Large flat displays

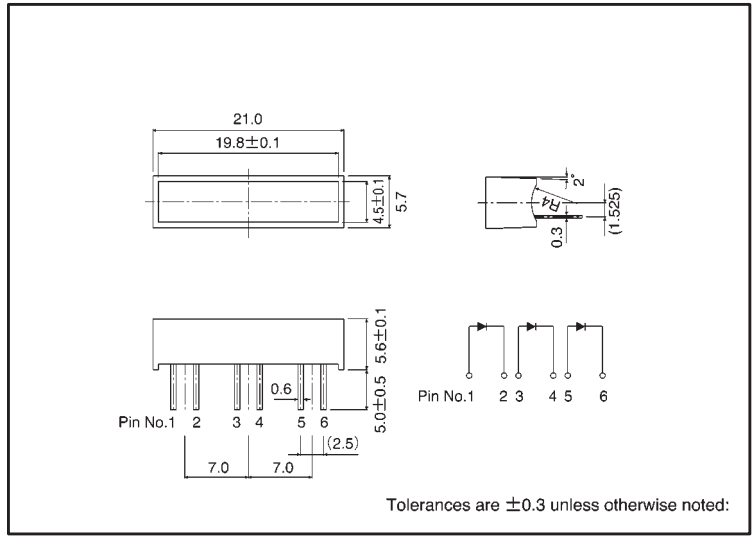
LD-701 Series

The LD-701 series were designed in response to the need for large, flat displays. These are three-chip, flat displays with high luminance.

●Features

1) Three independent chip elements.
2) Large 4.5 × 19.8 mm emission area.
3) Thin outer casing, multiple units can be coupled together.
4) Four colors: red, orange, yellow and green.

●External dimensions (Units: mm)



●Selection guide

Emitting color	Red	Orange	Yellow	Green
Type	LD-701VR	LD-701DU	LD-701YY	LD-701MG

●Absolute maximum ratings (Ta = 25°C)

Parameter	Symbol	Red	LD-701VR	Orange	LD-701DU	Yellow	LD-701YY	Green	LD-701MG	Unit
Power dissipation	P_D	180		180		180		225		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～+85								℃
Storage temperature	Tstg	−30～+100								℃

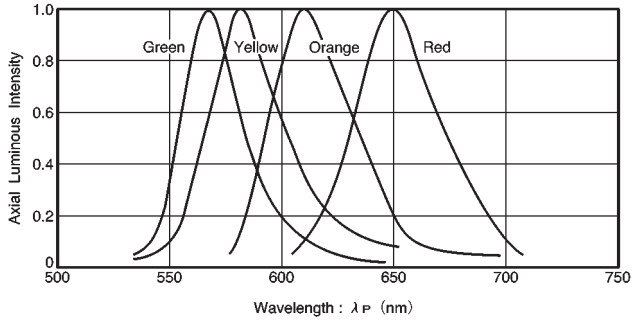
* Pulse width 1ms duty 1 / 5

●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	3.0	—	2.0	3.0	—	2.1	3.0	—	2.1	3.0	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

Electrical and optical values are guaranteed values per element.

●Luminous intensity vs. wavelength



●Luminous intensity

Color	Type	Min.	Typ.	Max.	Unit
Red	LD-701VR	3.6	10	—	mcd
Orange	LD-701DU	3.6	10	—	mcd
Yellow	LD-701YY	2.2	6.3	—	mcd
Green	LD-701MG	3.6	10	—	mcd

Note 1: Measured at I_F = 10mA
Note 2: Current passes through all elements.

●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.