LFBR Series 3mm (0.118")
Reverse Panel Mount Press Fit
Rigid Light Pipes

LFBR 3mm reverse mount light pipes with crushable ribs & press-fit installation deliver superior light transmittance and a wide 120 deg viewing angle.

MOUNTING HOLE 0.120"

MULTIPLE LENGTHS

120° VIEWING ANGLE

UL94V-0 MATERIAL

OPTICAL GRADE

Applications

- Audio/Video
- Communication
- Darkroom Equipment

- Industrial
- Maritime, Oil & Gas
- Automation & Controls

- Instrumentation
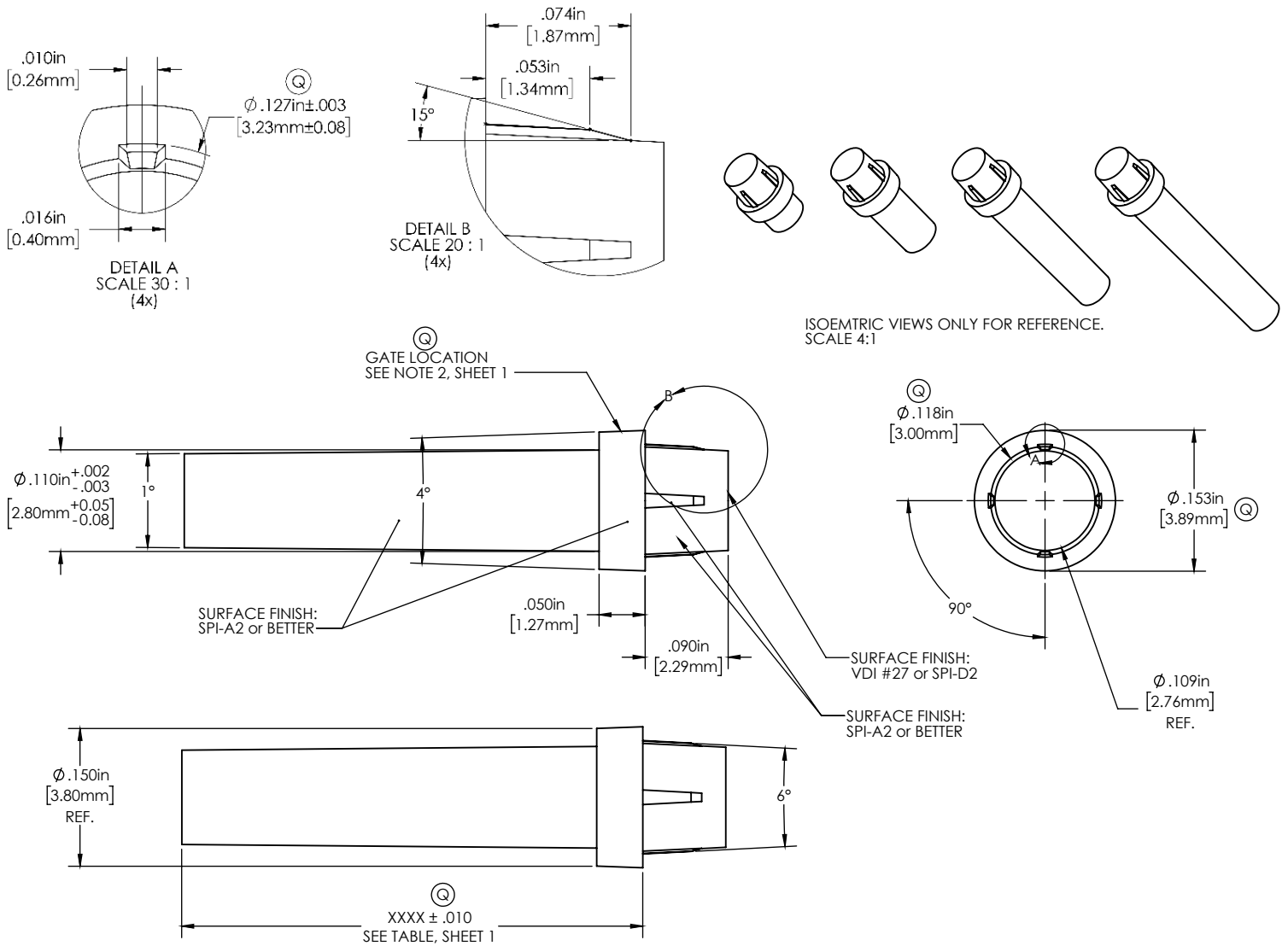- Transportation
- Robotics

Key Features

- Optical-grade polycarbonate delivers superior light transmission.
- Will not yellow or tarnish in UV or high-moisture environments.
- UL94V-0 rating ensures secure fire-retardant performance.
- Halogen-free material.
- Enhanced resin system provides superb mechanical & optical stability for harsh or damp conditions.
- Reverse-mount design accommodates products where the PCB is difficult to reach.
- Press-fit mounting and crushable ribs simplify installation and assembly.
- Dome lens options provide wide viewing angle.
- Flat lens options support low profile panel designs.
- Standard length options from .100" to .830" .
- RoHS and REACH compliant.
- Compatible with single and multi-color SMD LEDs, such as VCC's SpectraBright, LSM, CMD15, CMD17, VAOL series, and other light sources.
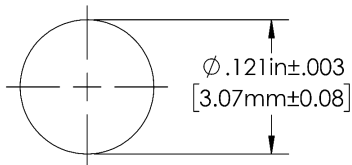
Ordering Data

Series	Length	Color
LFBR - Flat Lens	012	C

VCC **Part Number**	**Body Length**
LFBR3F0100C	0.100″ (2.5mm)
LFBR3F0125C	0.125″ (3.2mm)
LFBR3F0196C	0.196″ (5.0mm)
LFBR3F0250C	0.250″ (6.4mm)
LFBR3F0275C	0.275″ (7.0mm)
LFBR3F0313C	0.313″ (7.9mm)
LFBR3F0350C	0.350″ (8.9mm)
LFBR3F0375C	0.375″ (9.5mm)
LFBR3F0500C	0.500″ (12.7mm)
LFBR3F0625C	0.625″ (15.9mm)
LFBR3F0750C	0.750″ (19.0mm)
LFBR3F0830C	0.830″ (21.1mm)

Clear

Series	Length	Color
LFBR - Domed Lens	012	C

VCC **Part Number**	**Body Length**
LFBR3D0125C	0.125″ (3.2mm)
LFBR3D0175C	0.175″ (4.4mm)
LFBR3D0250C	0.250″ (6.4mm)
LFBR3D0313C	0.313″ (7.9mm)
LFBR3D0350C	0.350″ (8.9mm
LFBR3D0375C	0.375″ (9.5mm)
LFBR3D0460C	0.460″ (11.7mm)
LFBR3D0500C	0.500″ (12.7mm)
LFBR3D0625C	0.625″ (15.9mm)
LFBR3D0750C	0.750″ (19.0mm)

Clear

.010in
[0.26mm]

⌀ .127in±.003
[3.23mm±0.08]

.016in
[0.40mm]

DETAIL A
SCALE 30 : 1
(4x)

.074in
[1.87mm]

.053in
[1.34mm]

15°

DETAIL B
SCALE 20 : 1
(4x)

ISOEMTRIC VIEWS ONLY FOR REFERENCE.
SCALE 4:1

GATE LOCATION
SEE NOTE 2, SHEET 1

⌀ .110in +.002 -.003
[2.80mm +0.05 -0.08]

1°

4°

SURFACE FINISH:
SPI-A2 or BETTER

.050in
[1.27mm]

.090in
[2.29mm]

SURFACE FINISH:
VDI #27 or SPI-D2

SURFACE FINISH:
SPI-A2 or BETTER

⌀ .118in
[3.00mm]

⌀ .153in
[3.89mm]

90°

⌀ .109in
[2.76mm]
REF.

⌀ .150in
[3.80mm]
REF.

6°

XXXX ± .010
SEE TABLE, SHEET 1

Recommended Mounting Hole

⌀ .121in±.003
[3.07mm±0.08]

RECOMMENDED MOUNTING HOLE
PANEL THICKNESS: 0.039" [1mm] ~ 0.094"[2.4mm]

Notes:

1. All dimensions are in inches [millimeters]
2. Tolerance is ± 0.005″ [0.1mm] unless otherwise noted.
3. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.

Product Dimensions - Domed

.010in
[0.26mm]

Q
∅.127in±.003
[3.23mm±0.08]

.016in
[0.40mm]

DETAIL A
SCALE 30 : 1
(4x)

[1.87mm]

.053in
[1.34mm]

15°

ISOEMTRIC VIEWS ONLY FOR REFERENCE.
SCALE 4:1

Q
GATE LOCATION
SEE NOTE 2, SHEET 1

.144in
[3.66mm]

B

∅.110in ⁺·⁰⁰²₋·⁰⁰³
[2.80mm ⁺⁰·⁰⁵₋₀.₀₈]

1°

4°

.050in
[1.27mm]

.090in
[2.29mm]

SURFACE FINISH:
SPI-A2 or BETTER

SURFACE FINISH:
VDI #27 or SPI-D2

SURFACE FINISH:
SPI-A2 or BETTER

Q
∅.118in
[3.00mm]

A

∅.153in
[3.89mm] Q

90°

∅.109in
[2.76mm]
REF.

∅.150in
[3.80mm]
REF.

6°

Q
XXX ± .010
SEE TABLE, SHEET 1
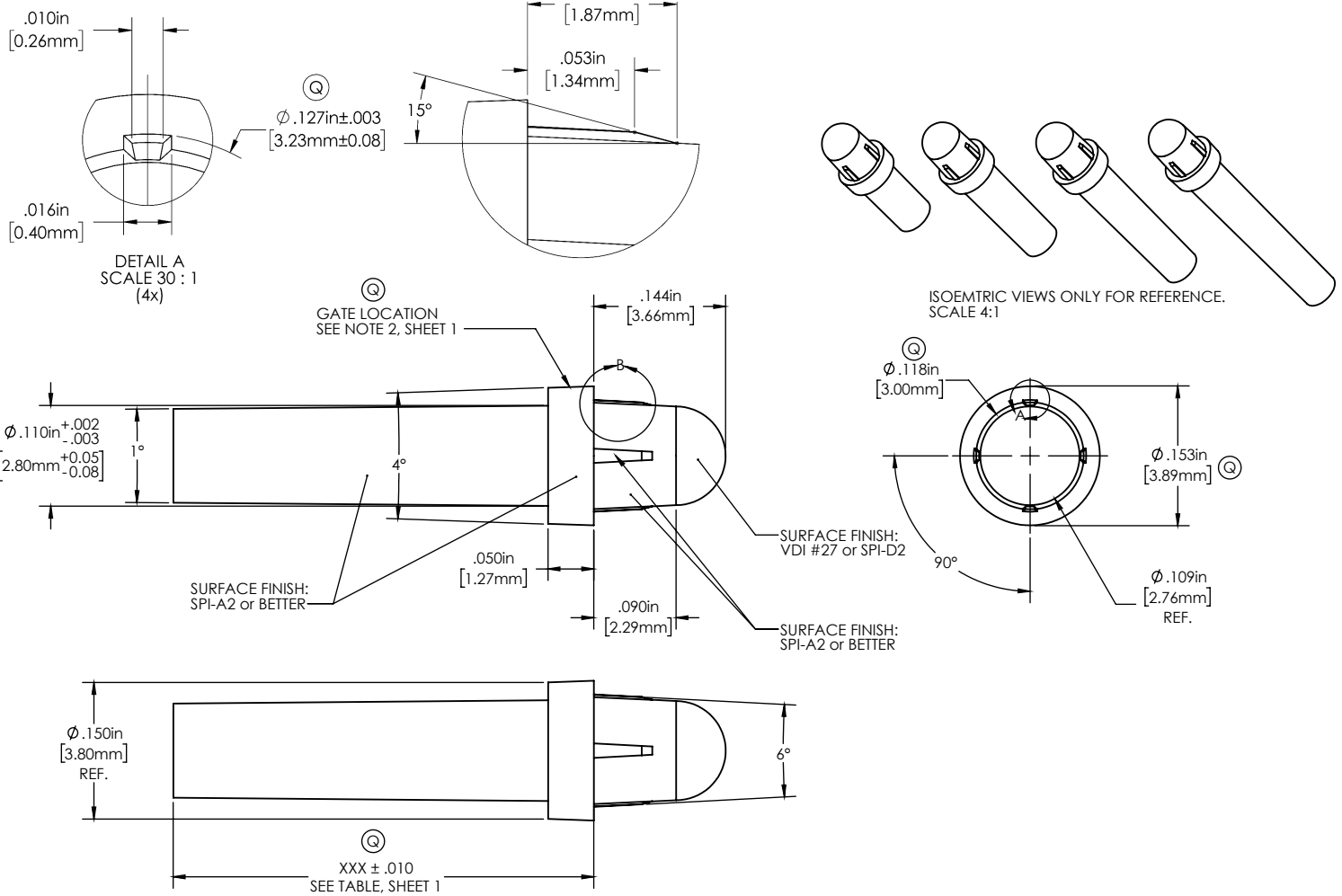
Recommended Mounting Hole

∅.121in±.003
[3.07mm±0.08]

RECOMMENDED MOUTING HOLE
PANEL THICKNESS: 0.039'' [1mm] ~ 0.094''[2.4mm]

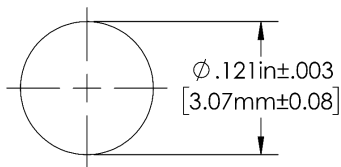**Notes:**

1. All dimensions are in inches [millimeters]
2. Tolerance is ± 0.005″ [0.1mm] unless otherwise noted.
3. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.

Product Specifications

Materials	
Body	Polycarbonate, Clear UL94V-0

Temperature Specifications	
Operating Temperature	-40* to 248F (-40* to 120C)

Installation Specifications	
Diameter	Ø 0.121" +/-0.003 (3.07+/- 0.05mm)
Standard Lengths	.100" to 830" (2.5mm to 21.1mm)

Recommendation:
Maximum air gap (clearance) between LED and light pipe for best performance:
0.020" [0.5mm] for wide viewing angle LED
0.050" [1.3mm] for narrow viewing angle LED

Compliances and Approvals

REACH
COMPLIANCE

RoHS
COMPLIANT