

LITEPIPE® FOR SURFACE MOUNT AND STANDARD LEDS



U.S. & Foreign Patents Issued and Pending

APPLICATION

VCC's LITEPIPE® provides a method of transmitting the light of a surface mount LED to the display panel. Vertical and horizontal PCB and surface mount LEDs can be displayed in this manner. The LITEPIPE® is also capable of blending multicolor LED light into a single color.

LITEPIPE® 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.

The LITEPIPE® is available in .020" increments from .200" to 2.0". 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.

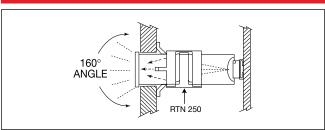
INSTALLATION

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

SPECIFICATIONS MATERIAL Acrylic, optical grade, (Clear) Grommet Polyethylene, (black) - J-Von - Spring Steel (nickel plate) Spring Clip MOUNTING Panel hole: round .171" Dia.(4.34mm). square .180" x .180" (4.57mm x 4.57mm). rectangular .170" x .250" (4.34mm x 6.35mm). LITEPIPE® from .200" to .500" use grommet retainer (RTN 150). LITEPIPE® from .500" to 2.00" the spring clip (RTN250) is recommended for rigidity. **LED** Surface mount, vertical and horizontal LEDs. LITEPIPE® products for blending multicolor LEDs are available. **STANDOFF** Use standoff to adjust height of standard LED above the PCB in order to maintain a maximum .050" clearance between LITEPIPE and LED.

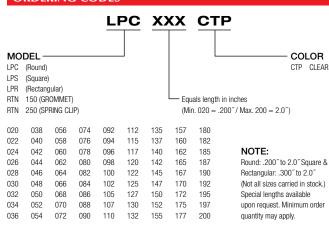
LITEPIPE® WITH VERTICAL SURFACE MOUNT LED

See STD Series data sheet on page 28.

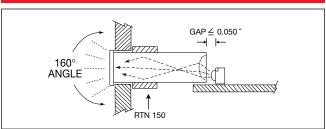


Pass LITEPIPE $^{\circ}$ through panel opening. Press on retaining ring. Air gap .050 $\!\!\!\!^{''}$ maximum between LED and LITEPIPE® for best performance.

ORDERING CODES



LITEPIPE® WITH HORIZONTAL SURFACE MOUNT LED



MOUNTING COMPONENTS **OUTLINE DRAWING LPR** LPS LPC **RTN 150 RTN 250** 0.190 DIA .040 (1.02mm) .040 (1.02mm) 0.200 20 DIA (5.08mm) .170 DIA. .170 DIA. .170 DIA 200 - XXX Rectangular .190 X .270 Square .200 X .200 Round .190 Dia. **GROMMET** SPRING CLIP (4.83mm X 6.86mm) (5.08mm X 5.08mm) (4.83mm)