



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.

INTENSITY

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.

VERSATILITY

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.

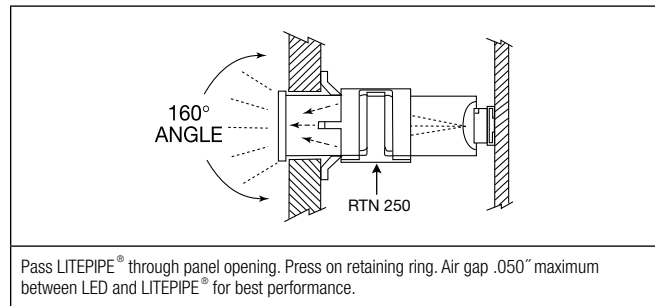
INSTALLATION

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	LITEPIPE® - Acrylic, optical grade, (Clear) Grommet - Polyethylene, (black) - J-Von Spring Clip - Spring Steel (nickel plate)
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. See STD Series data sheet on page 28.

LITEPIPE® WITH VERTICAL SURFACE MOUNT LED



ORDERING CODES

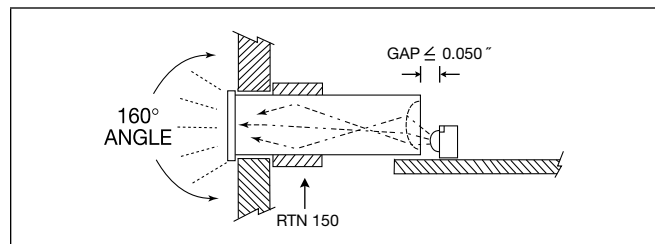
MODEL	LPC	XXX	CTP	COLOR
LPC (Round)				CTP CLEAR
LPS (Square)				
LPR (Rectangular)				
RTN 150 (GROMMET)				
RTN 250 (SPRING CLIP)				

Equals length in inches
(Min. 0.020 = .200" / Max. 200 = 2.0")

020	038	056	074	092	112	135	157	180
022	040	058	076	094	115	137	160	182
024	042	060	078	096	117	140	162	185
026	044	062	080	098	120	142	165	187
028	046	064	082	100	122	145	167	190
030	048	066	084	102	125	147	170	192
032	050	068	086	105	127	150	172	195
034	052	070	088	107	130	152	175	197
036	054	072	090	110	132	155	177	200

NOTE:
Round: .200" to 2.0" Square &
Rectangular: .300" to 2.0"
(Not all sizes carried in stock.)
Special lengths available
upon request. Minimum order
quantity may apply.

LITEPIPE® WITH HORIZONTAL SURFACE MOUNT LED



OUTLINE DRAWING

<p>LPR</p> <p>Rectangular .190 X .270 (4.83mm X 6.86mm)</p>	<p>LPS</p> <p>Square .200 X .200 (5.08mm X 5.08mm)</p>	<p>LPC</p> <p>Round .190 Dia. (4.83mm)</p>	<p>RTN 150</p> <p>GROMMET</p>	<p>RTN 250</p> <p>SPRING CLIP</p>
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MOUNTING COMPONENTS