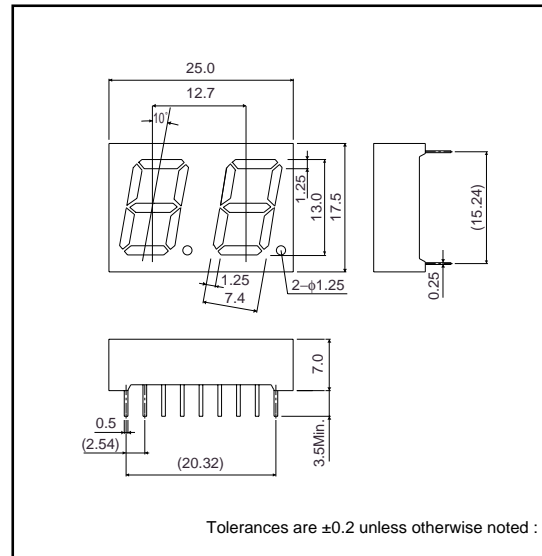


LB-502DN Series

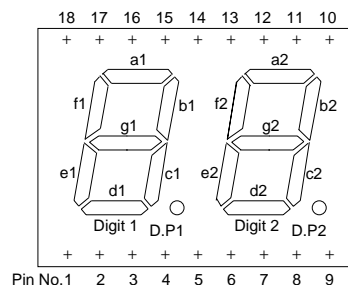
●External Dimensions (Units: mm)

- 1) Height of character: 13.0mm
- 2) Common anode and common cathode configurations are available for each color.
- 3) High efficiency reflectors are used to achieve a bright, clear display.
- 4) The package surface is painted black and the segments are colored the display color.



Emitting color Common	Red	Orange	Green
Anode	LB-502VD	LB-502DD *	LB-502MD
Cathode	LB-502VN	LB-502DN *	LB-502MN

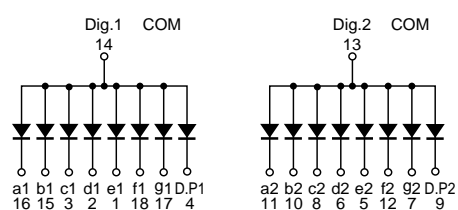
●Pin assignments



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 cathode)



●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Red	Orange	Green	Unit
		LB-502VD / VN	LB-502DD / DN	LB-502MD / MN	
Power dissipation	P _D	960	960	960	mW
Power dissipation	P _D / seg	60	60	60	mW
Forward current	I _F	20	20	20	mA
Peak forward current	I _{FP}	60*	60*	60*	mA
Reverse voltage	V _R	5	5	5	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			Green			Unit
			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	V
Reverse current	I _R	V _R =5V	—	—	100	—	—	100	—	—	100	μA
Peak wavelength	λ _P	I _F =10mA	—	650	—	—	610	—	—	563	—	nm
Spectral line half width	Δλ	I _F =10mA	—	40	—	—	40	—	—	40	—	nm

© Not designed for radiation resistance.

●Luminous intensity

Color	λ _P	Type	Min.	Typ.	Max.	Unit
Red	650	LB-502VD	5.6	16	—	mcd
		LB-502VN				
Orange	610	LB-502DD	5.6	16	—	mcd
		LB-502DN				
Green	563	LB-502MD	9.0	25	—	mcd
		LB-502MN				

Note : Measured at I_F=10mA