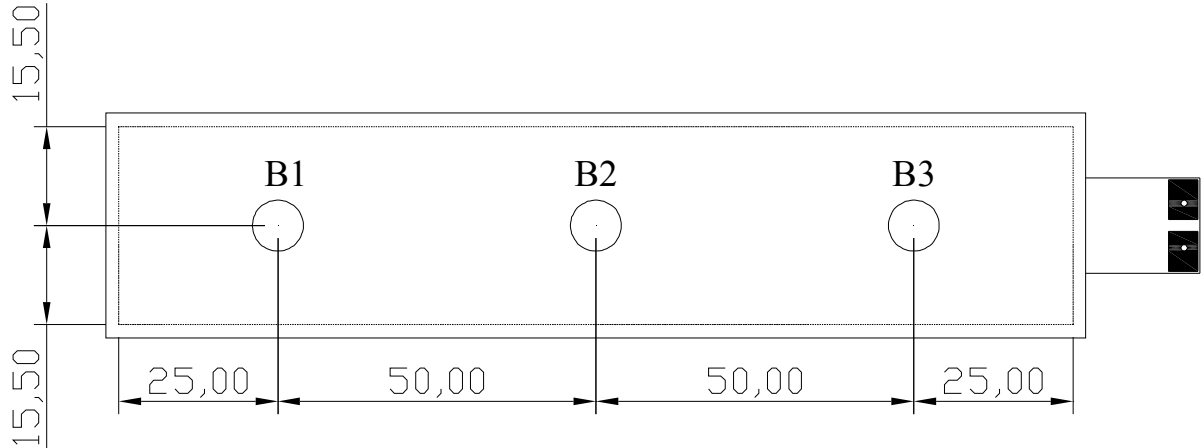
NOTES: (1) The test equipment is "TOPCON"BM-7 . Field (θ) = 1°

(2) The "TOPCON"BM-7 test position of luminous intensity is B1~B3.

★3. The "TOPCON"BM-7 test

$$\text{Luminous Uniformity} = \frac{B(\text{MIN.})}{B(\text{MAX.})} \times 100\%$$

The test equipment is "TOPCON"BM-7



TEST CONDITIONS : VF =4.2V , If = 600mA Ta=25°C

(1) The test equipment is "TOPCON"BM-7 Field (θ) =1° =0.2° =0.1

NO	VF	IF (mA)	Location(CD/m ²)				MAX CD/m ²	AVG CD/m ²	MIN CD/m ²	均匀度 %
			B1	B2	B3					
1	4.2	600	325.0	349.0	348.0		349.0	340.7	325.0	93
2	4.2	600	345.0	364.0	356.0		364.0	355.0	345.0	95
3	4.2	600	325.0	353.0	352.0		353.0	343.3	325.0	92
4	4.2	600	306.0	332.0	320.0		332.0	319.3	306.0	92
5	4.2	600	313.0	335.0	324.0		335.0	324.0	313.0	93

Sulfur-sensitive

- I There is silver-plated metal part on the inner/outer side of the outer package.
If exposed to the condition with corrosive gas, the silver plating surface may go bad, which will affect soldering strength and optical properties. Therefore, after opening it must be kept in a sealed container, etc.**
- I Materials contain sulfur component (gasket, adhesive, etc.) may have bad effects on the surface of the coating, so please do not use such materials in the product.**
- I In cardboard boxes and rubber, even in the atmosphere may contain minute amount of corrosive gases; In addition, the resin material may also contain halogen which has a bad effect on the surface of the coating.**
- I Even if the soldering installation and product assembly finished, by the effect of corrosive gas generated by relative materials of LED and external injected, the coating surface may go bad, so it is necessary to design the product taking into account the above factors.**
- I If requires, it is best to use a silicone washer, but be aware that low molecular silicone may cause the product poor contact.**
- I Keep the product in location where has less temperature change, because moisture condensation would be generated under a condition of strong temperature change.**

DISCLAIMER

- 1. Our department reserves the right(s) on the adjustment of product material mix for the specification.**
- 2.The product meets our department published specification for a period of twelve (12) months from date of shipment.**
- 3.The graphs shown in this datasheet are representing typical data only and do not show guaranteed values.**
- 4.When using this product, please observe the absolute maximum ratings and the instructions for using outlined in these specification sheets. Our department assumes no responsibility for any damage resulting from the use of the product which does not comply with the absolute maximum ratings and the instructions included in these specification sheets.**
- 5.These specification sheets include materials protected under copyright of our department.
Reproduction in any form is prohibited without obtaining our department's prior consent.**
- 6.This product is not intended to be used for military, aircraft, automotive, medical, life sustaining or life saving applications or any other application which can result in human injury or death. Please contact authorized our department sales agent for special application request.**