

PRODUCT DATASHEET Lisa2-Clip16-N19 series











Ordering number Description	FA11078 FA11078_Lisa2-M-clip16-NV3	S19		
Family	Lisa2	FWHM	0 degrees	
Туре	Lens	Efficiency	-	
LED	NVS19	cd/lm	-	
Color	Black	Gerber File	Available	
Diameter	9.9 mm			
Height	7 mm			
Style	Round			
Optic Material	РММА			
Holder Material	PC			
Fastening	Clips, glue			
Status	Ready			
Ordering number Description	FA11079 FA11079_Lisa2-W-clip16-NV	S19		
Family	Lisa2	FWHM	0 degrees	
Туре	Lens	Efficiency	-	
LED	NVS19	cd/lm	-	
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 Description		/S19		
		/S19 FWHM	0 degrees	
Description	FA11087_Lisa2-RS-clip16-N		0 degrees -	
Description Family	FA11087_Lisa2-RS-clip16-N	FWHM	0 degrees - -	
Description Family Type	FA11087_Lisa2-RS-clip16-N Lisa2 Lens	FWHM Efficiency	0 degrees - - Available	
Description Family Type LED	FA11087_Lisa2-RS-clip16-N Lisa2 Lens NVS19	FWHM Efficiency cd/lm	-	
Description Family Type LED Color	FA11087_Lisa2-RS-clip16-NV Lisa2 Lens NVS19 Black	FWHM Efficiency cd/lm	-	
Description Family Type LED Color Diameter	FA11087_Lisa2-RS-clip16-NV Lisa2 Lens NVS19 Black 9.9 mm	FWHM Efficiency cd/lm	-	
Description Family Type LED Color Diameter Height Style Optic Material	FA11087_Lisa2-RS-clip16-NV Lisa2 Lens NVS19 Black 9.9 mm 7 mm	FWHM Efficiency cd/lm	-	
Description Family Type LED Color Diameter Height Style Optic Material Holder Material	FA11087_Lisa2-RS-clip16-NV Lisa2 Lens NVS19 Black 9.9 mm 7 mm Round PMMA PC	FWHM Efficiency cd/lm	-	
Description Family Type LED Color Diameter Height Style Optic Material Holder Material Fastening	FA11087_Lisa2-RS-clip16-NV Lisa2 Lens NVS19 Black 9.9 mm 7 mm Round PMMA PC Clips, glue	FWHM Efficiency cd/lm	-	
Description Family Type LED Color Diameter Height Style Optic Material Holder Material	FA11087_Lisa2-RS-clip16-NV Lisa2 Lens NVS19 Black 9.9 mm 7 mm Round PMMA PC	FWHM Efficiency cd/lm	-	
Description Family Type LED Color Diameter Height Style Optic Material Holder Material Fastening	FA11087_Lisa2-RS-clip16-NN Lisa2 Lens NVS19 Black 9.9 mm 7 mm Round PMMA PC Clips, glue Ready	FWHM Efficiency cd/Im Gerber File	-	
Description Family Type LED Color Diameter Height Style Optic Material Holder Material Fastening Status Ordering number Description	FA11087_Lisa2-RS-clip16-NN Lisa2 Lens NVS19 Black 9.9 mm 7 mm Round PMMA PC Clips, glue Ready FA11123	FWHM Efficiency cd/Im Gerber File	- Available	
Description Family Type LED Color Diameter Height Style Optic Material Holder Material Fastening Status Ordering number Description Family	FA11087_Lisa2-RS-clip16-NN Lisa2 Lens NVS19 Black 9.9 mm 7 mm Round PMMA PC Clips, glue Ready FA11123 FA11123_Lisa2-O-clip16-NVS	FWHM Efficiency cd/Im Gerber File	-	
Description Family Type LED Color Diameter Height Style Optic Material Holder Material Fastening Status Ordering number Description	FA11087_Lisa2-RS-clip16-NN Lisa2 Lens NVS19 Black 9.9 mm 7 mm Round PMMA PC Clips, glue Ready FA11123 FA11123_Lisa2-O-clip16-NVS Lisa2	FWHM Efficiency cd/Im Gerber File S19 FWHM	- Available	
Description Family Type LED Color Diameter Height Style Optic Material Holder Material Fastening Status Ordering number Description Family Type	FA11087_Lisa2-RS-clip16-NN Lisa2 Lens NVS19 Black 9.9 mm 7 mm Round PMMA PC Clips, glue Ready FA11123 FA11123_Lisa2-O-clip16-NVS Lisa2 Lens	FWHM Efficiency cd/Im Gerber File	- Available	
Description Family Type LED Color Diameter Height Style Optic Material Holder Material Fastening Status Ordering number Description Family Type LED	FA11087_Lisa2-RS-clip16-NV Lisa2 Lens NVS19 Black 9.9 mm 7 mm Round PMMA PC Clips, glue Ready FA11123 FA11123_Lisa2-O-clip16-NVS Lisa2 Lens NVS19	FWHM Efficiency cd/Im Gerber File S19 FWHM Efficiency cd/Im	- Available 0 degrees -	
Description Family Type LED Color Diameter Height Style Optic Material Holder Material Fastening Status Ordering number Description Family Type LED Color	FA11087_Lisa2-RS-clip16-NV Lisa2 Lens NVS19 Black 9.9 mm 7 mm Round PMMA PC Clips, glue Ready FA11123 FA11123_Lisa2-O-clip16-NV Lisa2 Lens NVS19 Black	FWHM Efficiency cd/Im Gerber File S19 FWHM Efficiency cd/Im	- Available 0 degrees -	
Description Family Type LED Color Diameter Height Style Optic Material Holder Material Fastening Status Ordering number Description Family Type LED Color Diameter	FA11087_Lisa2-RS-clip16-NV Lisa2 Lens NVS19 Black 9.9 mm 7 mm Round PMMA PC Clips, glue Ready FA11123 FA11123_Lisa2-O-clip16-NVS Lisa2 Lens NVS19 Black 9.9 mm	FWHM Efficiency cd/Im Gerber File S19 FWHM Efficiency cd/Im	- Available 0 degrees -	
Description Family Type LED Color Diameter Height Style Optic Material Holder Material Fastening Status Ordering number Description Family Type LED Color Diameter Height	FA11087_Lisa2-RS-clip16-NV Lisa2 Lens NVS19 Black 9.9 mm 7 mm Round PMMA PC Clips, glue Ready FA11123 FA11123_Lisa2-O-clip16-NVS Lisa2 Lens NVS19 Black 9.9 mm 7 mm	FWHM Efficiency cd/Im Gerber File S19 FWHM Efficiency cd/Im	- Available 0 degrees -	
Description Family Type LED Color Diameter Height Style Optic Material Holder Material Fastening Status Ordering number Description Family Type LED Color Diameter Height Style	FA11087_Lisa2-RS-clip16-NV Lisa2 Lens NVS19 Black 9.9 mm 7 mm Round PMMA PC Clips, glue Ready FA11123 FA11123_Lisa2-O-clip16-NVS Lisa2 Lens NVS19 Black 9.9 mm 7 mm Round	FWHM Efficiency cd/Im Gerber File S19 FWHM Efficiency cd/Im	- Available 0 degrees -	
Description Family Type LED Color Diameter Height Style Optic Material Holder Material Fastening Status Ordering number Description Family Type LED Color Diameter Height Style Optic Material	FA11087_Lisa2-RS-clip16-NY Lisa2 Lens NVS19 Black 9.9 mm 7 mm Round PMMA PC Clips, glue Ready FA11123 FA11123_Lisa2-O-clip16-NYS Lisa2 Lens NVS19 Black 9.9 mm 7 mm Round PMMA	FWHM Efficiency cd/Im Gerber File S19 FWHM Efficiency cd/Im	- Available 0 degrees -	
Description Family Type LED Color Diameter Height Style Optic Material Holder Material Fastening Status Ordering number Description Family Type LED Color Diameter Height Style Optic Material Holder Material	FA11087_Lisa2-RS-clip16-NV Lisa2 Lens NVS19 Black 9.9 mm 7 mm Round PMMA PC Clips, glue Ready FA11123 FA11123_Lisa2-O-clip16-NVS Lisa2 Lens NVS19 Black 9.9 mm 7 mm Round PMMA PC	FWHM Efficiency cd/Im Gerber File S19 FWHM Efficiency cd/Im	- Available 0 degrees -	

September 26th 2011 6:16 Copyright Ledil Oy - Subject to change without prior notice - Page 1/3

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PRODUCT DATASHEET Lisa2-Clip16-N19 series



Ordering number Description	FA11860 FA11860_Lisa2-O-90-clip16-N	IVS19	
Family	Lisa2	FWHM	0 degrees
Туре	Lens	Efficiency	-
LED	NVS19	cd/lm	-
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		
	FA11955 FA11955_Lisa2-WWW-Clip16-NVS19		
Ordering number Description	FA11955 FA11955_Lisa2-WWW-Clip16-	-NVS19	
Ordering number Description Family	FA11955 FA11955_Lisa2-WWW-Clip16- Lisa2	-NVS19 FWHM	0 degrees
Description Family	FA11955_Lisa2-WWW-Clip16		0 degrees
Description	FA11955_Lisa2-WWW-Clip16	FWHM	0 degrees - -
Description Family Type	FA11955_Lisa2-WWW-Clip16 Lisa2 Lens	FWHM Efficiency	0 degrees - - Available
Description Family Type LED	FA11955_Lisa2-WWW-Clip16 Lisa2 Lens NVS19	FWHM Efficiency cd/lm	-
Description Family Type LED Color	FA11955_Lisa2-WWW-Clip16- Lisa2 Lens NVS19 Black	FWHM Efficiency cd/lm	-
Description Family Type LED Color Diameter	FA11955_Lisa2-WWW-Clip16- Lisa2 Lens NVS19 Black 9.9 mm	FWHM Efficiency cd/lm	-
Description Family Type LED Color Diameter Height	FA11955_Lisa2-WWW-Clip16- Lisa2 Lens NVS19 Black 9.9 mm 7 mm	FWHM Efficiency cd/lm	-
Description Family Type LED Color Diameter Height Style	FA11955_Lisa2-WWW-Clip16- Lisa2 Lens NVS19 Black 9.9 mm 7 mm Round	FWHM Efficiency cd/lm	-
Description Family Type LED Color Diameter Height Style Optic Material	FA11955_Lisa2-WWW-Clip16- Lisa2 Lens NVS19 Black 9.9 mm 7 mm Round PMMA	FWHM Efficiency cd/lm	-

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.

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PRODUCT DATASHEET Lisa2-Clip16-N19 series

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%208N%20UL94_Yellow%20Card.pdf http://ledil.fi/sites/default/files/Documents/Technical/Material/PMMA%208N%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 boar 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 boar weaken the strength of the glue.

NOTE 2: All surfaces where glue 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.

