

LA-501DN series

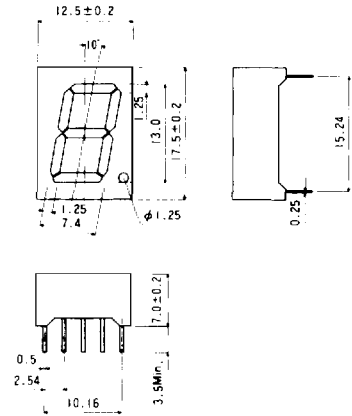
**Numeric display, single digit,
single color, 7 segment**

The LA-501 DN series are single digit numeric display light-emitting diodes that can be used in bright locations.

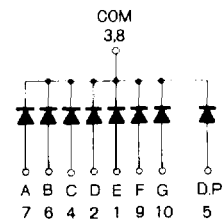
Features

- outer dimensions of package: 12.5 × 17.5 × 7 mm
- character height: 13 mm (0.5 in.)
- available in red, orange, and green
- package has black-painted surface, segments are tinted
- anode and cathode-common types available for each color
- high luminous intensity and clear display
- simple pin arrangement

Dimensions (Units : mm)

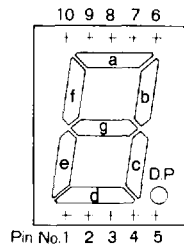


Example (common cathode)



Selection guide

| | | | |
|--------------------|-------------|----------------|--------------|
| Part no. | LA-501VD | LA-501DD | LA-501MD |
| Color & wavelength | Red, 650 nm | Orange, 610 nm | Green, 563nm |
| Common pin | Anode | Anode | Anode |
| Availability | semi-std | semi-std | semi-std |
| Part no. | LA-501VN | LA-501DN | LA-501MN |
| Color & wavelength | Red, 650 nm | Orange, 610 nm | Green, 563nm |
| Common pin | Cathode | Cathode | Cathode |
| Availability | semi-std | semi-std | semi-std |

Pin connections


| Pin no. | Function |
|---------|---------------|
| 1 | Segment "e" |
| 2 | Segment "d" |
| 3 | Common |
| 4 | Segment "c" |
| 5 | Decimal point |
| 6 | Segment "b" |
| 7 | Segment "a" |
| 8 | Common |
| 9 | Segment "f" |
| 10 | Segment "g" |

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

| Parameter | Symbol | Limits | | | Unit | Conditions |
|-------------------------------|------------------|-----------|--------|-------|------------------|----------------------------|
| | | Red | Orange | Green | | |
| Power dissipation | P_d | 480 | | | 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 ~ +75 | | | $^\circ\text{C}$ | |
| Storage temperature | T_{stg} | -30 ~ +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 | $V_R = 5\text{ V}$ |
| Luminous intensity/digit | I_v | 3.6 | 10 | | 3.6 | 10 | | 5.6 | 16 | | 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 | $I_F = 10\text{ mA}$ |