

## Lightpipes for Surface Mount LEDs

### **Specifications:**

#### **MATERIAL:**

Lightpipe: Acrylic, optical grade, (clear).

Grommet: Polyethylene, (black).

Spring clip: Spring steel (nickel plate).

#### **MOUNTING:**

Panel hole: round 0.171in Dia. (4.34mm).

Lightpipes from 0.200in to 0.500in use grommet retainer.

Lightpipes from 0.500in to 2.00in the spring clip is recommended

for rigidity.

#### LED:

Surface mount, vertical and horizontal LEDs. Lightpipes for blending multicolor LEDs are available on special request.

#### **Application:**

Lightpipes provide a method of transmitting the light of a surface mount LED to the display panel. Both vertical and horizontal PCB surface mount LEDs can be displayed in this manner. The lightpipe is also capable of blending multicolor LED light into a single color.

#### Intensity:

Lightpipes have a unique near flush design and are still able to provide up to 160 degrees of viewing angle. This light output is achieved by the use of a concave shaped receiving surface which collects the LEDs light, and fresnel rings on the opposite surface that disperse the light.

#### Versatility:

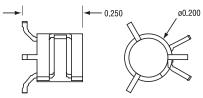
Lightpipes are available in 0.020in increments from 0.200in to 2.0in. This wide range of lengths simplifies the PCB positioning in relation to the display panel. Lightpipes are secured directly to the display panel with no mechanical attachment to the PCB. The installation and removal of the circuit board can thus be accomplished without disturbing the display panel.

#### **Installation:**

Lightpipes are easy to install. Slide the lightpipe through the panel opening and slip the retainer in place. Finish the installation by pressing the retainer up against the display panel.

### Spring clip

For lightpipes over 0.500in in length



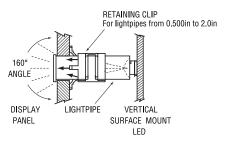
#### NOTES:

- 1) Material: Acrylic (Optical grade Clear).
- 2) Mounting: Hole size Round 0.171in diameter; Square 0.180in x 0.180in Punch; Rectangular 0.175in x 0.250in Punch.

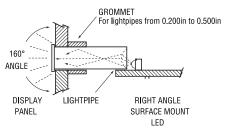
Grommet

- 3) LED: Surface mount and Standard 3mm through hole.
- 4) Caution: Damage to the polished surfaces of the lightpipe will cause light transmission loss.

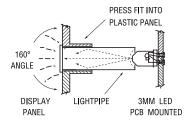
## Lightpipe with vertical surface mount LED



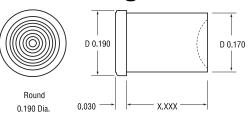
## Lightpipe with horizontal surface mount LED



# Lightpipe with 3mm LED PCB mount



### **Outline drawing**



For lightpipes over 0.500in in length

a0 240

0.150