High efficiency, two-digit numeric displays

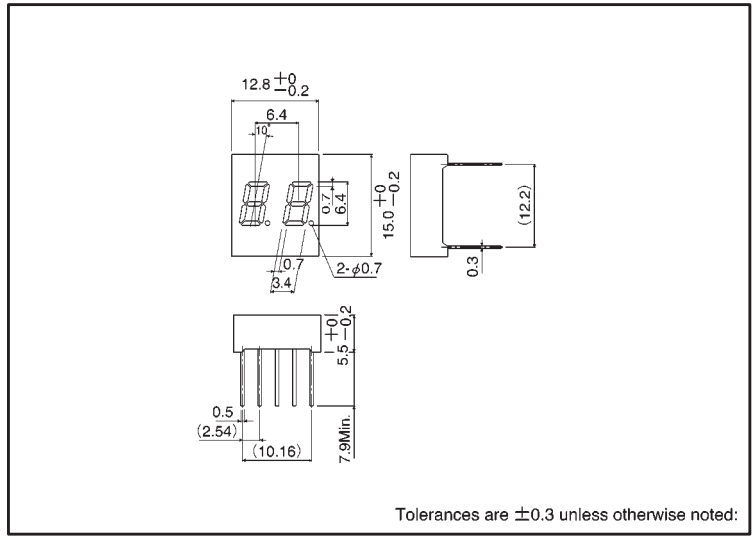
LB-202 BL Series

The LB-202 BL 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.

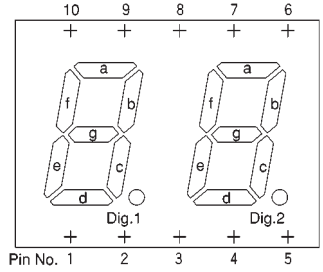
●External dimensions (Units: mm)



●Selection guide

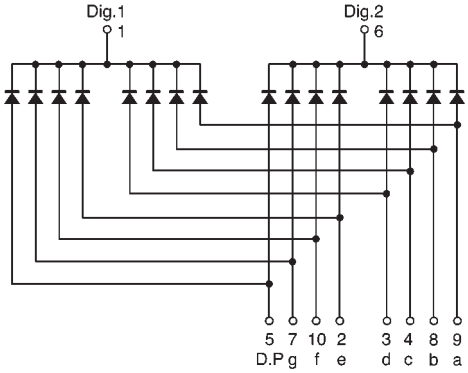
Common \ Emitting color	Red	Orange	Yellow	Green
Anode	LB-202VB	LB-202DB	LB-202YB	LB-202MB
Cathode	LB-202VL	LB-202DL	LB-202YL	LB-202ML

●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"

●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	40	mW
Forward current	I_F	15	15	15	15	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°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	$\Delta\lambda$	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