

High efficiency, two-digit numeric displays

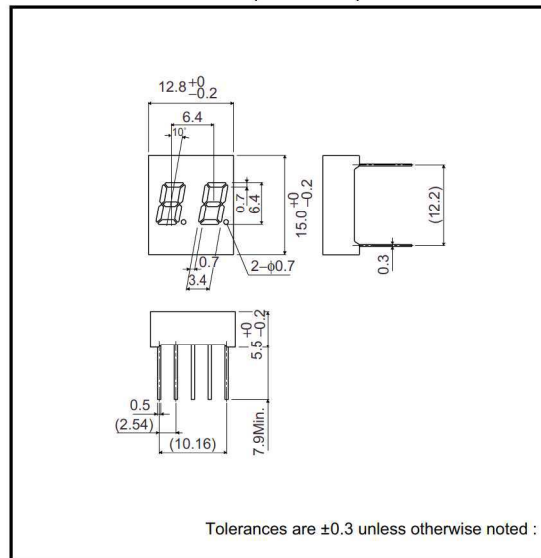
LB-202BL Series

The LB-202BL series are small, two-digit numeric displays with a character height of 6.4 mm. These displays can be combined with appropriate displays in the three-digit LB-203 BL series to form a multi-digit display with an equal pitch interval between characters.

●Features

- 1) Four colors are available: red, orange, yellow, and green.
- 2) Common anode and common cathode configurations are available.
- 3) Dynamic lighting system to minimize the number of pins.
- 4) The package surface is painted black and the segments are colored the display color.

●External Dimensions (Units: mm)

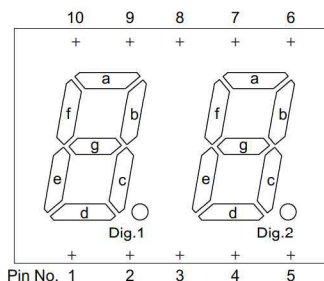


●Selection guide

Emitting color	Red	Orange	Yellow	Green
	Common			
Anode	LB-202VB	LB-202DB *	LB-202YB *	LB-202MB
Cathode	LB-202VL	LB-202DL *	LA-202YL *	LB-202ML

* Order-based production.

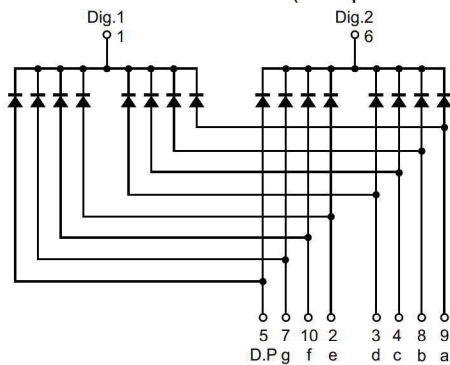
●Pin assignments



Pin No.	Function
1	Digit 1 Common
2	Segment "e"
3	Segment "d"
4	Segment "c"
5	D.P
6	Digit 2 Common
7	Segment "g"
8	Segment "b"
9	Segment "a"
10	Segment "f"

LED displays

● Internal circuit schematic (example of common cathode)



● Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Red	Orange	Yellow	Green	Unit
		LB-202VB / VL	LB-202DB / DL	LB-202YB / YL	LB-202MB / ML	
Power dissipation	P _d	640	640	640	640	mW
Power dissipation	P _D / seg	40	40	40	60	mW
Forward current	I _F	15	15	15	20	mA
Peak forward current	I _{FP}	60*	60*	60*	60*	mA
Reverse voltage	V _R	3	3	3	3	V
Operating temperature	T _{opr}	-25~+75				°C
Storage temperature	T _{stg}	-30~+85				°C

* 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	2.8	-	2.0	2.8	-	2.1	2.8	-	2.1	2.8	V
Reverse current	I _R	V _R =3V	-	-	100	-	-	100	-	-	100	-	-	100	μA
Peak wavelength	λ _P	I _F =10mA	-	650	-	-	610	-	-	585	-	-	563	-	nm
Spectral line half width	Δλ	I _F =10mA	-	40	-	-	40	-	-	40	-	-	40	-	nm

◎ Not designed for radiation resistance.

● Luminous intensity

Color	λ _P	Type	Min.	Typ.	Max.	Unit
Red	650	LB-202VB	2.2	6.3	-	mcd
		LB-202VL				
Orange	610	LB-202DB	2.2	6.3	-	mcd
		LB-202DL				
Yellow	585	LB-202YB	2.2	6.3	-	mcd
		LB-202YL				
Green	563	LB-202MB	2.2	6.3	-	mcd
		LB-202ML				

Note : Measured at I_F=10mA