Technical data sheet



EL160.120.39



ICEBrite[™] small graphics TFEL display

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

Lumineq's 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:		Technical specifications:		
 Wide temperature range from -50 to +70 °C 			Technology	Thin Film Electroluminescence
			Color	Amber
Compact screen size			Viewing angle	179°, any viewing directions
Broad voltage input range from 8 to 18 VDC			Response time	< 1 ms
			Luminance	70 cd/m ² typical areal @ 150 Hz
General TFEL features and benefits:			Contrast	59:1 typical @ 500 lux
				32:1 typical @ 1,000 lux
				4.3:1 typical @ 10,000 lux
 Instant ON in cold and hot temperatures 			Resolution	160 × 120 pixels
 No need for heating and cooling 			Pixel pitch	0.39 × 0.39 mm
Very long lifetime			Weight	65 g
• Extremely stable brightness – measured 100,000 hours			Display size	94 × 62 × 20 mm
with $> 85\%$ left of initial luminance			Active area	62.3 × 46.7 mm
• TFEL display brightness, contrast, viewing angle and			Supply voltages	5 and 818 VDC
response time are the same across the entire operating			Power	3.0 W typical @ 150 Hz
temperature range			MTBF	> 50,000 hours
 Wide viewing angle > 179° with crisp and clear image 			Temperature	Operating: -50 to +70 °C
 Whe viewing angle > 179° with crisp and clear image Very fast response time, < 1 ms 				Survival: -50 to +85 °C
				Storage: -60 to +105 °C
• Extremely rugged and solid TFEL display structure			Humidity	93% RH, oper., IEC 68-2-3
 Very long production life time Extremely wide operating temperature range 			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 ² /Hz random
Ordering Information:				IEC 68-2-36, test Fdb
Product	Part number	Features	Interface	4-bit LCD-type timing
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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