High efficiency, two-digit numeric displays

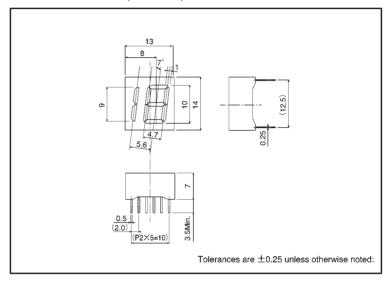
LB-402 CM Series

The LB-402 CM series are two-digit LED numeric displays with a character height of 10 mm. These displays were designed for use as counter displays, and are housed in a compact case of 14 \times 13 mm.

Features

- 1) Height of character: 10 mm.
- High efficiency in a compact package.
- Two colors, red and green, are available for a wide range of applications.

External dimensions (Units: mm)

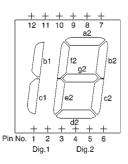


Selection guide

Emitting color Common	Red	Green		
Anode	LB-402VC*	LB-402MC		
Cathode	LB-402VM*	LB-402MM		

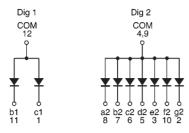
^{*} Settings for high luminance specifications are also available.

Pin assignments



Pin No.	Function
1	Segment "c1"
2	Segment "g2"
3	Segment "e2"
4	Digit 2 Common
5	Segment "d2"
6	Segment "c2"
7	Segment "b2"
8	Segment "a2"
9	Digit 2 Common
10	Segment "f2"
11	Segment "b1"
12	Digit 1 Common

●Internal circuit schematic (example of common anode)



●Absolute maximum ratings (Ta = 25°C)

Parameter	Cumbal	Red	Green	Unit	
	Symbol	LB-402VC / VM	LB-402MC / MM		
Power dissipation	P□	360	360	mW	
Power dissipation	P₂/ seg	40	40	mW	
Forward current	lF	15	15	mA	
Peak forward current	lfp	60*	60*	mA	
Reverse voltage	VR	3	3	V	
Operating temperature	Topr	-25~ + 75		°C	
Storage temperature	Tstg	− 30~+85		°C	

^{*} Pulse width 1ms duty 1 / 5

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

Parameter Sym	Cumbal Cand	Conditions		Red		Green			Unit
	Symbol	Symbol Conditions	Min.	Тур.	Max.	Min.	Тур.	Max.	Offic
Forward voltage	VF	I=10mA	_	2.0	2.8	_	2.1	2.8	V
Reverse current	IR	V _R =3V	_	_	100	_	_	100	μΑ
Peak wavelength	λР	I=10mA	_	650	_	_	563	_	nm
Spectral line half width	Δλ	I _F =10mA	_	40	_	_	40	_	nm

ONot designed for radiation resistance.

Luminous intensity

Color	λР	Туре	Min.	Тур.	Max.	Unit
Red 650	6EO	LB-402VC	3.6	10	_	mcd
	650	LB-402VM				
Green 563	LB-402MC	5.0	16	-		
	503	LB-402MM	5.6	16	_	mcd

Note: Measured at IF = 10mA