

Product specifications contained herein may be changed without prior notice. It is therefore advisable to contact Purdy Electronics before proceeding with the design of equipment incorporating this product.

## AND-8010-B Series <br> GaAsP/GaP-Red; GaP-Green 16 Segment, Single Digit, 0.8 Inch

## Features

- 16 segment alphanumeric displays • RoHS Compliant
- 0.8 inch character height
- Available in red or green
- Suitable for computer peripherals and terminal displays for viewing at a distance
- Available in both common cathode and common anode


## Description

| Size | Number <br> of Digits | Common |  | Color |  | Number <br> of Pins |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Cathode | Anode | Display | Face |  |
| 0.8 inch | 1 | AND-8010SCLB | AND-8010SALB | Red | Red | 18 |
| 0.8 inch | 1 | AND-8010GCLB | AND-8010GALB | Green | Gray | 18 |

## Absolute Maximum Ratings ( $\mathbf{T}=\mathbf{2 5}{ }^{\circ} \mathrm{C}$ )

| Characteristics | Symbol | Rating | Unit |
| :--- | :---: | :---: | :---: |
| DC Forward Current/Segment | $\mathrm{I}_{\mathrm{F}}(\mathrm{DC}) / \mathrm{SEG}$ | 30 | mA |
| Pulse Forward Current/Segment <br> (1us Pulse $-.3 \%$ Duty Cycle) | $\mathrm{I}_{\mathrm{FP}} / \mathrm{SEG}$ | 100 | mA |
| Reverse Voltage/Segment | $\mathrm{V}_{\mathrm{R}}$ | 3 (Red), 5 (Green) | V |
| Operating Temperature Range | $\mathrm{T}_{\mathrm{Opr}}$ | -25 to 85 | ${ }^{\circ} \mathrm{C}$ |
| Storage Temperature Range | $\mathrm{T}_{\text {Stg }}$ | -25 to 100 | ${ }^{\circ} \mathrm{C}$ |

## Electro-Optical Characteristics ( $\mathrm{T}=25^{\circ} \mathrm{C}$ )

| Characteristics |  | Symbol | Test Condition | Minimum | Typical | Maximum | Unit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Forward Voltage |  | $V_{F}$ | $\mathrm{I}_{\mathrm{F}}=10 \mathrm{~mA}$ | - | 2.1 | 3.0 | V |
| Reverse Current |  | $\mathrm{I}_{\mathrm{R}}$ | $\mathrm{V}_{\mathrm{R}}=3$ (Red),5 (Green) | - | - | 100 | $\mu \mathrm{A}$ |
| Luminous Intensity Per Segment | Red | $\mathrm{IV}_{\mathrm{V}}$ | $\mathrm{I}_{\mathrm{F}}=10 \mathrm{~mA}$ | 2.3 | 3.8 | - | mcd |
|  | Green |  |  | 2.0 | 3.3 | - |  |
| Peak Emission Wavelength | Red | $\lambda_{P}$ | $\mathrm{I}_{\mathrm{F}}=10 \mathrm{~mA}$ | - | 635 | - | nm |
|  | Green |  |  | - | 567 | - |  |
| Spectral Line Half Width | Red | $\Delta \lambda$ | $\mathrm{I}_{\mathrm{F}}=10 \mathrm{~mA}$ | - | 40 | - | nm |
|  | Green |  |  | - | 30 | - |  |

## Precaution

Please be careful of the following:

1. Soldering temperature: $260^{\circ} \mathrm{C}$ max; Soldering time: 3 sec . max; Soldering portion of lead: up to 2 mm from the body of the device.
2. The lead can be formed up to 5 mm from the body of the device without forming stress. Soldering should be performed after the lead forming.




## AND-8010-B Series Pin Connection Table

| AND-8010GCLB |  |  |  |
| :---: | :--- | :---: | :--- |
| Pin | Connection | Pin | Connection |
| 1 | A2 Seg.Anode | 10 | D1 Seg.Anode |
| 2 | A1 Seg.Anode | 11 | D2 Seg.Anode |
| 3 | F Seg.Anode | 12 | Common Cathode |
| 4 | H Seg.Anode | 13 | C Seg.Anode |
| 5 | E Seg.Anode | 14 | G Seg.Anode |
| 6 | J Seg.Anode | 15 | B Seg.Anode |
| 7 | P Seg.Anode | 16 | M Seg.Anode |
| 8 | R Seg.Anode | 17 | Common Cathode |
| 9 | N Seg.Anode | 18 | K Seg.Anode |


| AND-8010GALB |  |  |  |
| :---: | :--- | :---: | :--- |
| Pin | Connection | Pin | Connection |
| 1 | A2 Seg. Cathode | 10 | D1 Seg.Cathode |
| 2 | A1 Seg.Cathode | 11 | D2 Seg.Cathode |
| 3 | F Seg.Cathode | 12 | Common Anode |
| 4 | H Seg.Cathode | 13 | C Seg.Cathode |
| 5 | E Seg.Cathode | 14 | G Seg.Cathode |
| 6 | J Seg.Cathode | 15 | B Seg.Cathode |
| 7 | P Seg.Cathode | 16 | M Seg.Cathode |
| 8 | R Seg.Cathode | 17 | Common Anode |
| 9 | N Seg.Cathode | 18 | K Seg.Cathode |

