



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

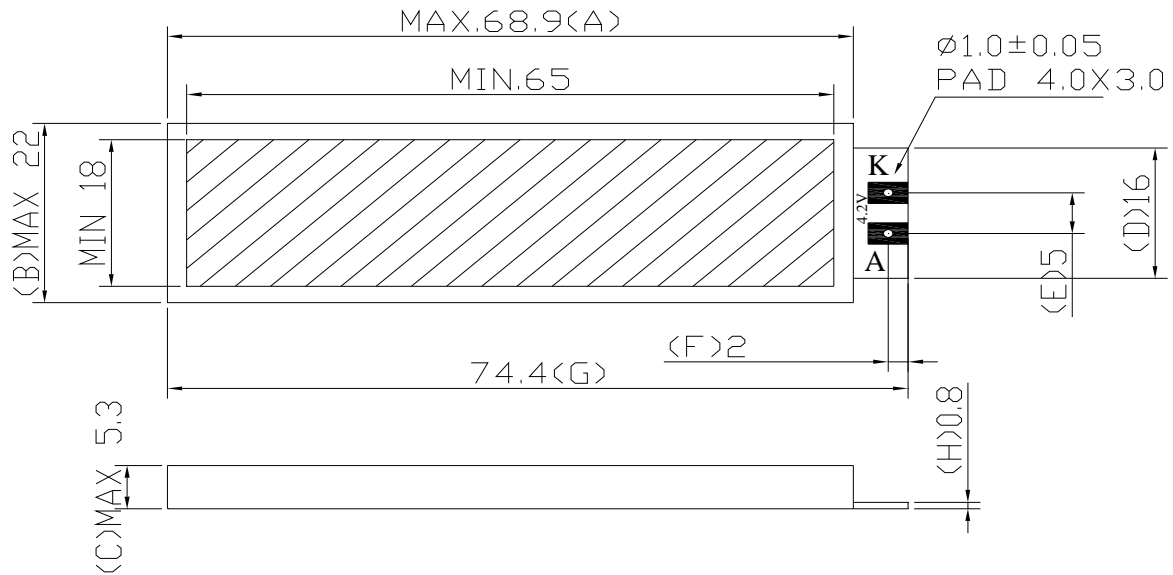
*PART NO. : MTBL3L11-UYG*

**LED BACKLIGHT**



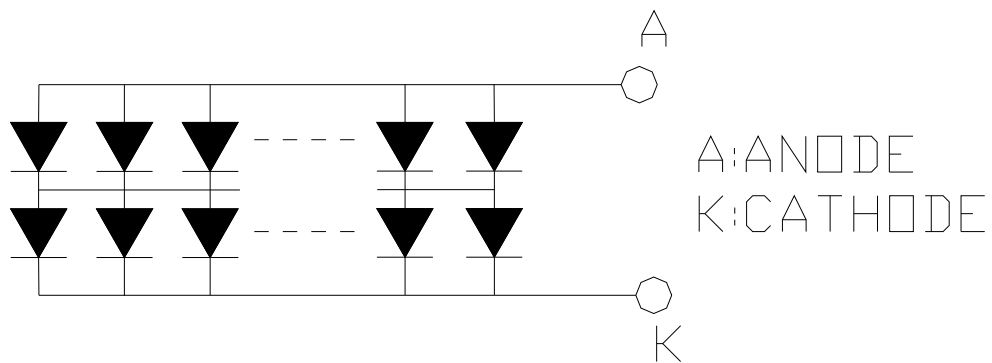
**ATTENTION**  
**OBSERVE PRECAUTION**  
**FOR HANDLING**  
**ELECTRO STATIC**  
**SENSITIVE**  
**DEVICES**

**Dimensions**



- 1.All dimensions are in millimeters..
2. Tolerance is ±0.20mm unless otherwise noted.

**Internal Circuit Diagram**



LED NUMBERS: 13X2=26

**Description**

Part No.	LED Chip	
	Material	Emitting Color
MTBL3L11-UYG	GaP/GaP	Yellow Green

**Absolute Maximum Ratings at Ta=25 °C**

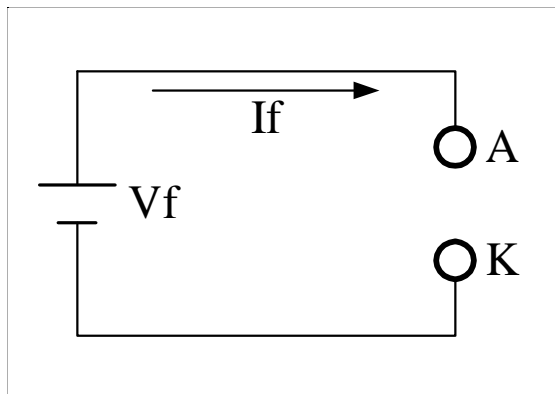
Parameter	Symbol	Rating	Unit
Power Dissipation	P <sub>D</sub>	1.056	W
Pulse Current(1/10Duty Cycle,0.1ms Pulse Width.)	I <sub>FP</sub>	100	mA
Forward Current	I <sub>F</sub>	260	mA
Reverse (Leakage)Current	I <sub>r</sub>	130	uA
Reverse Voltage	V <sub>R</sub>	5	V
Operating Temperature Range	T <sub>opr.</sub>	-20 to +70	°C
Storage Temperature Range	T <sub>stg.</sub>	-30 to +80	°C
Soldering Iron Temp.(1.6mm from seating plane)		350 for 3s MAX.	°C

**Electrical and Optical Characteristics:**

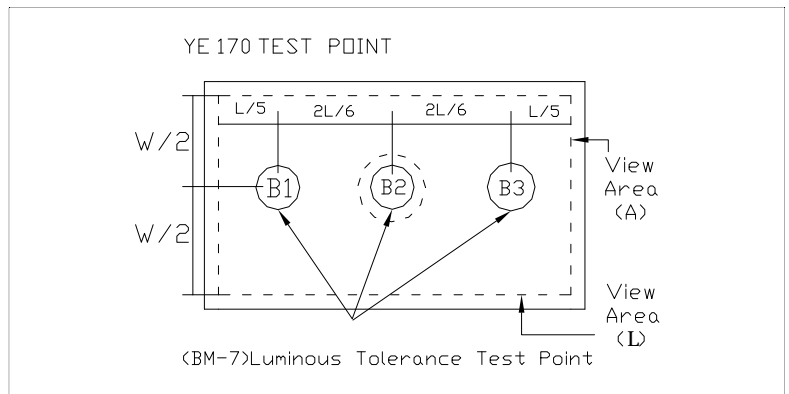
Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Luminous Intensity	Iv	If=130mA	150	175	-	cd/m <sup>2</sup>
Forward Voltage	Vf	If=130mA	-	4.1	4.4	V
Luminous Tolerance	-	If=130mA	70	-	-	%
Peak Wavelength	λd	IF=20mA/per chip	570	573	575	nm
Reverse Current Per Chip (Leakage Current Per Chip)	Ir	Vr=5V	-	-	10	uA
Spectrum Line Halfwidth	Δλ	IF=20mA/per chip	-	30	-	nm

**Remark**

**★1. Testing Method**



**★2. Measured Method**



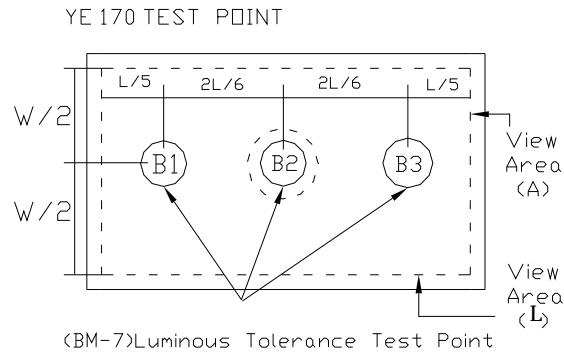
(1) The test equipment is "TOPCON"BM-7 . Field (θ)  = 2°  = 1°  = 0.2°

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

**★3. The "TOPCON"BM-7 test**

Position of luminous Uniformity = 
$$\frac{B(\text{MIN})}{B(\text{MAX})} \times 100\%$$

The test equipment is "TOPCON"BM-7



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

NO	VF (V)	IF (mA)	Location(CD/m <sup>2</sup> )						AVG	Uniformity (%)
			B1	B2	B3	B4	B5	B6		
1	4.17	130	196	202	185				196.3	92
2	4.15	130	234	240	223				232.3	93
3	4.16	130	205	241	231				225.7	85
4	4.15	130	198	203	189				196.7	93
5	4.14	130	201	225	197				207.7	88