60.8mm (2.4 INCH) 5x8 DOT MATRIX DISPLAY

Features

- 2.4 INCH MATRIX HEIGHT.
- DOT SIZE 5mm.
- LOW CURRENT OPERATION.
- HIGH CONTRAST AND LIGHT OUTPUT.
- COMPATIBLE WITH ASCII AND EBCDIC CODES.
- STACKABLE HORIZONTALLY.
- EASY MOUNTING ON P.C. BOARDS OR SOCKETS.
- MULTICOLOR AVAILABLE.
- MECHANICALLY RUGGED.
- STANDARD: GRAY FACE, WHITE DOT.
- RoHS COMPLIANT

Description

The High Efficiency Red source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange Light Emitting Diode.

Package Dimensions & Internal Circuit Diagram

Notes:
1. All dimensions are in millimeters (inches). Tolerance is ±0.25(0.01") unless otherwise noted.
2. Specifications are subject to change without notice.
Selection Guide

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Dice</th>
<th>Lens Type</th>
<th>Iv (ucd) [1] @ 10mA</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TA24-11EWA</td>
<td>High Efficiency Red (GaAsP/GaP)</td>
<td>WHITE DIFFUSED</td>
<td>3000 13500</td>
<td>Column Anode</td>
</tr>
</tbody>
</table>

Note:
1. Luminous intensity/ luminous Flux: +/-15%.

Electrical / Optical Characteristics at TA=25°C

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Parameter</th>
<th>Device</th>
<th>Typ.</th>
<th>Max.</th>
<th>Units</th>
<th>Test Conditions</th>
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</thead>
<tbody>
<tr>
<td>λpeak</td>
<td>Peak Wavelength</td>
<td>High Efficiency Red</td>
<td>627</td>
<td>nm</td>
<td>IF=20mA</td>
<td></td>
</tr>
<tr>
<td>AλD [1]</td>
<td>Dominant Wavelength</td>
<td>High Efficiency Red</td>
<td>625</td>
<td>nm</td>
<td>If=20mA</td>
<td></td>
</tr>
<tr>
<td>Δλ1/2</td>
<td>Spectral Line Half-width</td>
<td>High Efficiency Red</td>
<td>45</td>
<td>nm</td>
<td>If=20mA</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>Capacitance</td>
<td>High Efficiency Red</td>
<td>15</td>
<td>pF</td>
<td>Vf=0V;f=1MHz</td>
<td></td>
</tr>
<tr>
<td>Vf [2]</td>
<td>Forward Voltage</td>
<td>High Efficiency Red</td>
<td>2.0</td>
<td>2.5</td>
<td>V</td>
<td>If=20mA</td>
</tr>
<tr>
<td>Ir</td>
<td>Reverse Current</td>
<td>High Efficiency Red</td>
<td>10</td>
<td>uA</td>
<td>Vr=5V</td>
<td></td>
</tr>
</tbody>
</table>

Notes:
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

<table>
<thead>
<tr>
<th>Parameter</th>
<th>High Efficiency Red</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power dissipation</td>
<td>75</td>
<td>mW</td>
</tr>
<tr>
<td>DC Forward Current</td>
<td>30</td>
<td>mA</td>
</tr>
<tr>
<td>Peak Forward Current [1]</td>
<td>160</td>
<td>mA</td>
</tr>
<tr>
<td>Reverse Voltage</td>
<td>5</td>
<td>V</td>
</tr>
<tr>
<td>Operating / Storage Temperature</td>
<td>-40°C To +85°C</td>
<td></td>
</tr>
<tr>
<td>Lead Solder Temperature[2]</td>
<td>260°C For 3-5 Seconds</td>
<td></td>
</tr>
</tbody>
</table>

Notes:
1. 1/10 Duty Cycle. 0.1ms Pulse Width.
2. 2mm below package base.
High Efficiency Red  
**TA24-11EWA**

- **Relative Radiant Intensity** vs. **Wavelength**
  - Wavelength: 500 to 800 nm
  - Intensity: 0 to 1.0

- **Forward Voltage (V)** vs. **Forward Current (mA)**
  - Forward Voltage: 1.3 to 2.3 V
  - Forward Current: 0 to 20 mA

- **Luminous Intensity** vs. **Relative Value at IF=10mA**
  - Luminous Intensity: 0 to 2.5
  - Relative Value: 0 to 2.5

- **Relative Luminous Intensity** vs. **Ambient Temperature Ta (°C)**
  - Ambient Temperature: -60 to 80 °C
  - Relative Luminous Intensity: 0 to 2.0
Packing & Label Specifications

Kingbright

Inside Label Paste On The IC-tube

Kingbright TYPE: TX24-11XXX
QTY: 10000 CODE: xx

Date

RoHS Compliant

LOT NO.

Number Of FQC

Outside Label Paste On The Box

TX24-11XXX  330 PCS

Date

RoHS Compliant

Number Of QA

SPEC NO: DSAD2468  REV NO: V.8  DATE: MAY/24/2007  PAGE: 4 OF 4
APPROVED: WYNEC  CHECKED: Joe Lee  DRAWN: Y.L.LI  ERP: 1332000198