



EL320.240 FA3

Multi-Color Electroluminescent Display

Embedded Display for EXTREME Conditions

For over 20 years, Planar has been known for its electroluminescent displays: rugged, reliable and yes, in that very recognizable amber color. Our engineers have made continual and dramatic improvements in the brightness of the luminescent films and the development of drive schemes to extend display life. They have significantly improved brightness and contrast, reduced power consumption, developed proprietary gray-scale algorithms, improved packaging to reduce size and to enhance shock and vibration resistance.

Well now we have made an improvement that is even more noticeable. More Colors! We are proud to introduce the EL320.240 FA3 Multi-Color Electroluminescent Display. Red and green sub-pixel elements are formed on an amber, ALD based substrate by applying an organic filter to a glass cover panel. Offering the same high performance, visual characteristics, and "at-a-glance" viewability of Planar's monochrome EL product line, the EL320.240 FA3 will add critical color capabilities to the inherent ruggedness of this proven display technology.

The new multi-color red/green/yellow EL display has the same form factor and QVGA resolution as Planar's most popular EL display model and is ideal for transportation, medical, military and industrial applications that need to highlight important information under extreme conditions.







	EL 330 340 EA3
	EL320.240 FA3
Part Numbers	997-3377-00LF
	997-3377-01LF (w/Conformal Coating)
Technology	Thin Film Electroluminescent
	(TFEL)
Diagonal	4.9 in (124 mm)
Pixel Pitch	0.012 in (0.31 mm)
Brightness (Typical)	85 cd/m ²
Power (Typical, 10% of pixels on)	4.7 W
Viewing Angle	>160°
Response Time	<1ms
Operating Temperature	-50°C ∼ +85°C
Video Interface	4 bit AMLCD
Other Features	Red/Green/Yellow
	Multi-color
	16 Colors
	Dimming
	Locking Connector
	RoHS Compliant

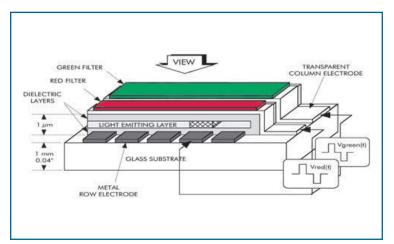


Thin Film EL Technology

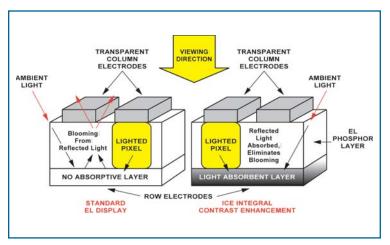
Planar's ICEBrite $^{\text{TM}}$ Electroluminescent Displays consist of a solid-state glass panel, an electronic control circuit and a power supply.

The thin film EL glass panel consists of a luminescent phosphor layer sandwiched between transparent dielectric layers and a matrix of row and column electrodes. A circuit board containing the drive and control electronics is connected to the back of the glass panel. Voltage is applied to row and column electrodes causing the area of intersection (a pixel) to emit light.

The result of this solid-state design is a flat, compact, reliable and inherently rugged display with exceptionally fast response times.



Structure of Thin Film Electroluminescent Display



ICEBrite - Integrated Contrast Enhancement