



The EL160.120.39 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 -50 to +70 °C
- Compact screen size
- Broad voltage input range from 8 to 18 VDC

##### 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

##### Technical specifications:

Technology	Thin Film Electroluminescence
Color	TFEL-yellow
Viewing angle	179°, any viewing directions
Response time	< 1 ms
Luminance	70 cd/m <sup>2</sup> typical areal @ 150 Hz
Contrast	59:1 typical @ 500 lux 32:1 typical @ 1,000 lux 4.3:1 typical @ 10,000 lux
Resolution	160 x 120 pixels
Pixel pitch	0.39 x 0.39 mm
Weight	65 g
Display size	94 x 62 x 20 mm
Active area	62.3 x 46.7 mm
Supply voltages	5 and 8...18 VDC
Power	3.0 W typical @ 150 Hz
MTBF	> 50,000 hours
Temperature	Operating: -50 to +70 °C Survival: -50 to +85 °C Storage: -60 to +105 °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, 0.02 g <sup>2</sup> /Hz random IEC 68-2-36, test Fdb
Interface	4-bit LCD-type timing

##### Ordering Information:

Product	Part number	Features
EL160.120.39	996-0303-00LF	Extended temperature range, locking connector, dimming
EL160.120.39 CC	996-0303-01LF	Extended temperature range, locking connector, dimming, conformal coating

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