Product Summary

1.4 cm (0.55Type) Silicon Reflective Liquid Crystal Display

SXRD242

1. Description

The SXRD242 is a 1.4 cm diagonal reflective liquid crystal display panel with built-in drivers using a single crystal silicon backplane, and enables the full-color display by color sequential system. The panel supports FHD resolutions of 1920×1080. It provides film-like picture quality with high contrast and high aperture ratio that can be free from the grainy mesh effect. The capability of displaying smooth moving pictures with a rapid optical response and 360Hz•480Hz•600Hz•720Hz•840Hz•960Hz operation frequency makes it ideal for use in portable projectors.

2. Features

- 1.4 cm in diagonal (0.55 inch type)
- Supports FHD format (Screen aspect ratio 16:9)
- Number of dots:1920 (H)×1080 (V) = 2,073,600  (Available: 2048(H) x 1080(V)
- Total number of pixels: 2112(H) × 1088 (V) = 2,297,856
- Pixel pitch: 6.4 μm
- High reflectivity: 87% (Typ. 550 nm)
- Rapid optical response (rise time/fall time) 0.6ms / 1.0ms (Typ.)
- Vertically aligned liquid crystal
- High light resistance
- Color sequential system
- Dust-proof glass package
- Normally black mode
- Maximum operation frequency: 960Hz
- Embedded thermal sensor and heater function
- Embedded photo sensor function
- Embedded timing controller/Programmable Gamma Buffer
3. Power supply voltage used, Temperature range

<table>
<thead>
<tr>
<th>Item</th>
<th>Rated</th>
<th>Unit</th>
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</thead>
<tbody>
<tr>
<td>Operating temperature range</td>
<td>-10~+60</td>
<td>°C</td>
</tr>
<tr>
<td>Storage temperature range</td>
<td>-20~+70</td>
<td>°C</td>
</tr>
<tr>
<td>Power supply</td>
<td>6.0±0.2</td>
<td>V</td>
</tr>
<tr>
<td></td>
<td>1.5±0.1</td>
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4. System block diagram

*1 DDR2: Required when using the Keystone function

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