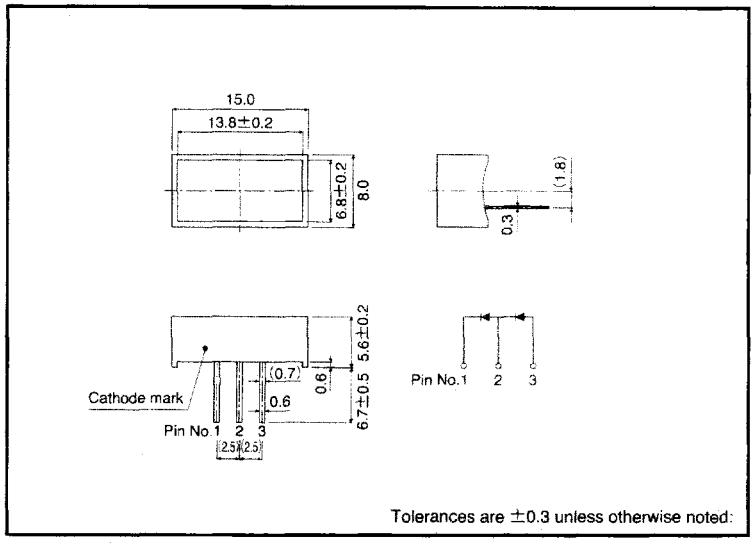
Flat displays
LD-603 Series

The LD-603 series were designed in response to the need for large, flat displays. These are two-chip, flat displays with high luminance.

●Features

1) 6.8 × 13.8 mm planar emission from two chips connected in series.
2) High luminance, uniform planar emission.
3) Thin outer casing, multiple units can be coupled together.
4) Four colors are available : red, orange, yellow and green.

●External dimensions (Unit: mm)



Tolerances are ±0.3 unless otherwise noted.

●Selection guide

Emitting color	Red	Orange	Yellow	Green
Type	LD-603VR	LD-603DU	LD-603YY	LD-603MG

●Absolute maximum ratings (Ta = 25℃)

Parameter	Symbol	Red	LD-603VR	Orange	LD-603DU	Yellow	LD-603YY	Green	LD-603MG	Unit
Power dissipation	P_D	120		120		120		150		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								℃

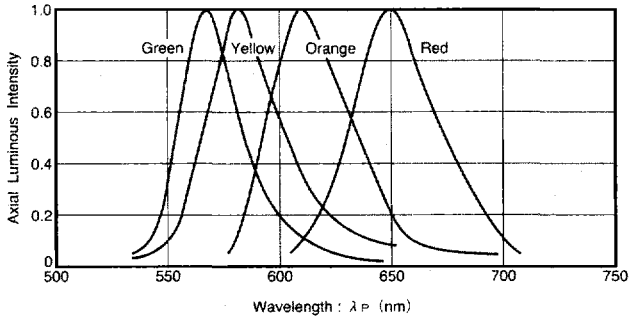
* Pulse width 1ms Duty 1/5

●Electrical and optical characteristics (Ta = 25℃)

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	—	4.0	5.6	—	4.0	5.6	—	4.2	5.6	—	4.2	5.6	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 segment.

●Luminous intensity vs. wavelength



●Luminous intensity

Color	Type	Min.	Typ.	Max.	Unit
Red	LD-603VR	1.4	4.0	—	mcd
Orange	LD-603DU	2.2	6.3	—	mcd
Yellow	LD-603YY	2.2	6.3	—	mcd
Green	LD-603MG	2.2	6.3	—	mcd

Note 1: Measured at I_F = 10 mA

Note 2: Current passes through 2 elements.

●Precautions

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