LED displays

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 x 19.8 mm emission area.
3) Thin outer casing, multiple units can be coupled together.
4) Four colors are available: red, orange, yellow and green.

●**External dimensions** (Units : mm)

Tolerances are ±0.3 unless otherwise noted:
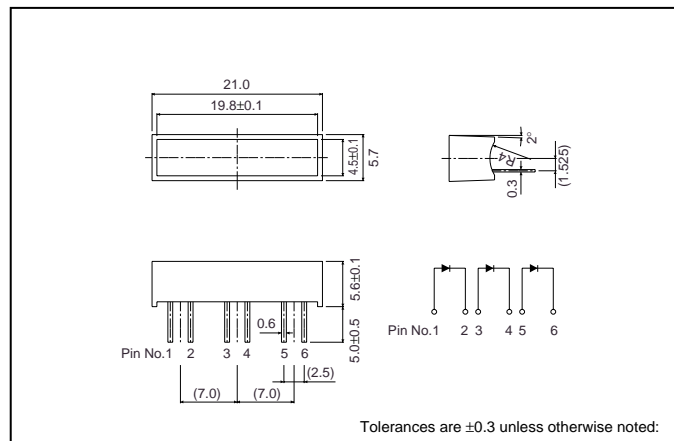
●**Selection guide**

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

∗Order-based production.

●**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~+75							°C
Storage temperature	Tstg		−30~+85							°C

∗ Pulse width 1ms duty 1 / 5

ROHM

LED displays

● **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**
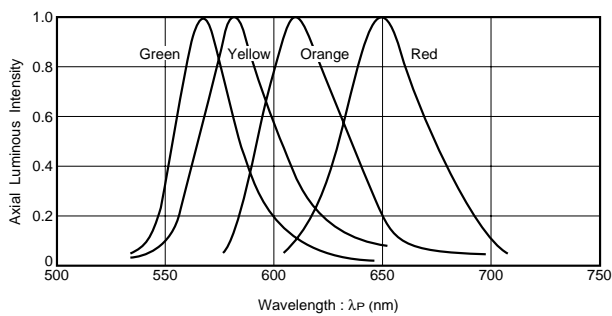
● **Luminous intensity**

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 2mm 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.