# High efficiency, three-digit numeric displays

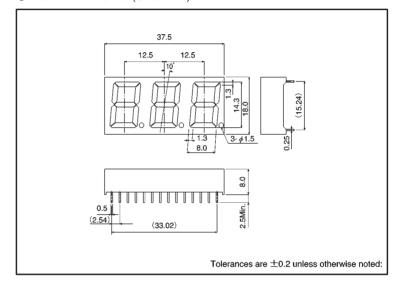
# **LB-603 FP Series**

The LB-603 FP series were designed to meet the need for multi-digit numeric displays. These LED numeric displays use GaAsP on GaP for the emitting material (with the exception of green) and are housed in an epoxy resin package. They are three-digit displays with a character height of 14.3 mm.

#### Features

- 1) Height of character: 14.3 mm.
- The package surface is painted black and the segments are colored the display color.
- 3) High efficiency reflectors are used to achieve a bright, clear display.

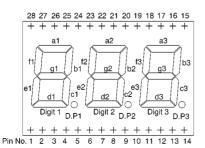
### External dimensions (Units: mm)



#### Selection guide

Emitting color Common	Red	Green		
Anode	LB-603VF	LB-603MF		
Cathode	LB-603VP	LB-603MP		

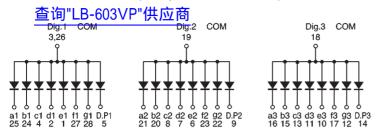
### Pin assignments



Pin No.	Function	Pin No.	Function
1	Segment "e1"	15	Segment "b3"
2	Segment "d1"	16	Segment "a3"
3	Digit 1 Common	17	Segment "f3"
4	Segment "c1"	18	Digit 3 Common
5	D.P1	19	Digit 2 Common
6	Segment "e2"	20	Segment "b2"
7	Segment "d2"	21	Segment "a2"
8	Segment "c2"	22	Segment "g2"
9	D.P2	23	Segment "f2"
10	Segment "e3"	24	Segment "b1"
11	Segment "d3"	25	Segment "a1"
12	Segment "g3"	26	Digit 1 Common
13	Segment "c3"	27	Segment "f1"
14	D.P3	28	Segment "g1"



## ●Internal circuit schematic (example of common anode)



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

Parameter	Cumbal	Red	Green	Unit	
	Symbol	LB-603VF / VP LB-603MF / MP		Offic	
Power dissipation	P□	960	1440	mW	
Power dissipation	P₂/ seg	40	60	mW	
Forward current	lF	15	20	mA	
Peak forward current	lfP	60*	60*	mA	
Reverse voltage	VR	3	3	V	
Operating temperature	Topr	<b>−25</b> ~ <b>+</b> 75		°C	
Storage temperature	Tstg	<b>−30~+85</b>		°C	

<sup>\*</sup> Pulse width 1ms duty 1 / 5

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

Parameter 5	Symbol	Conditions	Red			Green			Unit
			Min.	Тур.	Max.	Min.	Тур.	Max.	Offit
Forward voltage	VF	I=10mA	_	2.0	2.8	_	2.1	2.8	٧
Reverse current	lR	V <sub>R</sub> =3V	_	_	100	_	_	100	μΑ
Peak wavelength	λР	I=10mA	_	650	_	_	563	_	nm
Spectral line half width	Δλ	I=10mA	_	40	_	_	40	_	nm

ONot designed for radiation resistance.

### Luminous intensity

Color	λР	Туре	Min.	Тур.	Max.	Unit
Red 650	6EO	LB-603VF	5.6	16	_	mcd
	650	LB-603VP				
Green 563	500	LB-603MF	9	25	_	mcd
	563	LB-603MP				

Note: Measured at IF = 10mA

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  product described in this document are for reference only. Upon actual use, therefore, please request
  that specifications to be separately delivered.
- Application circuit diagrams and circuit constants contained herein are shown as examples of standard 查询"LB-603yrd deciding upon circuit constants in the set.
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