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SPECIFICATION

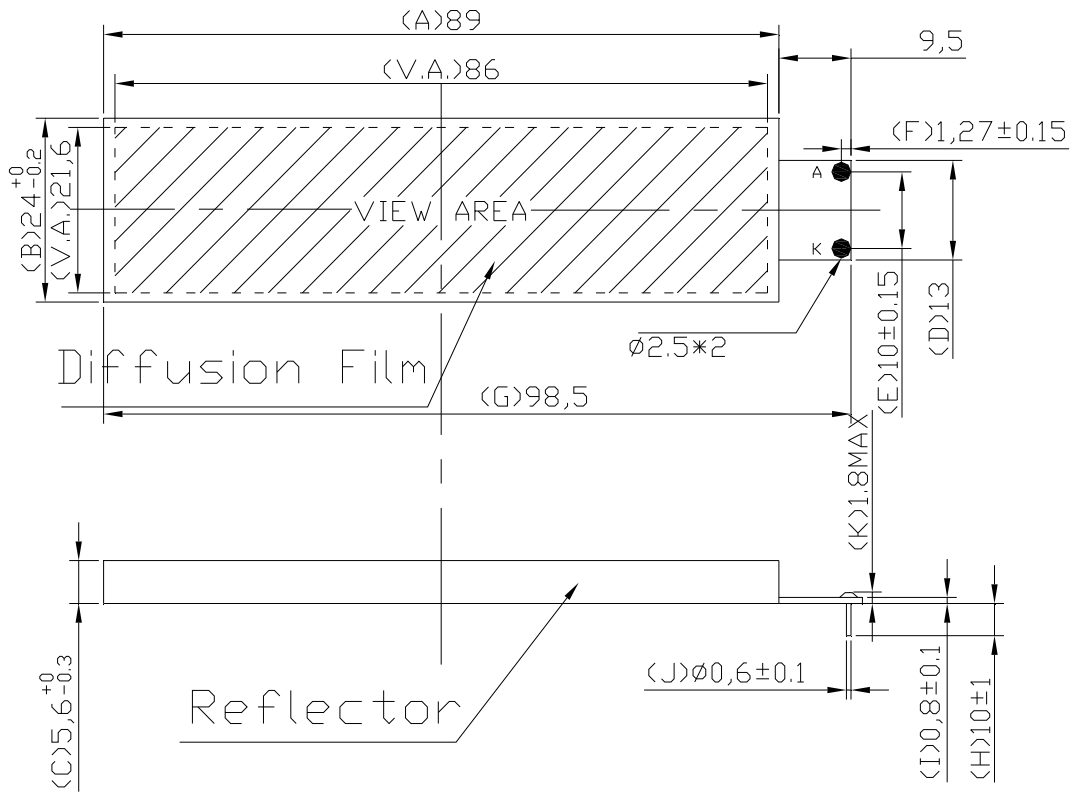
PART NO. : MTBL3Q11-UYG

LED BACKLIGHT



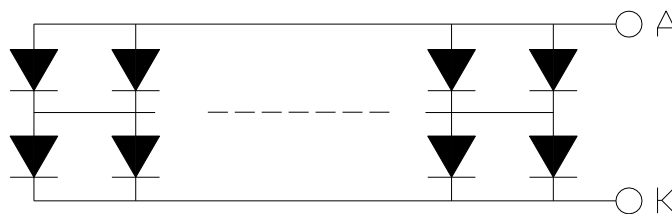
ATTENTION
OBSERVE PRECAUTION
FOR HANDLING
ELECTRO STATIC
SENSITIVE
DEVICES

Dimensions



1. All dimensions are in millimeters..
2. Tolerance is $\pm 0.30\text{mm}$ unless otherwise noted.

Internal Circuit Diagram



LED NUMBERS: 2X21=42
A: ANODE / K: CATHODE

Description

Part No.	LED Chip	
	Material	Emitting Color
MTBL3Q11-UYG	GaP/GaP	Yellow Green

Absolute Maximum Ratings at Ta=25 °C

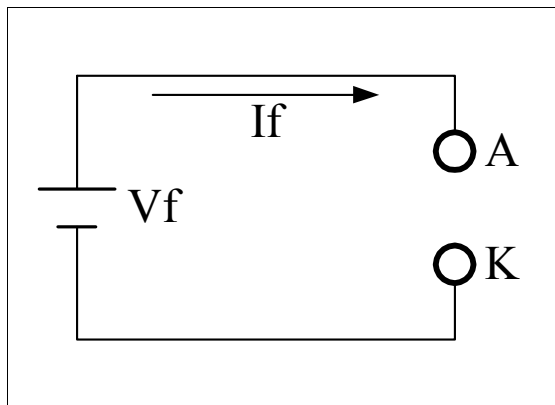
Parameter	Symbol	Rating	Unit
Power Dissipation	PD	2.1	W
Pulse Current(1/10Duty Cycle,0.1ms Pulse Width.) Per Chip	IFP	100	mA
Forward Current	IF	420	mA
Reverse (Leakage)Current	Ir	2.1	mA
Reverse Voltage	VR	5	V
Operating Temperature Range	Topr.	-20 to +70	°C
Storage Temperature Range	Tstg.	-30 to +80	°C
Soldering Temperature.	Tsol.	Dip Soldering: 260°C for 5 sec. Hand Soldering: 350°C for 3 sec.	

Electrical and Optical Characteristics:

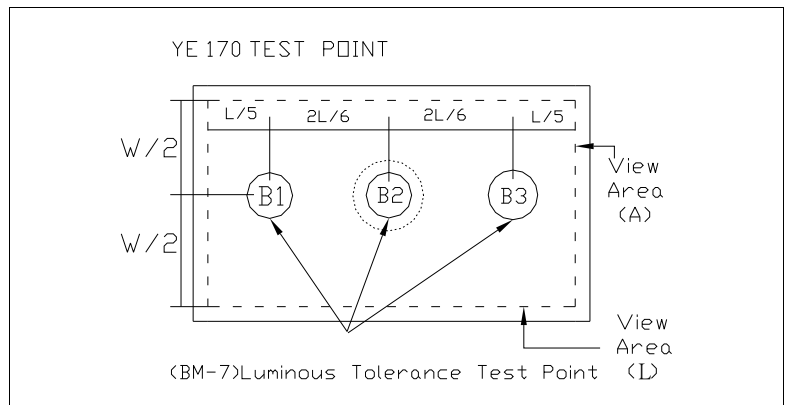
Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Luminous Intensity	Iv	If=210mA	120	170	-	cd/m ²
Forward Voltage	Vf	If=210mA	3.6	4.5	5	V
Luminous Tolerance	-	If=210mA	75	-	-	%
Peak Wavelength	λP	If=20mA/per chip	567	570	573	nm
Spectrum Line Halfwidth	Δλ	If=20mA/per chip	-	30	-	nm
Reverse Current Per Chip (Leakage Current Per Chip)	Ir	Vr=5V	-	-	2.1	mA
Chromaticity Coordinates	x	If=210mA	0.40	0.43	0.46	
	y		0.51	0.53	0.56	

Remark

★1. Testing Method



★2. Measured Method



(1) The test equipment is "TOPCON"BM-7 . Field (θ) $\square = 2^\circ$ $\square = 1^\circ$ $\square = 0.2^\circ$

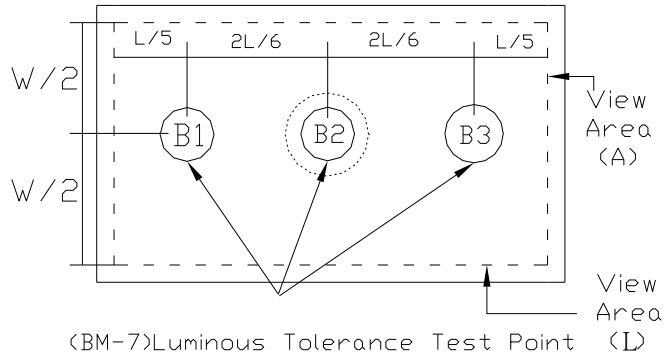
(2)The "TOPCON"BM-7 test position of luminous intensity is B1~B3.

★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

YE 170 TEST POINT



(BM-7)Luminous Tolerance Test Point (L)

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

NO	If (mA)	VF (V)	Location(CD/m ²)					AVG	Uniormity (%)
			B1	B2	B3	B4	B5		
1	210	4.13	218	220	194			210.7	88
2	210	4.14	212	227	209			216.0	92
3	210	4.15	215	237	221			224.3	91
4	210	4.13	236	235	218			229.7	92
5	210	4.14	216	213	202			210.3	94

(2) Color Coordinate: TOPCON BM-7 , Field (θ) =1° =0.2° =0.1°

Location(X/Y)

NO	1	2	3	4	5	AVG
X	0.4362	0.4370	0.4361	0.4363	0.4357	0.4362
Y	0.5591	0.5589	0.5595	0.5588	0.5591	0.5595