

DUAL COLOR INDICATOR LAMP

T-1 3/4 PACKAGE SOLID STATE LAMP

MVL-504B3A

Description

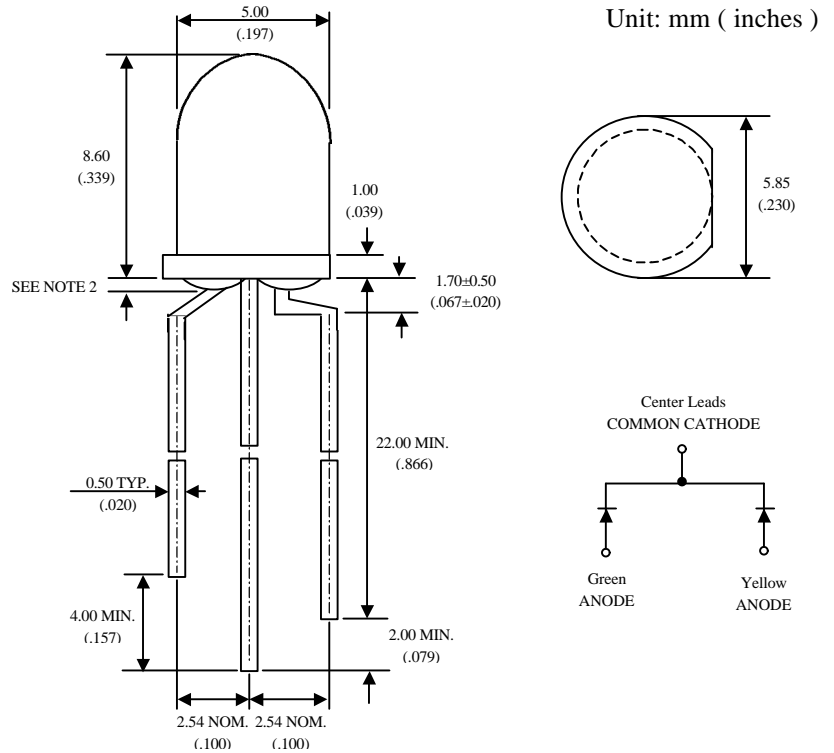
The MVL-504B3A is a water clear narrow viewing angle, dual chips, utilizing Gallium Arsenide Phosphide on Gallium Phosphide yellow light emitting diode and Gallium Phosphide on Gallium Phosphide green light emitting diode.

The green and yellow operating independently of each other with a common cathode.

Features

- Green and yellow chips are matched for uniform light output.
- Long life-solid state reliability.
- Low power consumption / I.C. compatible

Package Dimensions



Notes :

1. Tolerance is ± 0.25 mm (.010") unless otherwise noted.
2. Protruded resin under flange is 0.8 mm (.031") max.
3. Lead spacing is measured where the leads emerge from the package.

Absolute Maximum Ratings

@ $T_A=25$

Parameter	Symbol	Maximum Rating		Unit
		GREEN	YELLOW	
Power Dissipation	P_{ad}	100	60	mW
Peak Forward Current (1/10 Duty Cycle 0.1ms pulse width)	I_{pf}	120	80	mA
Continuous Forward Current	I_{af}	30	20	mA
Derating Linear From 50		0.4	0.25	mA/
Reverse Voltage	V_R	5	5	V
Operating Temperature Range	T_{opr}	-55 to + 100		
Storage Temperature Range	T_{stg}	-55 to + 100		
Lead Soldering Temperature : 1.6 mm from body at 260 for 3 seconds				

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Optical-Electrical Characteristics

@ T_A=25

Parameter	Test Conditions	Symbol		Min .	Typ .	Max .	Unit .
Luminous Intensity	I _F =20mA	I _V	GREEN/YELLOW	30/20	90/60	-	mcd
Forward Voltage	I _F =20mA	V _F	GREEN/YELLOW	-	2.1/2.1	2.8/2.8	V
Reverse Current	V _R =5V	I _R	GREEN/YELLOW	-	-	100/100	μA
Peak Emission Wavelength	I _F =20mA	λ _p	GREEN/YELLOW	-	565/585	-	nm
Spectral Line Half Width	I _F =20mA	Δλ	GREEN/YELLOW	-	30/35	-	nm
Viewing Angle	I _F =20mA	2θ _{1/2}	GREEN/YELLOW	-	20/20	-	deg.

Typical Optical-Electrical Characteristic Curves

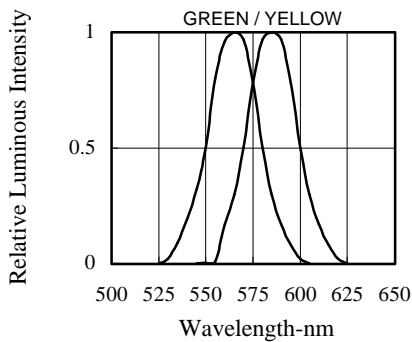


FIG.1 RELATIVE LUMINOUS INTENSITY VS. WAVELENGTH

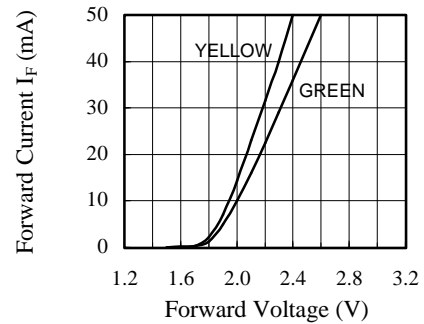


FIG.2 FORWARD CURRENT VS. FORWARD VOLTAGE

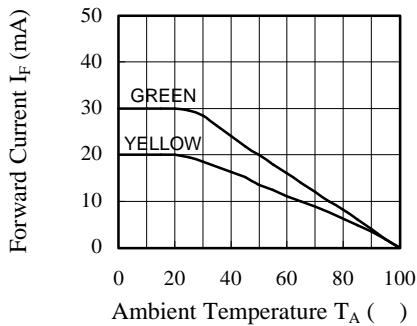


FIG.3 FORWARD CURRENT VS. AMBIENT TEMPERATURE

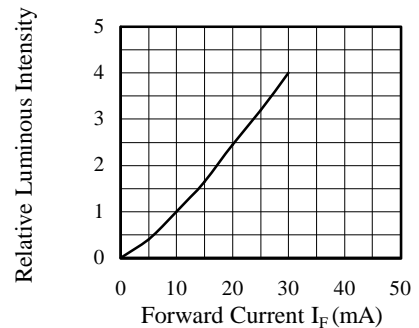


FIG.4 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

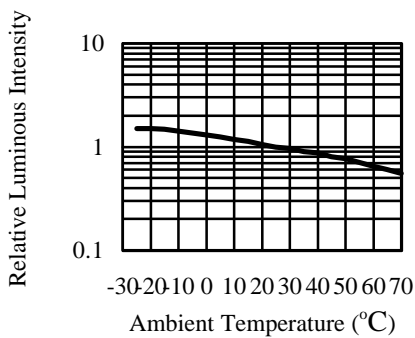


Fig 5. RELATIVE LUMINOUS INTENSITY VS. AMBIENT TEMPERATURE

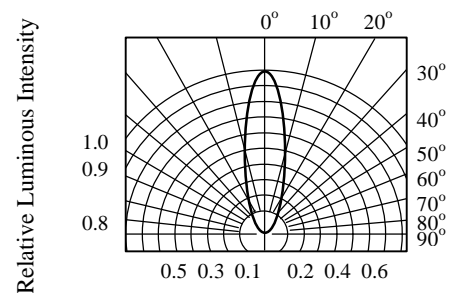


FIG.5 RADIATION DIAGRAM