

# TOS-8102AMR-N

## Single Digit Display LED

| Part Number   | Chip     |              | Face Color | Segment Color |
|---------------|----------|--------------|------------|---------------|
|               | Material | Source Color |            |               |
| TOS-8102AMR-N | AlGaInP  | Ultra-red    | Gray       | White         |

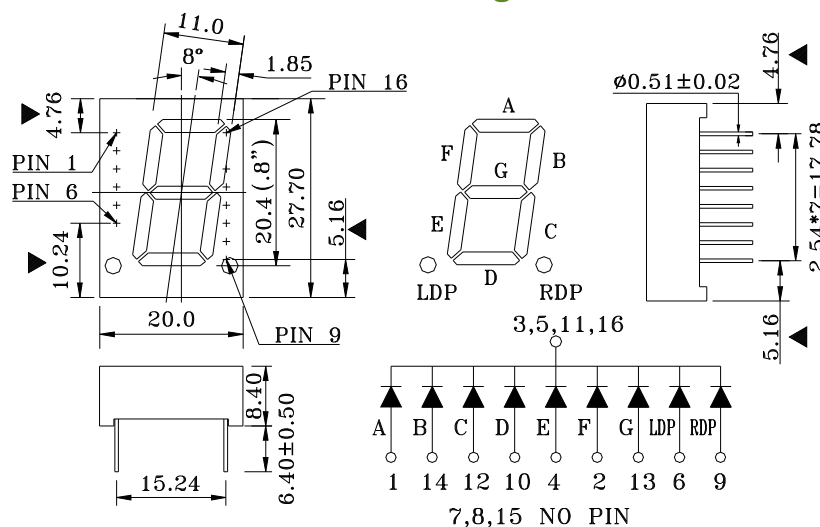
### Features

- (0.80") 20.40mm digit height
- Common cathode
- I.C. compatible
- Low power requirement
- RoHS compliant

### Applications

- Audio equipment
- Instrument panels
- Digital read out display

### Package Dimensions & Internal Circuit Diagram



**Notes:**

1. All dimensions are in millimeters, tolerance:  $\pm 0.25$  ; Angle:  $\pm 0.1^\circ$  unless otherwise noted.
2. Specifications are subject to change without notice.

## Absolute Maximum Rating @ Ta=25°C

| Parameter   | Maximum Rating  | Unit |
|---|-----------------|------|
| Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)   | 80              | mA   |
| Power Dissipation   | 75              | mW   |
| Continuous Forward Current                                  | 20              | mA   |
| Recommend Operating Current                                 | 12              | mA   |
| Reverse Voltage   | 5               | V    |
| Operating Temperature Range                                 | -25°C to +85°C  |      |
| Storage Temperature Range                                   | -30°C to +85°C  |      |
| Lead-Free Solder Temperature(1/16 Inch Below Seating Plane) | 260°C for 3 Sec |      |

## Electrical / Optical Characteristic @ Ta=25°C

| Parameter                        | Symbol            | Min. | Typ.  | Max.  | Unit | Test Condition       | Grade |
|----------------------------------|-------------------|------|-------|-------|------|----------------------|-------|
| Luminous Intensity               | I <sub>v</sub>    |      | 11941 |       | ucd  | I <sub>F</sub> =10mA |       |
| Dominant Wavelength              | λ <sub>d</sub>    |      | 630   |       | nm   | I <sub>F</sub> =20mA |       |
| Spectral Line Half-Width         | Δλ                |      | 15    |       | nm   | I <sub>F</sub> =20mA |       |
| Forward Voltage                  | V <sub>F</sub>    | 1.8  | 2.0   | 2.3   | V    | I <sub>F</sub> =20mA |       |
| Reverse Current                  | I <sub>R</sub>    |      |       | 100   | μA   | V <sub>R</sub> =5V   |       |
| Luminous Intensity Matching Rate | I <sub>v</sub> -m |      |       | 2.0:1 |      | I <sub>F</sub> =20mA |       |