

# EL160.120.39-SPI

## ICEBrite™ small graphics TFEL display



The EL160.120.39-SPI is a TFEL display designed for use in extreme operating conditions.

Lumineq<sup>®</sup> 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
- SPI Interface
- Compact screen size
- Broad voltage input range from 8 to 18 VDC
- Locking connector

### **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

ı	recimical specifications:					
•	Technology	Thin Film Electroluminescence				
	Color	TFEL-yellow				
	Viewing angle	179°, any viewing directions				
	Response time	< 1 ms				
	Luminance	70 cd/m² typical areal @ 150 Hz				
	Contrast	59:1 typical @ 500 lux				
		32:1 typical @ 1,000 lux				
ı		4.3:1 typical @ 10,000 lux				
ı	Resolution	160 × 120 pixels				
	Pixel pitch	0.39 × 0.39 mm				
	Weight	65 g				
	Display size	94 × 62 × 20 mm				
	Active area	62.3 × 46.7 mm				
	Supply voltages	5 and 818 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				
Altitude 18,000 m, c   Shock 100 g-force,   Vibration 5 to 500 Hz,		93% RH, oper. @ +40 °C, IEC 60068-2-78				
		18,000 m, oper., IEC 60068-2-13				
		100 g-force, 6 ms, IEC 60068-2-27, test Ea.				
		5 to 500 Hz, 0.02 g2/Hz random				
		IEC 60068-2-64, test Fh.				
	Interface	SPI (Serial Peripheral Interface Bus)				
ı	Options	Conformal coating				
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EL160.120.39-SPI	EL00101500	SPI Interface
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