# Flat displays

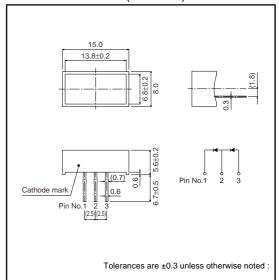
# **LD-603 Series**

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) 6.8×13.8mm 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 (Units : mm)



#### Selection guide

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

<sup>\*</sup> Order-based production.

#### ● Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Red	LD-603VR	Orange	LD-603DU	Yellow	LD-603YY	Green	LD-603MG	Unit
Power dissipation	P□	120		120		120		150		mW
Forward current	lF		20	20			20		mA	
Peak forward current	IFP		60*	60*		60*		60*		mA
Reverse voltage	VR		3		3 3		3	3		V
Operating temperature	Topr	-25~+75							°C	
Storage temperature	Tstg		-30~+85						°C	

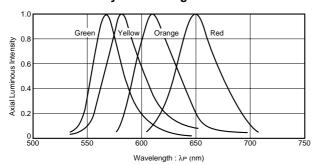
st Pulse width 1ms duty 1 / 5

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

Parameter Symbol	Curanha al		Red		Orange		Yellow			Green			Linit		
	Conditions	Min.	Тур.	Max.	Min.	Тур.	Max.	Min.	Тур.	Max.	Min.	Тур.	Max.	Unit	
Forward voltage	VF	I=10mA	-	4.0	5.6	-	4.0	5.6	_	4.2	5.6	-	4.2	5.6	V
Reverse current	lR	Vr=3V	_	_	10	_	_	10	-	_	10	_	_	10	μА
Peak wavelength	λР	I=10mA	_	650	_	-	610	_	_	585	_	_	563	-	nm
Spectral line half width	Δλ	I <sub>F</sub> =10mA	-	40	-	-	40	-	-	40	-	1	40	_	nm

Electrical and optical are guaranteed values per element.

# •Luminous intensity vs. wavelength



Luminous intensity

Color	Туре	Min.	Тур.	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 IF = 10mA

Note 2: Current passes through 2 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.