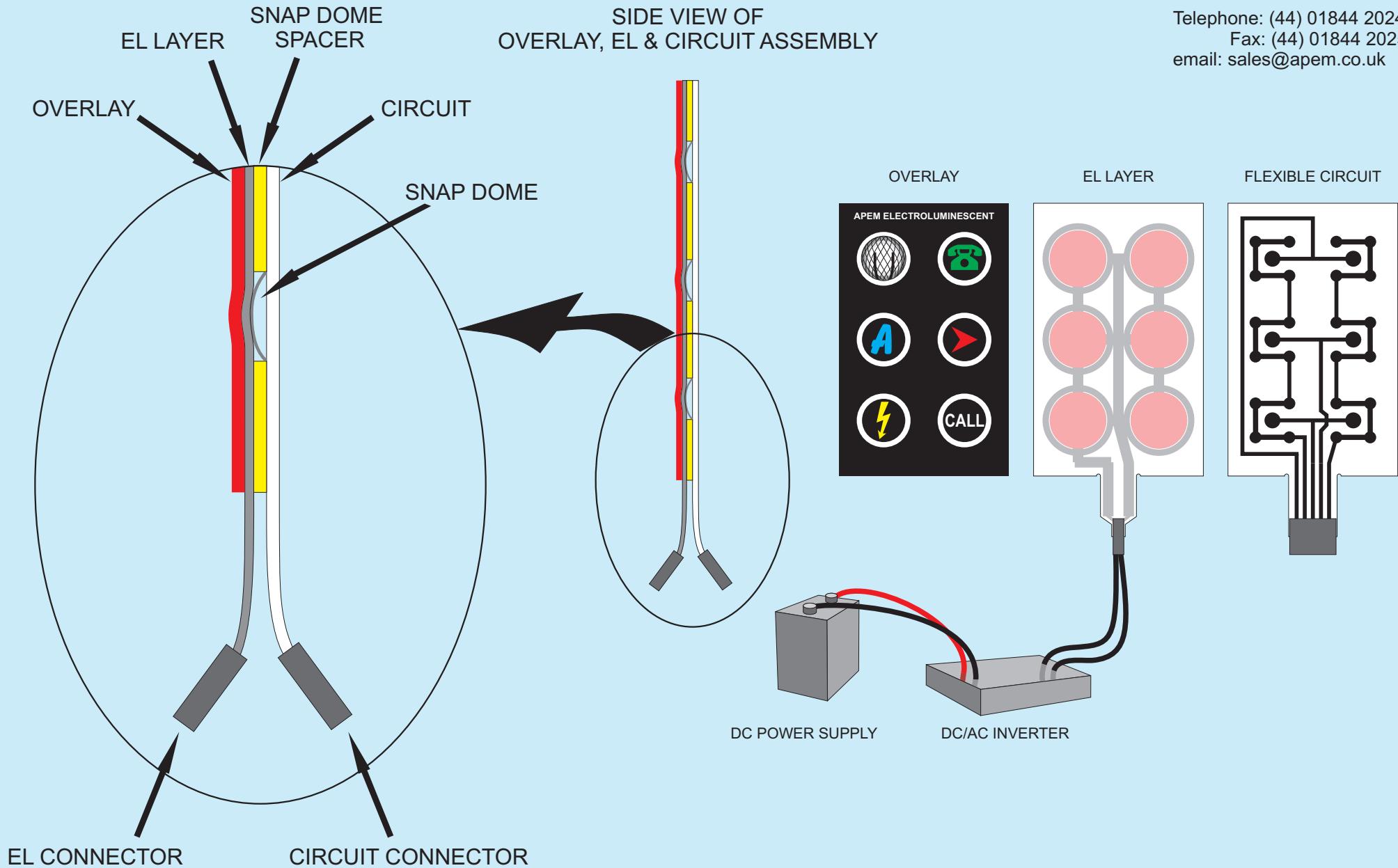


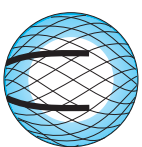
# MEMBRANE ASSEMBLY



**APEM COMPONENTS**

Telephone: (44) 01844 202400  
Fax: (44) 01844 202500  
email: sales@apem.co.uk





**APEM COMPONENTS**

Telephone: (44) 01844 202400

Fax: (44) 01844 202500

email: [sales@apem.co.uk](mailto:sales@apem.co.uk)

# Specifications for Electroluminescent Lamps

**POWER SOURCES:**

DC 1.5V to 24V or AC 110/220V

**RECOMMENDED SPECIFICATIONS FOR INVERTER:**

25V TO 115V at 214Hz to 730Hz is a recommended range for illuminating EL lamp, depending on the working environment.

**WORKING LIFE:**

A half life of 10,000 hours, depending on the acceptable brightness for its intended use. Half life is a period of operating time which elapses for the brightness to reduce to half the original brightness.

A half life of 10,000 hours will be achieved by driving the lamp between 25V to 100V and 214Hz to 500Hz. Driving the lamp above these settings will reduce the half life.

Switching the lamp on and off does not affect the life of EL.

The useful life of EL can reach as high as 50,000 hours. Correct matching of EL and inverter are important in this factor.

The use of “load responsive” inverters can control the brightness of the EL, as the lamp ages and its electrical characteristics change. The inverter’s output voltage and frequency rises and increases the useful life of the EL lamp.

**OPERATING TEMPERATURE:**

-25°C to +65°C used in conjunction with a touch switch membrane.

-40°C to +80°C as a stand-alone lamp.

**STORAGE TEMPERATURE:**

-30°C to +80°C used in conjunction with a touch switch membrane.

-50°C to +90°C as a stand-alone lamp.

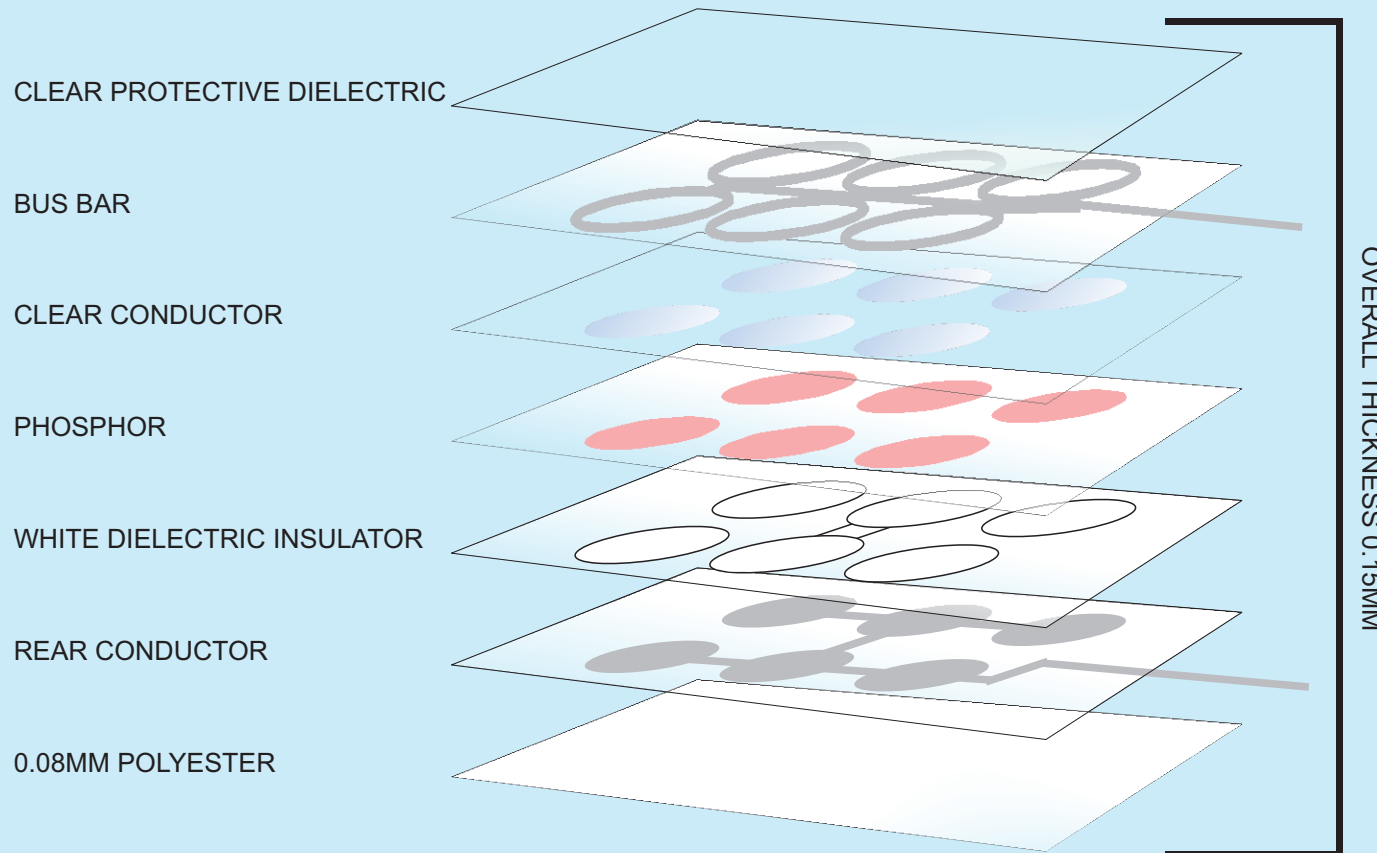
**VIEWING ANGLE:**

180° view.



**APEM COMPONENTS**

Telephone: (44) 01844 202400  
Fax: (44) 01844 202500  
email: sales@apem.co.uk



An EL lamp is essentially a capacitor structure with a phosphor layer sandwiched between the electrodes. An application of an AC voltage across the electrodes generates a changing electric field within the phosphor particles causing it to emit light

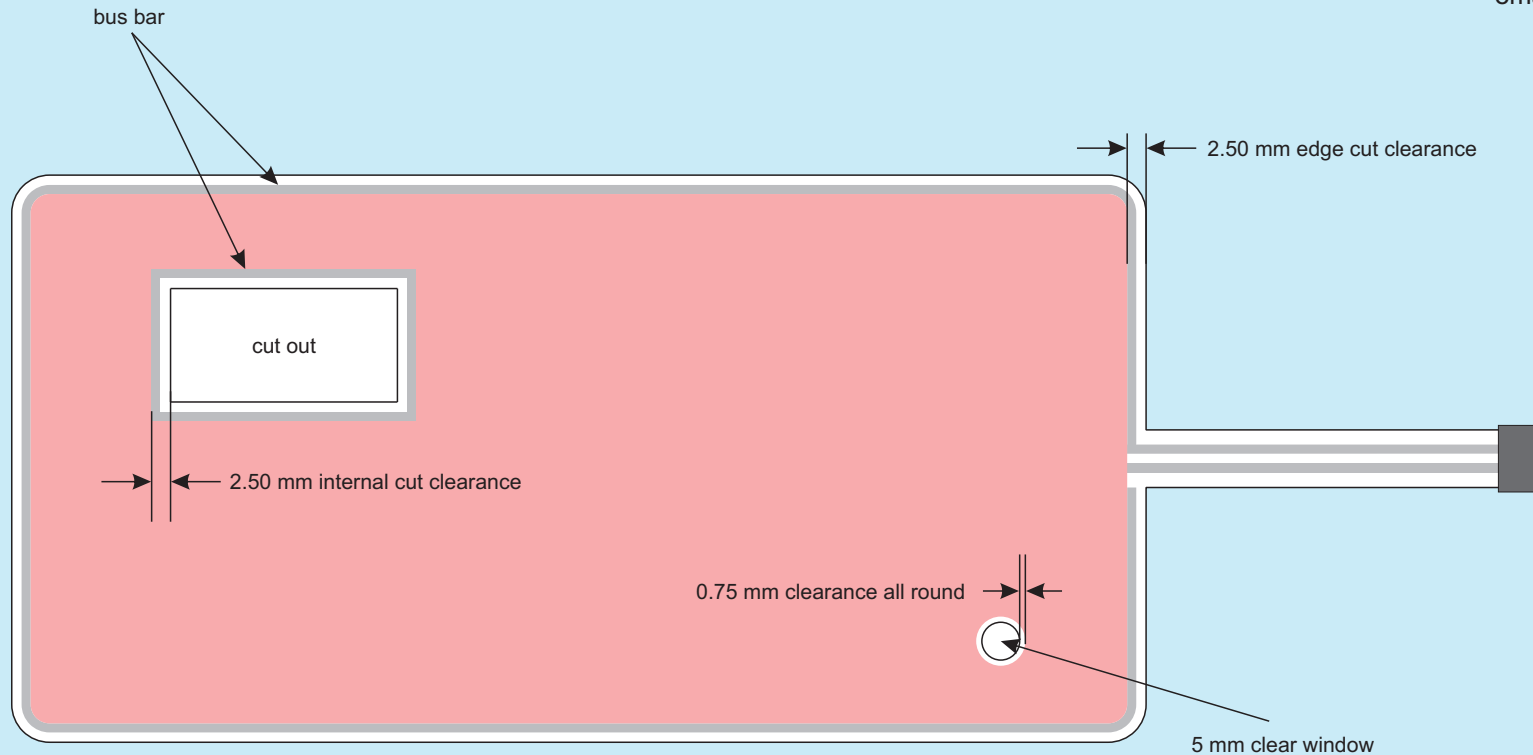


**APEM COMPONENTS**

Telephone: (44) 01844 202400

Fax: (44) 01844 202500

email: sales@apem.co.uk



The areas the EL must avoid are shown above.  
In some areas such as a clear window, there would normally be no need for a Bus Bar therefore allowing the EL to be in closer proximity than a cut out.