

LB-402 AK series

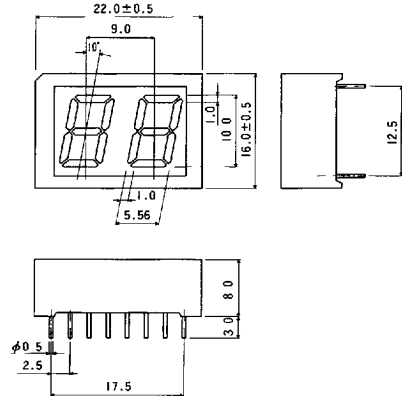
**Numeric display, two digit,
single color, 7 segment each**

The LB-402AK series are two digit numeric display light-emitting diodes that can be used in bright locations.

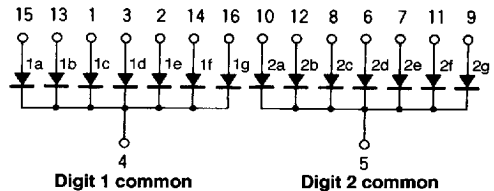
Features

- outer dimensions of package: $22 \times 16 \times 8.0$ mm
- character height: 10.0 mm (0.4 in.)
- available in red, orange, and green
- package has black-painted surface, segments are tinted. Numerals invisible when unlit
- anode and cathode-common types available for each color
- static drive can be used for pin driver, because independent pins for each segment
- high luminous intensity and clear display
- wide visual angle

Dimensions (Units : mm)



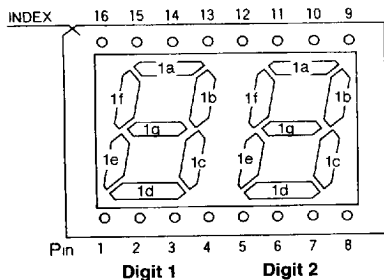
Example (common cathode)



Selection guide

Part no.	LB-402VA	LB-402DA	LB-402MA
Color & wavelength	Red, 650 nm	Orange, 610 nm	Green, 563nm
Common pin	Anode	Anode	Anode
Availability	semi-standard	semi-standard	semi-standard
Part no.	LB-402VK	LB-402DK	LB-402MK
Color & wavelength	Red, 650 nm	Orange, 610 nm	Green, 563nm
Common pin	Cathode	Cathode	Cathode
Availability	semi-standard	semi-standard	semi-standard

Pin connections



Pin no.	Function	Pin no.	Function
1	Segment "1c"	9	Segment "2g"
2	Segment "1e"	10	Segment "2a"
3	Segment "1d"	11	Segment "2f"
4	Digit 1 common	12	Segment "2b"
5	Digit 2 common	13	Segment "1b"
6	Segment "2d"	14	Segment "1f"
7	Segment "2e"	15	Segment "1a"
8	Segment "2c"	16	Segment "1g"

Absolute maximum ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Limits	Unit	Conditions
Power dissipation	P_d	840	mW	
Power dissipation per segment	P_d / seg	60	mW	
Forward current	I_F	20	mA	
Peak forward current	I_{FP}	60	mA	Pulse width 1 ms, duty 20%
Reverse voltage	V_R	5	V	
Operating temperature	T_{opr}	$-25 \sim +75$	$^\circ\text{C}$	
Storage temperature	T_{stg}	$-30 \sim +85$	$^\circ\text{C}$	

Electro-optical characteristics ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Red			Orange			Green			Unit	Conditions
		Min	Typ	Max	Min	Typ	Max	Min	Typ	Max		
Forward voltage	V_F		2.0	2.8		2.0	2.8		2.1	2.8	V	$I_F = 10 \text{ mA}$
Reverse current	I_R			100			100			100	μA	$V_R = 3 \text{ V}$
Luminous intensity per digit	I_V	0.5	1.0		0.5	1.0		0.7	1.5		mcd	$I_F = 10 \text{ mA}$
Peak wavelength	λ_p		650			610			563		nm	$I_F = 10 \text{ mA}$
Spectral half-width	$\Delta\lambda$		40			40			40		nm	$I_F = 10 \text{ mA}$