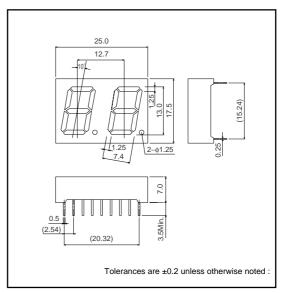
High efficiency, two-digit numeric displays LB-502DN Series

The LB-502DN 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 two-digit displays with a character height of 13.0mm.

Features

- 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.

•External Dimensions (Unit: mm)

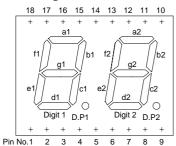


Selection guide

Emitting color Common	Red	Orange	Green				
Anode	LB-502VD	LB-502DD *	LB-502MD				
Cathode	LB-502VN	LB-502DN *	LB-502MN				
· Orden hand and dusting							

* Order-based production.

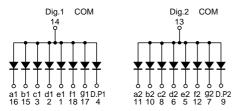
Pin assignments



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		Green	Unit	
	Symbol	LB-502VD / VN	_B-502VD / VN LB-502DD / DN LB-502MD / MN			
Power dissipation	P⊳	960	960	960	mW	
Power dissipation	P _D / seg	60	60	60	mW	
Forward current	lf	20	20	20	mA	
Peak forward current	IFP	60*	60*	60*	mA	
Reverse voltage	VR	5	5	5	V	
Operating temperature	Topr		°C			
Storage temperature	Tstg		°C			

* Pulse width 1ms duty 1 / 5

Parameter Symbol	Symbol Cor	Conditions	Red		Orange		Green			Unit		
	Conditions	Min.	Тур.	Max.	Min.	Тур.	Max.	Min.	Тур.	Max.	Unit	
Forward voltage	VF	I⊧=10mA	-	2.0	2.8	-	2.0	2.8	-	2.1	2.8	V
Reverse current	Ir	Vr=5V	I	-	100	-	_	100	-	-	100	μA
Peak wavelength	λρ	I⊧=10mA	-	650	-	-	610	_	-	563	-	nm
Spectral line half width	Δλ	I⊧=10mA	Ι	40	-	-	40	-	-	40	-	nm

•Electrical and optical characteristics (Ta=25°C)

Not designed for radiation resistance.

Luminous intensity

Color	λρ	Туре	Min.	Тур.	Max.	Unit
Red	650	LB-502VD	5.6	16		mcd
	000	LB-502VN	5.0		_	mcu
Orange	610	LB-502DD	5.6	16	Ι	mcd
		LB-502DN				
Green	563	LB-502MD	9.0	25	_	mcd
	000	LB-502MN	5.0	20	_	

Note : Measured at IF=10mA

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