

T-1 3/4 (ϕ 5mm) PACKAGE STANDARD LED LAMPs

MVL-511HR

Description

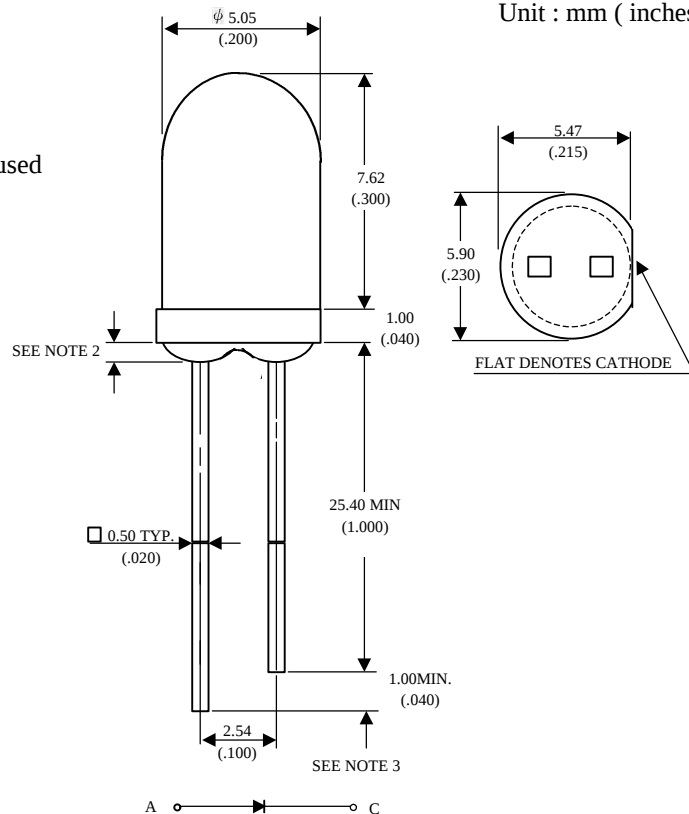
The MVL-511HR, lamp is made with
GaAsP/on GaP red light emitting diode
Phosphide light emitting diode.
The package is T-1 3/4 (ϕ 5mm) standard red diffused
plastic lens type .

Features

- High Intensity.
- PoPular T-13/4 diameter package.
- Selected minimum intensities.
- General purpose leads .
- Reliable and rugged.

Package Dimensions

Unit : mm (inches)



Notes :

1. Tolerance is ± 0.25 mm (.010") unless otherwise noted.
2. Protruded resin under flange is 1.5 mm (.059") max.
3. Lead spacing is measured where the leads emerge from the package.

Absolute Maximum Ratings

@ $T_A = 25^\circ\text{C}$

Parameter	Symbol	Maximum Rating	Unit
Power Dissipation	P _{ad}	100	mW
Peak Forward Current(1/10 Duty Cycle.1ms pulse width)	I _{pf}	120	mA
Continuous Forward Current	I _{af}	30	mA
Derating Linear From 25°C		0.4	mA/
Reverse Voltage	V _R	5	V
Operating Temperature Range	Topr	-55 °Cto +100°C	
Storage Temperature Range	Tstg	-55 °Cto +100°C	
Lead Soldering Temperature (1.6 mm from body) for 3 seconds at 260 °C			

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Optical-Electrical Characteristics

@ $T_A=25^{\circ}\text{C}$

Parameter	Test Conditions	Symbol	Min .	Typ .	Max .	Unit .
Luminous Intensity	$I_F=10\text{mA}$	I_V	7	20	-	mcd
Forward Voltage	$I_F=20\text{mA}$	V_F	-	2.0	2.8	V
Reverse Current	$V_R=5\text{V}$	I_R	-	-	100	μA
Wavelength	$I_F=20\text{mA}$	λ_p	-	640	-	nm
Spectral Line Half Width	$I_F=20\text{mA}$	$\Delta\lambda$	-	40	-	nm
Viewing Angle	$I_F=20\text{mA}$	$2\theta_{1/2}$	-	50	-	deg.

Typical Optical-Electrical Characteristic Curves

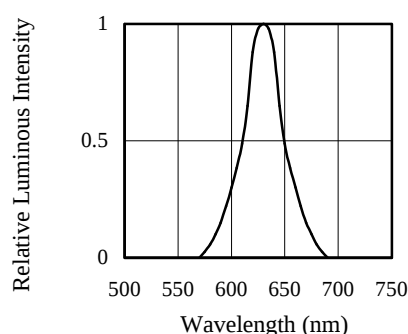


FIG.1 RELATIVE LUMINOUS INTENSITY VS. WAVELENGTH

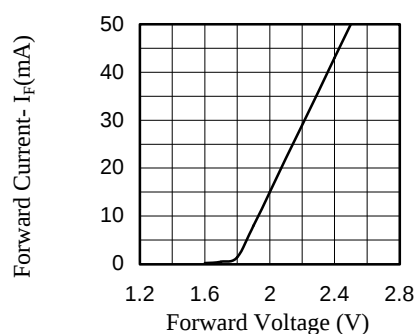


FIG.2 FORWARD CURRENT VS. FORWARD VOLTAGE

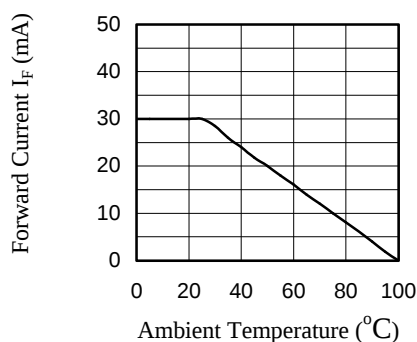


FIG.3 FORWARD CURRENT VS. AMBIENT TEMPERATURE

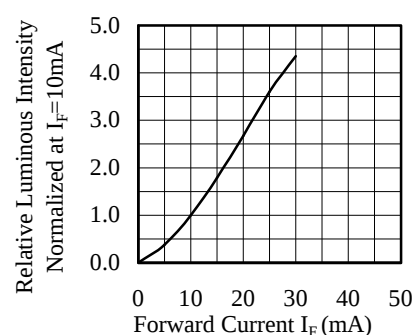


FIG.4 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

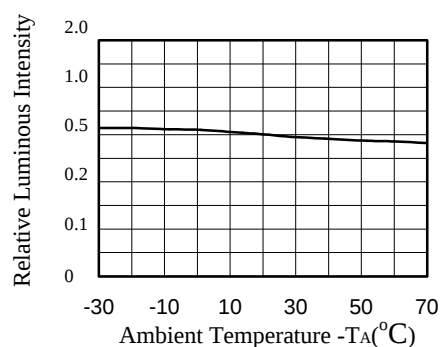


FIG.5 LUMINOUS INTENSITY VS. AMBIENT TEMPERATURE

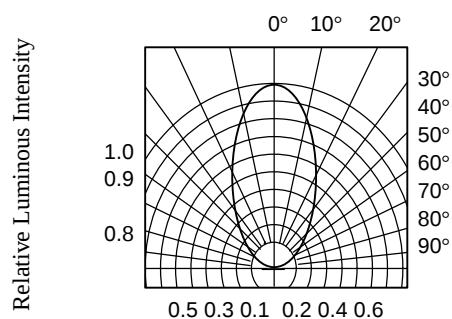


FIG.6 RADIATION DIAGRAM