DUAL COLOR INDICATOR LAMP
T-1 3/4 PACKAGE SOLID STATE LAMP **MVL-504B6A**

Description

The MVL-504B6A is a water clear narrow viewing angle, dual chips, utilizing Gallium Phosphide on Gallium Phosphide green light emitting diode and Aluminum Gallium Arsenide on Gallium Arsenide red light emitting diode.

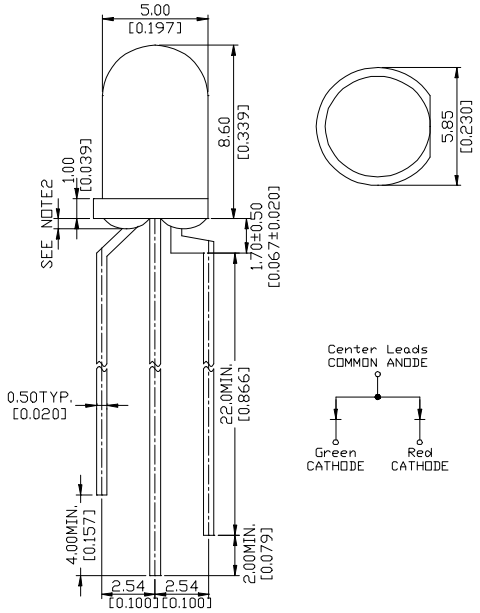
The green and red operating independently of each other with a common anode.

Features

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

Package Dimensions

Unit: mm (inches)



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°C

Parameter	Symbol	Maximum Rating		Unit
		GREEN	RED	
Power Dissipation	P_{ad}	100	100	mW
Peak Forward Current(1/10 Duty Cycle 0.1ms pulse width)	I_{pf}	120	120	mA
Continuous Forward Current	I_{af}	30	40	mA
Derating Linear From 50°C		0.4	0.5	mA/°C
Reverse Voltage	V_R	5	5	V
Operating Temperature Range	T_{opr}	-55°C to + 100°C		
Storage Temperature Range	T_{stg}	-55°C to + 100°C		
Lead Soldering Temperature : 1.6 mm from body at 260°C for 3 seconds				

Optical-Electrical Characteristics

@ T_A=25°C

Parameter	Test Conditions	Symbol		Min .	Typ .	Max .	Unit .
Luminous Intensity	I_F=20mA	I_V	GREEN/RED	35/100	100/300	-	mcd
Forward Voltage	I_F=20mA	V_F	GREEN/RED	-	2.1/1.8	2.8/2.6	V
Reverse Current	V_R=5V	I_R	GREEN/RED	-	-	100/100	μA
Peak Emission Wavelength	I_F=20mA	λ_p	GREEN/RED	-	565/660	-	nm
Spectral Line Half Width	I_F=20mA	$\Delta\lambda$	GREEN/RED	-	30/20	-	nm
Viewing Angle	I_F=20mA	$2\theta_{1/2}$	GREEN/RED	-	20/20	-	deg.

Typical Optical-Electrical Characteristic Curves

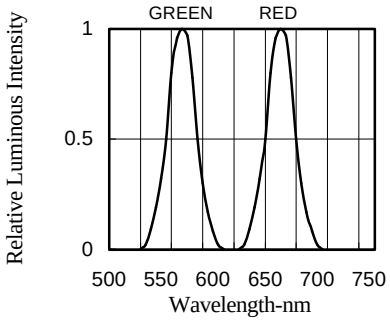


FIG.1 RELATIVE LUMINOUS INTENSITY VS. WAVELENGTH

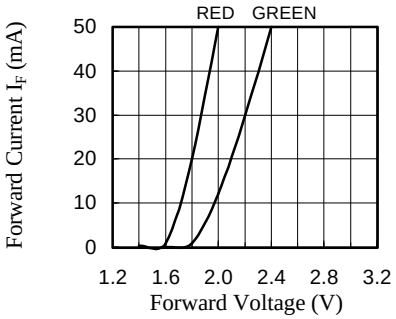


FIG.2 FORWARD CURRENT VS. FORWARD VOLTAGE

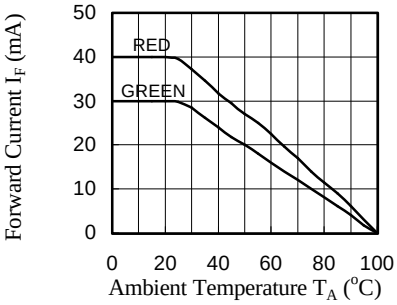


FIG.3 FORWARD CURRENT VS. AMBIENT TEMPERATURE

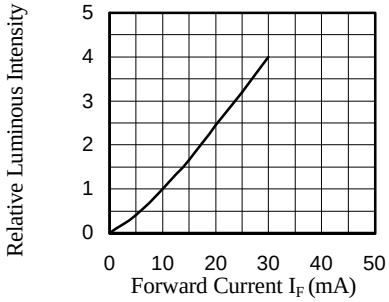


FIG.4 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

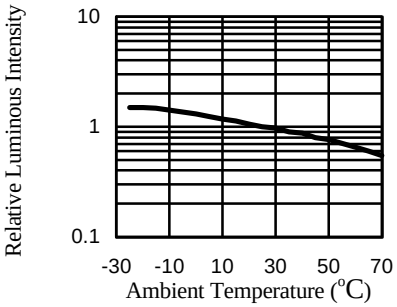


Fig 5. RELATIVE LUMINOUS INTENSITY VS. AMBIENT TEMPERATURE

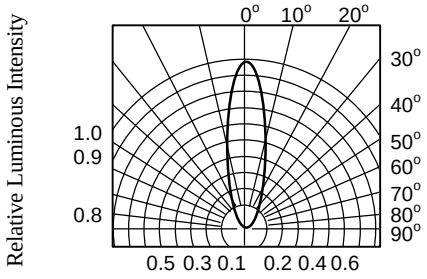


FIG.5 RADIATION DIAGRAM