



**Ordering number** FA11067  
**Description** FA11067\_LM1-O-90

Family Leila  
 Type Lens  
 LED MC-E  
 Color Black  
 Diameter 21.6 mm  
 Height 14.04 mm  
 Style Round  
 Optic Material PMMA  
 Holder Material PC  
 Fastening Tape  
 Status Ready

FWHM (simulated) 38+26  
 Efficiency -  
 cd/lm -  
 Gerber File Available



**Ordering number** FA11447  
**Description** FA11447\_LM1-M2

Family Leila  
 Type Assembly  
 LED MC-E  
 Color Black  
 Diameter 21.6 mm  
 Height 14.04 mm  
 Style Round  
 Optic Material PMMA  
 Holder Material PC  
 Fastening Tape  
 Status Ready

FWHM (simulated) 28  
 Efficiency -  
 cd/lm -  
 Gerber File Available



**Ordering number** FA10650  
**Description** FA10650\_LM1-D

Family Leila  
 Type Lens  
 LED MC-E  
 Color Black  
 Diameter 21.6 mm  
 Height 14.04 mm  
 Style Round  
 Optic Material PMMA  
 Holder Material PC  
 Fastening Tape  
 Status Ready

FWHM 20 degrees  
 Efficiency -  
 cd/lm -  
 Gerber File Available



**Ordering number** FA10613  
**Description** FA10613\_LM1-RS

Family Leila  
 Type Lens  
 LED MC-E  
 Color Black  
 Diameter 21.6 mm  
 Height 14.04 mm  
 Style Round  
 Optic Material PMMA  
 Holder Material PC  
 Fastening Tape  
 Status Ready

FWHM 21 degrees  
 Efficiency 89 %  
 cd/lm -  
 Gerber File Available



**Ordering number** FA10614  
**Description** FA10614\_LM1-M

Family	Leila	FWHM	24 degrees
Type	Lens	Efficiency	88 %
LED	MC-E	cd/lm	-
Color	Black	Gerber File	Available
Diameter	21.6 mm		
Height	14.04 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	PC		
Fastening	Tape		
Status	Ready		



**Ordering number** FA10615  
**Description** FA10615\_LM1-REC

Family	Leila	FWHM	38+24 degrees
Type	Lens	Efficiency	86 %
LED	MC-E	cd/lm	-
Color	Black	Gerber File	Available
Diameter	21.6 mm		
Height	14.04 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	PC		
Fastening	Tape		
Status	Ready		

**Ordering number** FA11827  
**Description** FA11827-LM1-WW

Family	Leila	FWHM	(simulated) 36
Type	Lens	Efficiency	-
LED	MC-E	cd/lm	-
Color	Black	Gerber File	Available
Diameter	21.6 mm		
Height	14.04 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	PC		
Fastening	Tape		
Status	Ready		

**Ordering number** FA11894  
**Description** FA11894\_LM1-W

Family	Leila	FWHM	28 degrees
Type	Lens	Efficiency	-
LED	MC-E	cd/lm	-
Color	Black	Gerber File	Available
Diameter	21.6 mm		
Height	14.04 mm		
Style	Round		
Optic Material	PMMA		
Holder Material	PC		
Fastening	Tape		
Status	Ready		



## PRODUCT DATASHEET LM1 series



**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.



## PRODUCT DATASHEET LM1 series



### GENERAL INFORMATION

- Product series especially designed & optimized for MC-E 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%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](http://www.ledil.com/datasheets/DataSheet_TAPE.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.**