Technical data sheet

EL160.80.50-ET SPI

ICEBrite™ small graphics TFEL display



The EL160.80.50-ET SPI is a TFEL display designed 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, military, public safety and other demanding applications.

Lumineq Thin Film Electroluminescent Display

Product highlights:

- Wide temperature range from -40 to +65 °C
- Small mechanical package
- Low power capability
- SPI interface

General TFEL features and benefits:

- Instant ON in cold and hot temperatures
- No need for heating and cooling
- Very long lifetime
- Extremely stable brightness – measured 100,000 hours with > 85% left of initial luminance
- TFEL display brightness, contrast, viewing angle and response time are the same across the entire operating temperature range
- Wide viewing angle > 179° with crisp and clear image
- Very fast response time, < 1 ms
- Extremely rugged and solid TFEL display structure
- Very long production life time
- Extremely wide operating temperature range

Ordering Information:

Product	Part number	Features
EL160.80.50-ET SPI	996-0267-22LF	SPI Interface, extended temperature range, dimming, locking connector

Technical specifications:

Technology	Thin Film Electroluminescence
Color	TFEL-yellow
Viewing angle	179°, any viewing directions
Response time	< 1 ms
Luminance	107 cd/m^2 typical areal @ 240 Hz
Contrast	50:1 typical @ 500 lux
Resolution	160 × 80 pixels
Pixel pitch	0.50 × 0.50 mm
Weight	77 g
Display size	109 × 57 × 21 mm
Active area	80 × 40 mm
Supply voltages	5 and 12 VDC
Power	2.0 W typical @ 60 Hz 2.7 W typical @ 120 Hz 4.4 W typical @ 240 Hz
MTBF	> 50,000 hours
Temperature	Operating: -40 to +65 °C Storage: -40 to +85 °C
Humidity	93% RH, oper., IEC 68-2-3
Altitude	18,000 m, oper., IEC 68-2-13
Shock	100 g-force, 6 ms, IEC 68-2-27
Vibration	5 to 500 Hz, 0.10 g^2/Hz random IEC 680068-2-64, test Fh
Interface	SPI (Serial Peripheral Interface Bus)
Options	Conformal coating

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