Flat displays

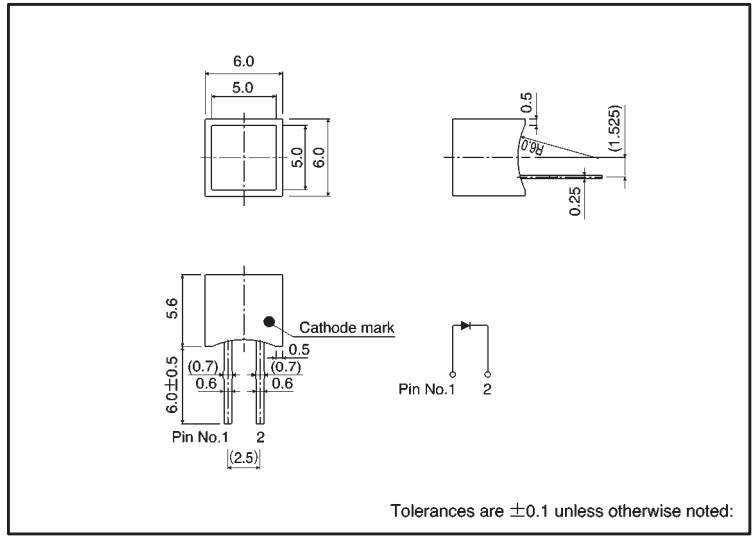
LD-101 Series

The LD-101 series were designed in response to the need for small, flat displays. These are single-chip, flat displays with high luminance.

●Features

1) Planar emission from a single chip.
2) Thin outer casing, multiple units can be coupled together.

●External dimensions (Units: mm)



●Selection guide

Emitting color	Red	Orange	Yellow	Green
Type	LD-101VR	LD-101DU	LD-101YY	LD-101MG

●Absolute maximum ratings (Ta = 25°C)

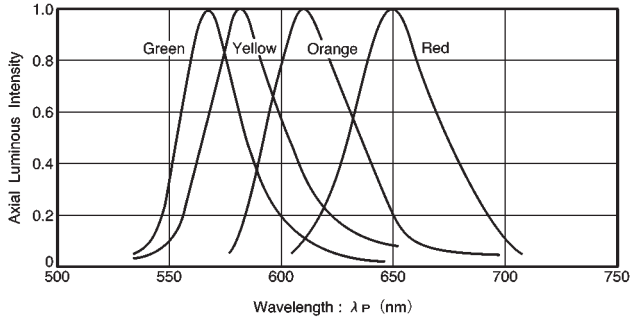
Parameter	Symbol	Red	LD-101VR	Orange	LD-101DU	Yellow	LD-101YY	Green	LD-101MG	Unit
Power dissipation	P_D	60		60		60		75		mW
Forward current	I_F	20		20		20		25		mA
Peak forward current	I_{FP}	60*		60*		60*		60*		mA
Reverse voltage	V_R	3		3		3		3		V
Operating temperature	Topr	−25～+75								℃
Storage temperature	Tstg	−30～+85								℃

* Pulse width 1ms duty 1 / 5

●Electrical and optical characteristics (Ta = 25°C)

Parameter	Symbol	Conditions	Red			Orange			Yellow			Green			Unit
			Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	
Forward voltage	V_F	I_F=10mA	—	2.0	2.8	—	2.0	2.8	—	2.1	2.8	—	2.1	2.8	V
Reverse current	I_R	V_R=3V	—	—	10	—	—	10	—	—	10	—	—	10	μA
Peak wavelength	λ_P	I_F=10mA	—	650	—	—	610	—	—	585	—	—	563	—	nm
Spectral line half width	$\Delta\lambda$	I_F=10mA	—	40	—	—	40	—	—	40	—	—	40	—	nm

●Luminous intensity vs. wavelength



●Luminous intensity

Color	Type	Min.	Typ.	Max.	Unit
Red	LD-101VR	0.9	2.5	—	mcd
Orange	LD-101DU	0.9	2.5	—	mcd
Yellow	LD-101YY	0.9	2.5	—	mcd
Green	LD-101MG	1.4	4.0	—	mcd

Note: Measured at I_F = 10mA

●Operation notes

When forming leads, the bend should be at least 2 mm from the base of the package. Solder after forming the leads, and ensure that the inside of the LED is not subjected to mechanical stress while it is hot.