Technical data sheet



EL640.480-AF1 ICEBrite[™] TFEL display



EL640.480-AF1 is a VGA-display for use in extreme operating conditions.

Lumineq[®] Thin Film Electroluminescence (TFEL) displays have the widest operating temperature range of commercially available technology.

TFEL displays are ideal for use in industrial, medical, transportation, defense, public safety and other demanding applications.

| Product highlights: | | Technical specifications: | | |
|--|---------------|---------------------------|------------------------------|---|
| | | | Technology | Thin Film Electroluminescence |
| Wide temperature area from -60 to +105 °C Standard VGA Locking connector | | Color | TFEL-yellow | |
| | | Viewing angle | 179°, any viewing directions | |
| | | Response time | < 1 ms | |
| | | | Luminance | 65 cd/m ² typical areal @ 120 Hz |
| General TFEL features and benefits: | | | Contrast | 50:1 typical at 500 lux |
| | | Resolution | 640 × 480 pixels | |
| Instant ON in cold and hot temperatures No need for heating and cooling Very long lifetime Extremely stable brightness - measured 100,000 hours | | | Pixel pitch | 0.202 × 0.202 mm |
| | | | Weight | 280 g |
| | | | Display size | 182 × 129 × 20 mm |
| | | | Active area | 129.3 × 97.0 mm |
| | | | Supply voltage | 12 VDC |
| with $> 85\%$ left of initial luminance | | | Power | 4.5 W typical @ 120 Hz |
| • TFEL display brightness, contrast, viewing angle and response time are the same across the entire operating temperature range | | | MTBF | > 50,000 hours |
| | | | Temperature | Extended temperature range (ET): |
| | | | | Operating Survival: -60 to +105 °C |
| • Wide viewing angle > 179° with crisp and clear image | | | | Operating, continuous use: -60 to +85 °C |
| Very fast response time, < 1 ms | | | | Storage: -60 to +110 °C Standard: |
| Extremely rugged and solid TFEL display structure Very long production life time | | | | Operating Survival: -20 to +65 °C |
| | | | | Operating, Continuous use: -5 to +55 °C |
| | | | | Storage: -40 to +75 °C |
| Ordering Information: | | | Humidity | 93% RH, oper. @ +40 °C, IEC 60068-2-78 |
| | | | Altitude | 18,000 m, oper., IEC 60068-2-13 |
| Product | Part number | Features | Shock | 100 g-force, 4 ms, IEC 60068-2-27, test Ea. |
| EL640.480-AF1 | 996-0270-00LF | Standard | | 5 to 500 Hz, 0.05 g ² /Hz random |
| EL640.480-AF1 ET | 996-0270-05LF | range. | | IEC 60068-2-64, test Fh. |
| | | | Interface | 8-bit dual panel |
| | | | Options | Anti-glare or Anti-reflective film, Tempered glas |
| | | connector, | | Resistive touch screen, ITO glass |
| | | dimming | | |
| | | ET with | | |
| EL640.480-AF1 ET CC | 996-0270-08LF | Conformal | | |
| | | coating | | |

Lumineg Thin Film Electroluminescent Display

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