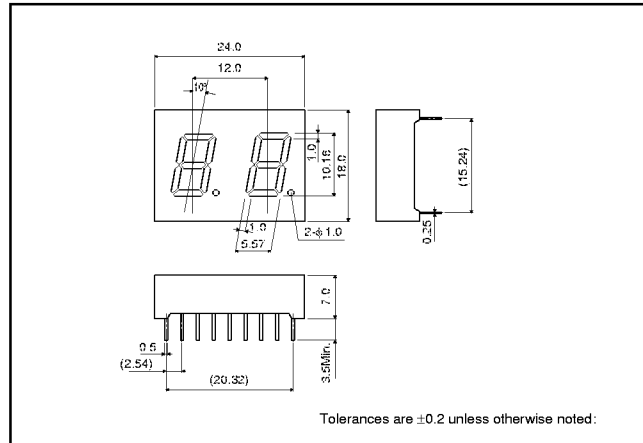


LB-402DN Series

- 1) Height of character : 10.16 mm
- 2) Common anode and common cathode configurations are available for each color.
- 3) The package surface is painted black and the segments are colored the display color.
- 4) High efficiency reflectors are used to achieve a bright, clear display.

●External dimensions (Units : mm)

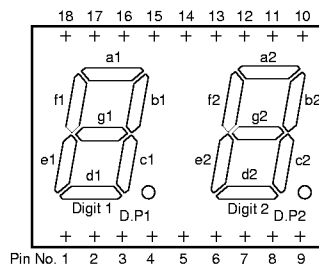


● Selection guide

Emitting color Common	Red	Orange	Yellow	Green
Anode	LB-402VD	LB-402DD*	LB-402YD*	LB-402MD
Cathode	LB-402VN	LB-402DN*	LB-402YN*	LB-402MN

*Order-based production.

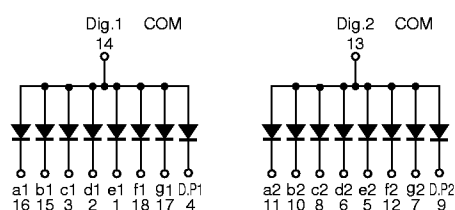
● Pin assignments



Pin No.	Function	Pin No.	Function
1	Segment "e1"	10	Segment "b2"
2	Segment "d1"	11	Segment "a2"
3	Segment "c1"	12	Segment "f2"
4	D.P1	13	Digit 2 Common
5	Segment "e2"	14	Digit 1 Common
6	Segment "d2"	15	Segment "b1"
7	Segment "g2"	16	Segment "a1"
8	Segment "c2"	17	Segment "g1"
9	D.P2	18	Segment "f1"

LED displays

● Internal circuit schematic (example of common anode)



● Absolute maximum ratings (Ta = 25°C)

Parameter	Symbol	Red	Orange	Yellow	Green	Unit
		LB-402VD / VN	LB-402DD / DN	LB-402YD / YN	LB-402MD / MN	
Power dissipation	P _D	640	640	640	960	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-402VD	5.6	16	—	mcd
		LB-402VN				
Orange	610	LB-402DD	3.6	10	—	mcd
		LB-402DN				
Yellow	585	LB-402YD	3.6	10	—	mcd
		LB-402YN				
Green	563	LB-402MD	9.0	25	—	mcd
		LB-402MN				

Note : Measured at I_F = 10mA