

High efficiency, single-character alphanumeric displays

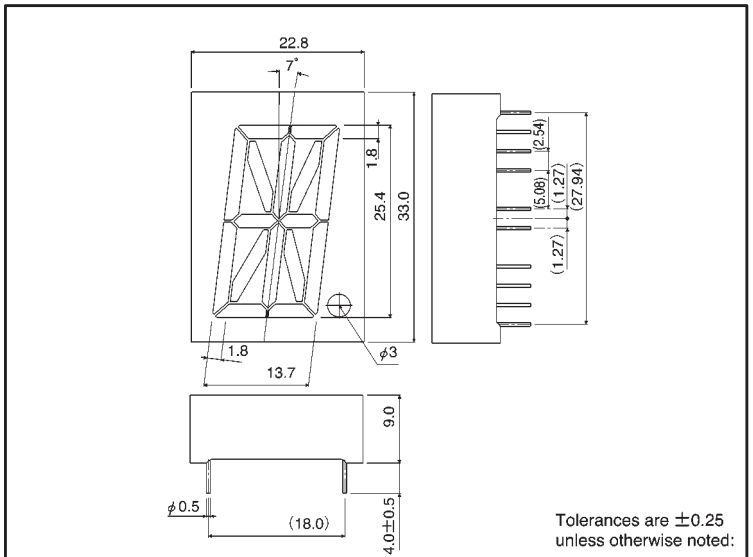
LA-131 AK Series

The LA-131 AK series are LED alphanumeric displays designed to be used in bright locations. The height of the character is 25.4 mm, and the color is bright red. These displays have been designed for use as large numeric displays.

●Features

- 1) Height of character : 25.4 mm.
- 2) Dimensions : 22.8 × 33 × 9 mm.
- 3) Common anode and common cathode configurations are available.
- 4) The package surface is painted black and the segments are milky white.
- 5) High luminance, clear display.

●External dimensions (Units: mm)

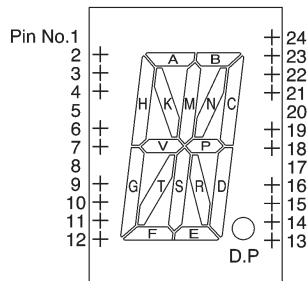


●Selection guide

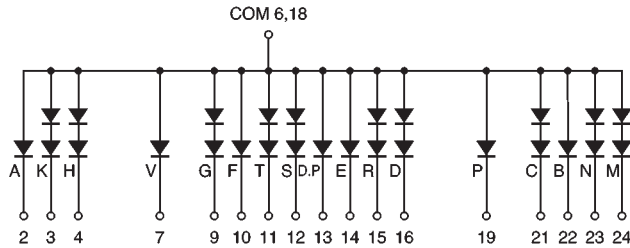
| | | |
|----------------|--|----------|
| Emitting color | | Red |
| Common | | |
| Anode | | LA-131LA |
| Cathode | | LA-131LK |

| Pin No. | Function |
|---------|---------------|
| 2 | Segment "A" |
| 3 | Segment "K" |
| 4 | Segment "H" |
| 6 | Common |
| 7 | Segment "V" |
| 9 | Segment "G" |
| 10 | Segment "F" |
| 11 | Segment "T" |
| 12 | Segment "S" |
| 13 | Segment "D.P" |
| 14 | Segment "E" |
| 15 | Segment "R" |
| 16 | Segment "D" |
| 18 | Common |
| 19 | Segment "P" |
| 21 | Segment "C" |
| 22 | Segment "B" |
| 23 | Segment "N" |
| 24 | Segment "M" |

●Pin assignments



● Internal circuit schematic (example of common anode)



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

| Parameter | Symbol | Red | Unit |
|-----------------------|--------------------|--------------------------------------|------------------|
| | | LA-131LA / LK | |
| Power dissipation | P_D | 1500 | mW |
| Power dissipation | P_D / seg | 125 / 2 elements 62.5 / 1 element | mW |
| Forward current | I_F | 25 | mA |
| Peak forward current | I_{FP} | 80* | mA |
| Reverse voltage | V_R | 8 / 2 elements 4 / 1 element | V |
| Operating temperature | T_{opr} | $-25 \sim +75$ | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | $-30 \sim +85$ | $^\circ\text{C}$ |

* Pulse width 1ms duty 1 / 5

● Electrical and optical characteristics ($T_a = 25^\circ\text{C}$)

| Parameter | Symbol | Conditions | Red | | | Unit |
|--------------------------|------------------|-------------------|------|------|------|---------------|
| | | | Min. | Typ. | Max. | |
| Forward voltage | V_F | $I_F=20\text{mA}$ | — | 1.75 | 2.5 | V |
| Reverse current | I_R | $V_R=3\text{V}$ | — | — | 100 | μA |
| Peak wavelength | λ_P | $I_F=20\text{mA}$ | — | 660 | — | nm |
| Spectral line half width | $\Delta \lambda$ | $I_F=20\text{mA}$ | — | 25 | — | nm |

© Not designed for radiation resistance.

The forward voltage and reverse current values are the guaranteed values per element.

● Luminous intensity

| Color | λ_P | Type | Min. | Typ. | Max. | Unit |
|-------|-------------|----------|------|------|------|------|
| Red | 660 | LA-131LA | 36 | 100 | — | mcd |
| | | LA-131LK | | | | |

Note: Measured at $I_F = 20\text{ mA}$