



Ordering number	FA11078		
Description	FA11078_Lisa2-M-clip16-NVS19		
Family	Lisa2	FWHM	0 degrees
Type	Lens	Efficiency	-
LED	NVS19	cd/Im	-
Color	Black	Gerber File	Available
Diameter	9.9 mm		
Height	7 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	PC		
Fastening	Clips, glue		
Status	Ready		



Ordering number	FA11079		
Description	FA11079_Lisa2-W-clip16-NVS19		
Family	Lisa2	FWHM	0 degrees
Type	Lens	Efficiency	-
LED	NVS19	cd/Im	-
Color	Black	Gerber File	Available
Diameter	9.9 mm		
Height	7 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	PC		
Fastening	Clips, glue		
Status	Ready		



Ordering number	FA11087		
Description	FA11087_Lisa2-RS-clip16-NVS19		
Family	Lisa2	FWHM	0 degrees
Type	Lens	Efficiency	-
LED	NVS19	cd/Im	-
Color	Black	Gerber File	Available
Diameter	9.9 mm		
Height	7 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	PC		
Fastening	Clips, glue		
Status	Ready		



Ordering number	FA11123		
Description	FA11123_Lisa2-O-clip16-NVS19		
Family	Lisa2	FWHM	0 degrees
Type	Lens	Efficiency	-
LED	NVS19	cd/Im	-
Color	Black	Gerber File	Available
Diameter	9.9 mm		
Height	7 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	PC		
Fastening	Glue, tape		
Status	Ready		



Ordering number	FA11860		
Description	FA11860_Lisa2-O-90-clip16-NVS19		
Family	Lisa2	FWHM	0 degrees
Type	Lens	Efficiency	-
LED	NVS19	cd/Im	-
Color	Black	Gerber File	Available
Diameter	9.9 mm		
Height	7 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	PC		
Fastening	Clips, glue		
Status	Ready		



Ordering number	FA11955		
Description	FA11955_Lisa2-WWW-Clip16-NVS19		
Family	Lisa2	FWHM	0 degrees
Type	Lens	Efficiency	-
LED	NVS19	cd/Im	-
Color	Black	Gerber File	Available
Diameter	9.9 mm		
Height	7 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	PC		
Fastening	Clips, glue		
Status	Ready		

NOTE: The typical divergence will be changed by different color, chip size and chip position tolerance. The typical total divergence is the full angle measured where the luminous intensity is half of the peak value.

GENERAL INFORMATION

- Product series especially designed & optimized for NVS19 series of LEDs.
- Special care taken to make light distribution as uniform as possible.
- Lens material optical grade PMMA with high UV and temperature resistance (105 degrees of Celcius / 220 degrees of Fahrenheit). Allows use of high current and temperature conditions.

Please find more information about used material from below:

http://ledil.fi/sites/default/files/Documents/Technical/Material/PMMA%20N%20UL94_Yellow%20Card.pdf

<http://ledil.fi/sites/default/files/Documents/Technical/Material/PMMA%20N%20PLEXIGLAS-Datasheet.pdf>

- Optic holder molded by high quality PC material (120 dergees of Celcius / 248 degrees of Fahrenheit).

- Fastening to heat sink with a PU foam adhesive tape of automotive grade. Please find fastening details by clicking link: http://www.ledil.com/datasheets/DataSheet_TAPE.pdf

- Fastening to PCB with appropriate adhesive. By clicking link below you can find Ledil recommended glue options.

http://www.ledil.com/datasheets/DataSheet_GLUES.pdf

NOTE 1: We advise customer to ensure the suitability and sufficiency of the bond in the end product. For example, mechanical stress, vibration and holes on the surface of the circuit board weaken the strength of the tape.

NOTE 2: Assembly to the surface must be made straight, so the tape bonds constant and balanced with fastening surface. Slanted assembly might cause unbalanced bond to the surface. All surfaces where tape is applied must be clean, dry and free from grease and dirt.

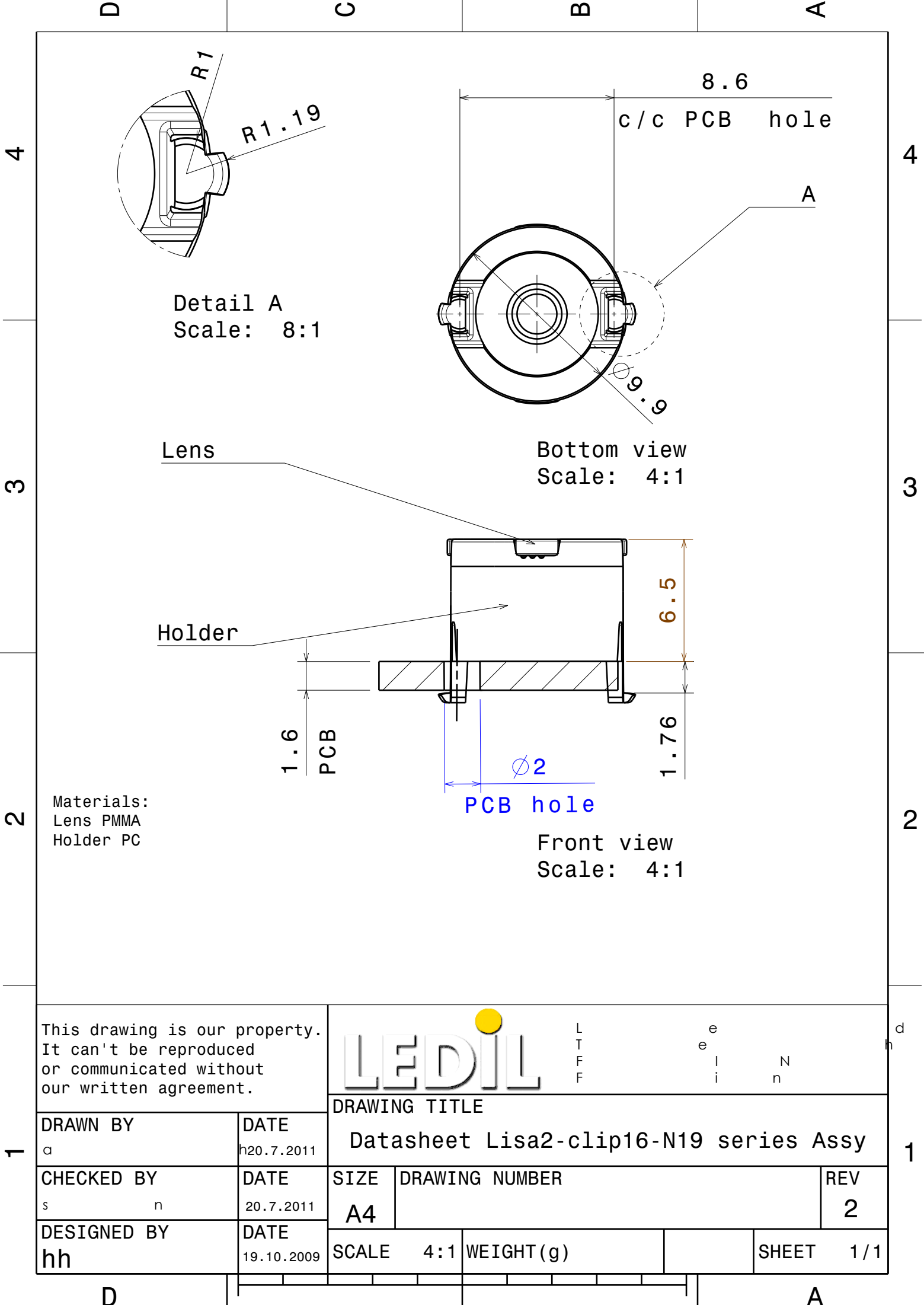
If cleaning of PCB surfaces is needed, please follow strictly the cleaning instructions of your LED manufacturer - this is important as cleaning shall under no circumstances damage LEDs or other electronics components on the PCB.

Further note that optical components shall not be cleaned with any chemicals - only micro fiber cloth may be used to remove fingerprints or other traces from handling.

NOTE 1: We advise customer to ensure the suitability and sufficiency of the bond in the end product. For example, mechanical stress, vibration and holes on the surface of the circuit board weaken the strength of the glue.

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DRAWING TITLE

Datasheet Lisa2-clip16-N19 series Assy

DRAWN BY

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DATE

20.7.2011

CHECKED BY

s

n

DATE

20.7.2011

DESIGNED BY

hh

DATE

19.10.2009

SIZE

A4

DRAWING NUMBER

REV

2

SCALE

4:1

WEIGHT (g)

SHEET

1/1

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