## Exceptional Portfolio - Light Pipes

### PANEL MOUNT LINEAR LIGHT PIPES

<table>
<thead>
<tr>
<th>Series</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LMC</td>
<td>2.5 mm / 0.10&quot; Fresnel 160° View Angle Low Profile</td>
</tr>
<tr>
<td>LFB</td>
<td>3.0 mm / 0.12&quot; Diffused Lens Press-fit 120° View Angle Low Profile</td>
</tr>
<tr>
<td>LSV</td>
<td>3.0 mm / 0.12&quot; Fits SMB_200 &amp; SMQ_250 lens 180° View Angle Low Profile</td>
</tr>
<tr>
<td>LPC</td>
<td>4.3 mm / 0.17&quot; Fresnel 160° View Angle Low Profile</td>
</tr>
<tr>
<td>LPCR</td>
<td>4.3 mm / 0.17&quot; Fits CLB_300 &amp; SQB_400 lens 180° View Angle Low Profile</td>
</tr>
<tr>
<td>LCV</td>
<td>5.0 mm / 0.20&quot; Diffused Lens Press-fit 120° View Angle Low Profile</td>
</tr>
<tr>
<td>LFC</td>
<td>5.0 mm / 0.20&quot;</td>
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</tbody>
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### PANEL MOUNT MOISTURE SEALED LINEAR LIGHT PIPES

<table>
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<tr>
<th>Series</th>
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</thead>
<tbody>
<tr>
<td>LSS</td>
<td>4.34 mm / 0.171&quot; 180° View Angle w/Retainer Ring Low Profile Sealed Light Pipe</td>
</tr>
<tr>
<td>LMS</td>
<td>7.14 mm / 0.281&quot; 180° View Angle w/Retainer Ring Sealed Light Pipe</td>
</tr>
<tr>
<td>LCS</td>
<td>7.92 mm / 0.312&quot; 180° View Angle w/Lockwasher &amp; Retainer Nut Threaded Moisture Sealed Light Pipe</td>
</tr>
<tr>
<td>LPCM</td>
<td>4.40 mm / 0.173&quot; Panel Flush Low Profile</td>
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</tbody>
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### BOARD MOUNT LINEAR LIGHT PIPES

### PANEL MOUNT FLEXIBLE LIGHT PIPES

<table>
<thead>
<tr>
<th>Series</th>
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</thead>
<tbody>
<tr>
<td>FLX3</td>
<td>4.3 mm / 0.17&quot; Fiber Optic Fits SMD_200, SML_190 &amp; SMQ_250 Lens</td>
</tr>
<tr>
<td>FLX</td>
<td>6.4 mm / 0.25&quot; Fiber Optic Fits CLF_280, CLB_300, CLR_301 &amp; SQB_400 Lens</td>
</tr>
<tr>
<td>7512F</td>
<td>4.8 mm / 0.19&quot; Fiber Optic Low Profile Wide View Angle</td>
</tr>
</tbody>
</table>

### BOARD MOUNT RIGHT ANGLE LIGHT PIPES

Wide Range of 1-position, 2-position, 3-position & 4-position

### MOISTURE-SEALED FLEXIBLE LIGHT PIPES

<table>
<thead>
<tr>
<th>Series</th>
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<tbody>
<tr>
<td>FLX_322</td>
<td>7.1 mm / 0.28&quot; Fiber Optic w/Fresnel Lens, Seal &amp; Retainer Ring</td>
</tr>
<tr>
<td>FLX_44X</td>
<td>7.9 mm / 0.31&quot; Fiber Optic w/Lens, Threaded Seal, Lockwasher, &amp; Retainer Ring</td>
</tr>
<tr>
<td>FLXR</td>
<td>10.1 mm / 0.40&quot; Fiber Optic NEMA4 Threaded w/Seal, Lockwasher, &amp; Retainer Ring</td>
</tr>
</tbody>
</table>

### BOARD MOUNT RIGHT ANGLE LIGHT PIPES

<table>
<thead>
<tr>
<th>Series</th>
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<tbody>
<tr>
<td>7512A7</td>
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<tr>
<td>7511B66</td>
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<tr>
<td>7511B11</td>
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<tr>
<td>7512A5-4A</td>
<td></td>
</tr>
</tbody>
</table>
### Panel Mount Linear Light Pipes

#### LMC SERIES

- **2.5 mm Rigid Light Pipe**
  - Low profile fresnel rigid light pipe
  - Increases the apparent brightness and viewing angle of the LED
  - Uniform brightness
  - Transmits the light from the source to the lens
  - Light pipe is secured to the display panel
  - 160° viewing angle
  - Supports surface mount, 3mm, 5mm standard LED packages
  - Fits 0.102” (2.5 mm) panel mounting hole
  - Enables flush panel design opportunities
  - Available lengths from 0.120” to 1.200”
  - Clear optical acrylic UL94-HB
  - RoHS Compliant

#### LFB SERIES

- **3 mm Press Fit Light Pipe**
  - Diffused rigid light pipe
  - Low profile press fit diffused light pipe
  - Crushable ribs simplify installation
  - Uniform brightness
  - Frosted surface provides a soft glow
  - 120° viewing angle
  - Works with through hole and SMD LEDs
  - Fits 0.116” (3 mm) panel mounting hole
  - Enables flush panel design opportunities
  - Available lengths from 0.125” to 1.000”
  - Clear polycarbonate UL 94-V0
  - Vibration resistant with optional retainer ring
  - RoHS Compliant

#### LSV SERIES

- **3 mm Rigid Light Pipe**
  - Light pipe mates with different VCC lens model
  - Light pipe snaps into lens locking tabs
  - Lens mounts light pipe securely to the display panel
  - 180° viewing angle
  - Fits 0.171” (4.3 mm) panel mounting hole
  - Available lengths from 0.200” to 1.200”
  - Clear optical acrylic UL94-HB
  - Optional color lens and shape available
  - Vibration resistant with optional retainer ring
  - RoHS Compliant

#### LPC SERIES

- **4.3 mm Low profile fresnel light pipe**
  - 4.3 mm low profile fresnel light pipe
  - Supports vertical and horizontal PCB LEDs
  - Unique near flush design
  - Uniform brightness
  - Rigid light pipe
  - Light pipe is secured to the display panel
  - Works with through hole and SMD LEDs
  - Fits 0.171” (4.3 mm) panel mounting hole
  - 160° viewing angle
  - Available lengths from 0.200” to 2.000”
  - Capable of blending multicolor LED light into a single color
  - Clear optical acrylic UL94-HB
  - Vibration resistant with retainer ring
  - RoHS Compliant
Panel Mount Linear Light Pipes

LPCR SERIES

4.3 mm Low profile Press fit fresnel light pipe
- Crushable ribs simplify installation
- Light pipe is secured to the display panel
- Unique near flush design
- Rigid light pipe
- 160° viewing angle
- Works with through hole and SMD LEDs
- Fits 0.171" (4.3 mm) panel mounting hole
- Available lengths from 0.125" to 1.000"
- Clear polycarbonate UL 94-V0
- Vibration resistant with optional retainer ring
- RoHS Compliant

LCV SERIES

5 mm Rigid Light Pipe
- Light pipe mates with different VCC lens model
- Lens mounts light pipe securely to the display panel
- Lightpipe snaps into lens locking tabs
- 180° viewing angle
- Fits 0.250" (6.35 mm) panel mounting hole
- Available lengths from 0.360" to 1.360"
- Clear optical acrylic UL94-HB
- 180° viewing angle
- Optional color lens and shape available
- Vibration resistant with optional retainer ring
- RoHS compliant

LFC SERIES

5 mm Rigid Light Pipe
- Diffused rigid light pipe
- For use with surface-mount or through-hole LEDs
- Optical grade polycarbonate for maximum light transmission
- Low profile, flush panel design
- 120° viewing angle
- Available lengths from 0.125" to 1.000"
- No physical connection between light pipe and LED provides versatility for assembly
- Custom lengths available
- RoHS compliant

Board Mount Linear Light Pipes

LPCM SERIES

Board mount light pipe
- Low profile, panel flush design
- Reduces shadowing and glare
- Mates to any PCB using SMD_4 mount
- Uniform brightness and maximum light transmission
- Works with VCC SMD LEDs
- Fits 0.173" (4.4 mm) panel mounting hole
- Enables flush panel design opportunities
- Available lengths from 0.300" to 1.20"
- Clear optical grade Acrylic 94-HB
- RoHS Compliant
Panel Mount Moisture Sealed Linear Light Pipes

**LSS SERIES**

3 mm light pipe with moisture sealed lens
- Transmits the light from the PCB mounted LEDs to the front display panel
- Low Profile, wide viewing angle, and moisture sealed lens
- Increases the apparent brightness and viewing angle of the LED
- 180° viewing angle
- Supports surface mount, 3mm and 5mm standard LED packages
- Fits 0.171” (4.34 mm) panel mounting hole
- Retainer ring are supplied for easy assembly
- Available lengths from 0.330” to 1.33”
- Different lens colors available
- Light pipe: Clear optical acrylic UL94-HB
- Lens: Polycarbonate UL 94-V2
- Seal: EPDM
- Meets NEMA 4, IP56 standards
- RoHS Compliant

**LMS SERIES**

5 mm light pipe with moisture sealed lens
- Transmits the light from the PCB mounted LEDs to the front display panel
- Low Profile, wide viewing angle, and moisture sealed lens
- Increases the apparent brightness and viewing angle of the LED
- 180° viewing angle
- Supports surface mount, 3mm and 5mm standard LED packages
- Fits 0.281” (7.14 mm) panel mounting hole
- Retainer ring are supplied for easy assembly
- Available lengths from 0.330” to 1.33”
- Different lens colors available
- Light pipe: Clear optical acrylic UL94-HB
- Lens: Polycarbonate UL 94-V2
- Seal: EPDM
- Meets NEMA 4, IP56 standards
- RoHS Compliant

**LCS SERIES**

8 mm light pipe with moisture sealed lens
- Increases the apparent brightness and viewing angle of the LED
- Transmits the light from the PCB mounted LEDs to the front display panel
- Light pipe fits into lens
- Lens mounts securely to the display panel with lockwasher
- 180° viewing angle
- Supports surface mount, 3mm and 5mm standard LED packages
- Fits 5/16” (8mm) panel mounting hole
- Available lengths from 0.320” to 1.77”
- Different lens colors available
- No physical connection between the light pipe and the LED
- Light pipe: Clear optical acrylic UL94-HB
- Lens: Polycarbonate UL 94-V2
- Seal: EPDM
- Meets NEMA 6P / IP67 standards
- RoHS Compliant

High-intensity LEDs and Light Pipes for Audio Products

Light Pipe for Intelligent Control Units

Smart Parking Meter with Flexible Light Pipe
**Panel Mount Flexible Light Pipes**

### FLX3 SERIES

- **3 mm Flexible Light Pipe**
  - Flexible panel board mount light pipe
  - Fiber optic with optical grade acrylic lens
  - Works with through hole and SMD LEDs
  - Fits 0.171" (4.34 mm) panel mounting hole
  - Variations of board mounting available
  - Optional color lens and shape available
  - Available lengths from 2.0" to 12.0"
  - Vibration resistant with optional retainer ring
  - RoHS compliant

### FLX SERIES

- **5 mm Flexible Light Pipe**
  - Flexible panel board mount light pipe
  - Fiber optic with optical grade acrylic lens
  - Works with through hole and SMD LEDs
  - Fits 0.250" (6.35 mm) panel mounting hole
  - Variations of board mounting available
  - Optional color lens and shape available
  - Available lengths from 2.0" to 12.0"
  - Vibration resistant with optional retainer ring
  - RoHS compliant

### 7512F SERIES

- **Flexible Board Mount Light Pipe**
  - Press fit
  - Flexible optical light pipe
  - Fits CMDA19 LED Series
  - Fits 0.187" (4.75 mm) panel mounting hole
  - ESD protection from circuitry
  - Wide viewing angle
  - IP65 rated
  - Water clear optics for variety of LED colors
  - Light pipe: Clear polycarbonate UL 94-V0
  - RoHS compliant

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### Moisture Sealed Flexible Light Pipes

#### FLX_322 SERIES

- **Moisture Seal Flexible Light Pipe**
  - Transmitting light from a PCB mounted LED to front panel
  - Offers wide design capabilities
  - Fiber optic with optical grade acrylic lens
  - Works with through hole and SMD LEDs
  - Fits 9/32" (7.12 mm) panel mounting hole
  - ESD protection from circuitry
  - Available lengths from 2.0" to 12.0"
  - Different fresnel lens colors available
  - Meets NEMA 4, IP56 standards
  - RoHS compliant

#### FLX_44X SERIES

- **Threaded moisture Seal Flexible Light Pipe**
  - Transmitting light from a PCB mounted LED to front panel
  - Offers wide design capabilities
  - Fiber optic with optical grade acrylic lens
  - Works with through hole and SMD LEDs
  - Fits 5/16" (7.97 mm) panel mounting hole
  - ESD protection device
  - Available lengths from 2.0" to 12.0"
  - Different fresnel lens colors available
  - RoHS compliant

#### FLXR SERIES

- **Threaded Moisture Seal Flexible Light Pipe**
  - Designed for harsh and outdoor environments
  - Ruggedized flexible light pipe
  - Anti-vandal low profile light pipe
  - Resistant to shock and vibration
  - Wide viewing angle
  - Fits 0.400" (10.1 mm) panel mounting hole
  - Clear or black anodized finish
  - ESD protection
  - RoHS compliant
Board Mount Right Angle Light Pipes

<table>
<thead>
<tr>
<th>7511B12-C</th>
<th>7513D2-L</th>
<th>7511A22</th>
<th>7514B2-4</th>
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**Board Mount Right Angle Light Pipes**

- Wide range of 1 Position, 2 Position, 3 Position and 4 Position
- Rigid light pipe
- Light pipe is secured to the board
- Maximum light transmission
- Transmit light from PCB mounted LED to the front display panel

Are you ready for next level illuminated components?