

T-1 3/4 (f5mm) HIGH POWER AlInGaP LED LAMPs

MVL-534SO

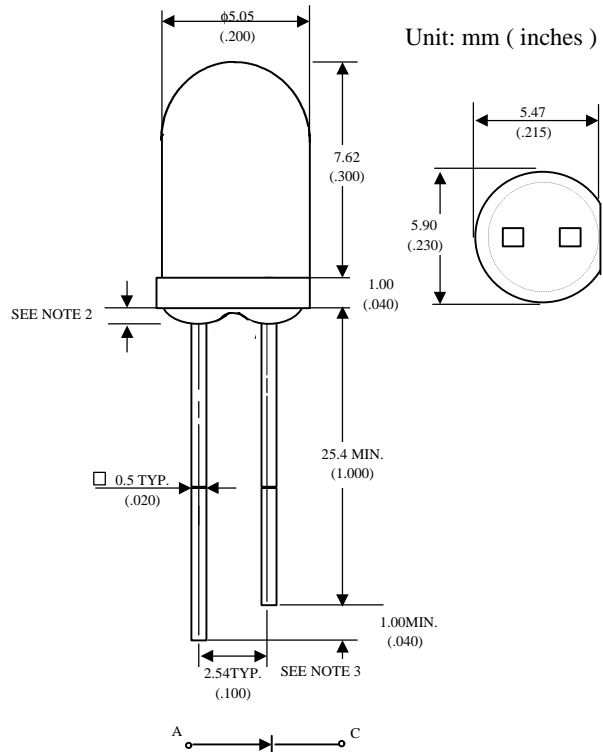
Description

The MVL-534SO , utilizes the latest absorbing substrate aluminum indium gallium phosphide (AlInGaP) LED technology. This LED material has outstanding light output efficiency over a wide range of drive current. The package is T-1 3/4(5mm) water clear standard type.

Features

- Ultra - brightness
- Low power consumption
- TTL compatible
- Reliable

Package Dimensions



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}	125	mW
Peak Forward Current(1/10 Duty Cycle 100 μ s pulse)	I_{pf}	200	mA
Transient Forward Current (10 μ sec Pulse)	I_{tr}	500	mA
Continuous Forward Current	I_{af}	50	mA
Reverse Voltage	V_R	5	V
Operating Temperature Range	T_{opr}	-40 $^\circ\text{C}$ to +100 $^\circ\text{C}$	
Storage Temperature Range	T_{stg}	-40 $^\circ\text{C}$ to +100 $^\circ\text{C}$	
Lead Soldering Temperature 1.6 mm from body for 5 seconds at 260 $^\circ\text{C}$			



Unity Opto Technology Co., Ltd.

09/05/2000

Optical-Electrical Characteristics

Parameter	Test Conditions	Symbol	Min.	Typ .	Max .	Unit .
Luminous Intensity	$I_F=20\text{mA}$	I_V	700	2400	-	mcd
Forward Voltage	$I_F=20\text{mA}$	V_F	-	2.0	2.6	V
Reverse Current	$V_R=5\text{V}$	I_R	-	-	100	μA
Peak Emission Wavelength	$I_F=20\text{mA}$	λ_d	-	610	-	nm
Spectral Line Half Width	$I_F=20\text{mA}$	$\Delta\lambda$	-	13	-	nm
Viewing Angle	$I_F=20\text{mA}$	$2\theta_{1/2}$	-	23	-	deg.

Typical Optical-Electrical Characteristic Curves

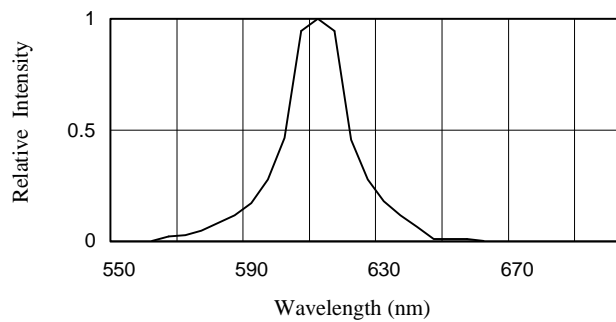


FIG.1 SPECTRAL DISTRIBUTION

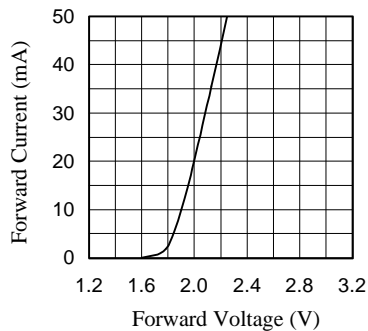


FIG.2 FORWARD CURRENT VS. FORWARD VOLTAGE

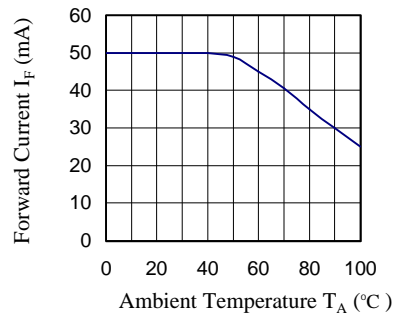


FIG.3 FORWARD CURRENT VS. AMBIENT TEMPERATURE

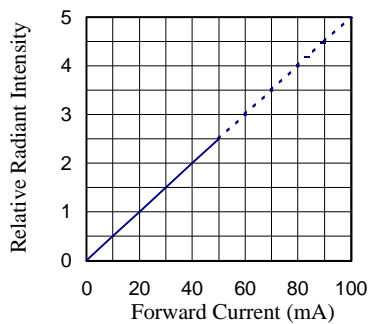


FIG.4 RELATIVE RADIANT INTENSITY VS. FORWARD CURRENT

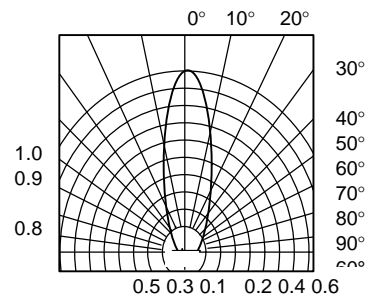


FIG.5 RADIATION DIAGRAM