

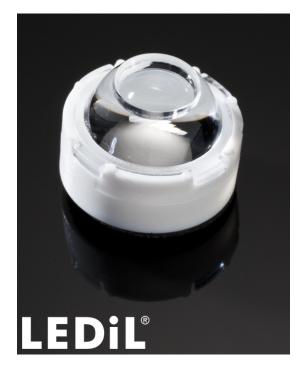
PRODUCT DATASHEET FA11905_TINA3-S

TINA3-S

~13° spot beam optimized for CREE XP-E. Assembly with holder, installation tape and location pins.

TECHNICAL SPECIFICATIONS:

Dimensions	Ø 16.1 mm
Height	11.4 mm
Fastening	tape, pin
ROHS compliant	yes 🛈



MATERIAL SPECIFICATIONS:

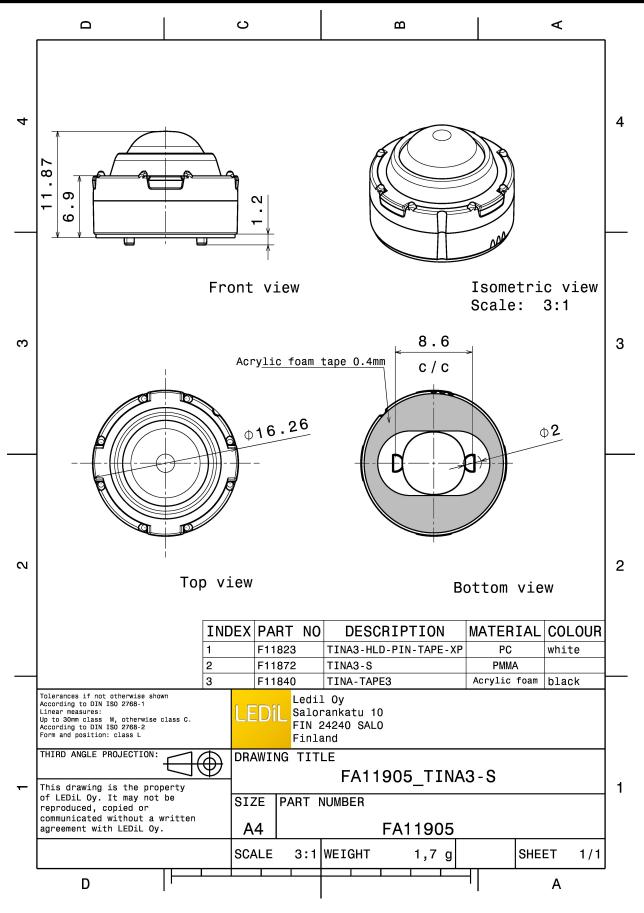
Component	Туре	Material	Colour	Finish
TINA3-S	Single lens	PMMA	clear	
TINA3-HLD-PIN-TAPE-XP	Holder	PC	white	
TINA-TAPE3	Таре	Acrylic foam	black	

ORDERING INFORMATION:

Component		Qty in box	MOQ	MPQ	Box weight (kg)
FA11905_TINA3-S	Single lens	2016	288	288	3.7
» Box size:					



PRODUCT DATASHEET FA11905_TINA3-S



See also our general installation guide: <u>www.ledil.com/installation_guide</u>



	D	90*	90*
LED	XM-L		
FWHM / FWTM	23.0° / 30.0°	75*	
Efficiency	86 %		
Peak intensity	3.4 cd/lm	80.8	1000
LEDs/each optic	1		
Light colour	White	52×	
Required compone			\times / \times
		1	15° 0° 15°
	D		
LED	XP-E		
FWHM / FWTM	10.0° / 16.0°		
Efficiency	86 %		
Peak intensity	15.8 cd/lm		
LEDs/each optic	1		
Light colour	White		
Required compone	ents:		
	D	99°	30'
LED	XP-G		
FWHM / FWTM	15.0° / 25.0°	75*	
Efficiency	86 %		
Peak intensity	6.7 cd/lm	60*	
LEDs/each optic	1		\times / / \wedge \times
Light colour	White	50	
Required compone			CE0
			30
		^{30°}	15° 0° 15°
	D	90*	90
LED	XP-L HD		A A
FWHM / FWTM	23.0° / 32.0°	255	
Efficiency	87 %		
Peak intensity	3.8 cd/lm	605	1500
LEDs/each optic	1		\times / / \land
Light colour	White	45°	2130
Required compone			
			320
		\rightarrow	
		30-	4000 30



	D		90*
	XP-L HI		
FWHM / FWTM	15.0° / 22.0°		75
Efficiency	88 %		
Peak intensity	8.9 cd/lm		60° 3200
LEDs/each optic	1		
Light colour	ı White		
Required compone			$r \times / / \times$
Required compone	5113.		600
			30- 30- 40-
	.EDS		
LED	LUXEON A		
FWHM / FWTM	16.0° / 23.0°		
Efficiency	83 %		
Peak intensity	6.7 cd/lm		
LEDs/each optic	1		
Light colour	White		
Required compone			
LUMIL LED FWHM / FWTM	LUXEON Rebel 11.0° / 18.0°		
Peak intensity LEDs/each optic Light colour	83 % 12.9 cd/lm 1 White ents:		
Peak intensity LEDs/each optic Light colour Required compone	12.9 cd/lm 1 White ents:		
Peak intensity LEDs/each optic Light colour Required compone	12.9 cd/lm 1 White ents: .EDS LUXEON Rebel ES		
Peak intensity LEDs/each optic Light colour Required compone Composition LUMIL LED FWHM / FWTM	12.9 cd/lm 1 White ents: EDS LUXEON Rebel ES 18.5° / 22.0°		
Peak intensity LEDs/each optic Light colour Required compone Composition LUMIL ED FWHM / FWTM Efficiency	12.9 cd/lm 1 White ents: EDS LUXEON Rebel ES 18.5° / 22.0° 82 %		
Peak intensity LEDs/each optic Light colour Required compone Composition LUMIL FWHM / FWTM Efficiency Peak intensity	12.9 cd/lm 1 White ents: EDS LUXEON Rebel ES 18.5° / 22.0° 82 % 6.9 cd/lm		
Peak intensity LEDs/each optic Light colour Required compone Composition LUMI Eff FWHM / FWTM Efficiency Peak intensity LEDs/each optic	12.9 cd/lm 1 White ents: EDS LUXEON Rebel ES 18.5° / 22.0° 82 % 6.9 cd/lm 1		
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	12.9 cd/lm 1 White ents: EDS LUXEON Rebel ES 18.5° / 22.0° 82 % 6.9 cd/lm 1 White		
Peak intensity LEDs/each optic Light colour Required compone Composition LUMI Eff FWHM / FWTM Efficiency Peak intensity LEDs/each optic	12.9 cd/lm 1 White ents: EDS LUXEON Rebel ES 18.5° / 22.0° 82 % 6.9 cd/lm 1 White		
Peak intensity LEDs/each optic Light colour Required compone Composition LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	12.9 cd/lm 1 White ents: EDS LUXEON Rebel ES 18.5° / 22.0° 82 % 6.9 cd/lm 1 White		



		20*
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	NVSW219F 18.0° / 24.0° 85 % 6.1 cd/lm 1 White	20, 00 P2, 00 P2
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required compone	NVSxx19A 16.5° / 23.0° 87 % 6.8 cd/lm 1 White nts:	
OSRAM Opto Semiconductors LED	OSLON SSL 150	23° 29°
FWHM / FWTM Efficiency Peak intensity LEDs/each optic	9.0° / 14.0° 84 % 18.4 cd/lm 1	
Light colour Required compone	White nts:	20 1300 20 ¹⁰ 1300 20 20 20
OSRAM Opto Semiconductors		<u> </u>
Opto Semiconductors LED FWHM / FWTM Efficiency	OSLON SSL 80 11.0° / 17.0° 86 %	
Peak intensity LEDs/each optic Light colour	14 cd/lm 1 White	
Required compone	nts:	



SEOUL	
SEOUL SEMICONDUCTOR	
LED	Z
FWHM / FWTM	10
Efficiency	80
Peak intensity	16
LEDs/each optic	1
Light colour	W
Required compone	nts:

Z5 10.0° / 17.0° 30 % 16.4 cd/lm 1 White





PHOTOMETRIC DATA (SIMULATED):

		90° 90°
LED	XP-E2	75*
FWHM / FWTM	10.0° / 17.0°	
Efficiency	92 %	6400 64 ⁰
Peak intensity	19.1 cd/lm	$\left[\left($
LEDs/each optic	1	
Light colour	White	45° 43°
Required components:		12000
		30 ⁴ 35 ⁴ 9 ⁴
		90 ⁴ 90 ⁴
LED	XP-G3	
FWHM / FWTM	18.0° / 28.0°	23.
Efficiency	78 %	1000
Peak intensity	5.1 cd/lm	60 ⁻
LEDs/each optic	1	
Light colour	Blue	5° 300 6°
Required components:		
		30* 30*
		15° 0° 15°
		7
		90* 90*
LED	LUXEON 2835 Line	39°
LED FWHM / FWTM	LUXEON 2835 Line 13.0° / 25.0°	
LED FWHM / FWTM Efficiency	LUXEON 2835 Line 13.0° / 25.0° 91 %	
LED FWHM / FWTM Efficiency Peak intensity	LUXEON 2835 Line 13.0° / 25.0° 91 % 9.5 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LUXEON 2835 Line 13.0° / 25.0° 91 % 9.5 cd/lm 1	77 64 1330 64
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON 2835 Line 13.0° / 25.0° 91 % 9.5 cd/lm	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	LUXEON 2835 Line 13.0° / 25.0° 91 % 9.5 cd/lm 1	77 64 1330 64
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON 2835 Line 13.0° / 25.0° 91 % 9.5 cd/lm 1	77 64 1330 64
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON 2835 Line 13.0° / 25.0° 91 % 9.5 cd/lm 1	77 64 1330 64
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON 2835 Line 13.0° / 25.0° 91 % 9.5 cd/lm 1 White	77 64 1330 64
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON 2835 Line 13.0° / 25.0° 91 % 9.5 cd/lm 1 White	5° 50° 6°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	LUXEON 2835 Line 13.0° / 25.0° 91 % 9.5 cd/lm 1 White	5° 50° 6°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON 2835 Line 13.0° / 25.0° 91 % 9.5 cd/lm 1 White	5. 5. 610 610 610 610 610 610 610 610 610 610
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON 2835 Line 13.0° / 25.0° 91 % 9.5 cd/lm 1 White US SST-20 12.0° / 22.0° 86 %	5° 50° 6°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON 2835 Line 13.0° / 25.0° 91 % 9.5 cd/lm 1 White USS SST-20 12.0° / 22.0°	5. 5. 610 610 610 610 610 610 610 610 610 610
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON 2835 Line 13.0° / 25.0° 91 % 9.5 cd/lm 1 White USS SST-20 12.0° / 22.0° 86 % 10.8 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON 2835 Line 13.0° / 25.0° 91 % 9.5 cd/lm 1 White SST-20 12.0° / 22.0° 86 % 10.8 cd/lm	5° 50° 6°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON 2835 Line 13.0° / 25.0° 91 % 9.5 cd/lm 1 White USS SST-20 12.0° / 22.0° 86 % 10.8 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON 2835 Line 13.0° / 25.0° 91 % 9.5 cd/lm 1 White USS SST-20 12.0° / 22.0° 86 % 10.8 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON 2835 Line 13.0° / 25.0° 91 % 9.5 cd/lm 1 White USS SST-20 12.0° / 22.0° 86 % 10.8 cd/lm 1	
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	LUXEON 2835 Line 13.0° / 25.0° 91 % 9.5 cd/lm 1 White USS SST-20 12.0° / 22.0° 86 % 10.8 cd/lm 1	



PHOTOMETRIC DATA (SIMULATED):

ΜΝΙCΗΙΛ		90° 90°
LED	NV4WB35AM	
FWHM / FWTM	22.0° / 41.0°	75.
Efficiency	90 %	
Peak intensity	4.6 cd/lm	60° 60°
LEDs/each optic	1	
Light colour	White	95* 45*
Required components:		- 330
		30° 000 30°
		30° 4800 30° 15° 0° 15°
OSRAM Opto Semiconductors		90° A 90°
LED	OSLON Black	
FWHM / FWTM	12.0° / 23.0°	77*
Efficiency	86 %	50 ⁴ 50 ⁴
Peak intensity	11.8 cd/lm	$r \times / / $
LEDs/each optic	1	500 F
Light colour	White	45
Required components:		
		950
		30-
		15* 13200 15*
OSRAM Opto Semiconductors		90* 90*
LED	SFH 4714A	75*
FWHM / FWTM	7.0° / 14.0°	75*
Efficiency	84 %	601 604
Peak intensity	26 cd/lm	
LEDs/each optic	1	
Light colour	IR	43° 43°
Required components:		
		30* 2240 30*
OSRAM		135 ⁹ 0 ⁶ 135 ⁹
Opto Semiconductors		
LED	SFH 4715AS	
FWHM / FWTM	13.0° / 25.0°	
Efficiency	88 %	
Peak intensity	10.6 cd/lm	
LEDs/each optic	1	
Light colour	IR	
Required components:		



PHOTOMETRIC DATA (SIMULATED):

OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required components:	SFH 4715S 13.0° / 24.0° 87 % 1 IR	99* 99 12 13 14 15 15 15 15 15 15 15 15 15 15 15 15 15
		90° 35° 36°
OSRAM Opto Semiconductors		97 - 50 ²
LED	SFH 4725S	75
FWHM / FWTM	13.0° / 24.0°	3200
Efficiency	87 %	60 ¹⁰
LEDs/each optic	1	
Light colour	IR	43° 6430 65°
Required components:		
		2000
		30°
		15° 0° 15°
000444		
OSRAM Opto Semiconductors		50°
OSRAM Opto Semiconductors		5° 5°
Opto Semiconductors	SFH 4726S	<u>B</u> . <u>B</u> . <u>B</u> .
Opto Semiconductors LED FWHM / FWTM	9.0° / 17.0°	80 85 21 22 24 25 26 26
opto Semiconductors LED FWHM / FWTM Efficiency	9.0° / 17.0° 84 %	9° 9° 3° 9° 600 600
opto Semiconductors LED FWHM / FWTM Efficiency LEDs/each optic	9.0° / 17.0° 84 % 1	9 ¹ 9 ¹ 9 ¹ 9 ¹ 9 ¹ 9 ¹ 9 ¹ 9 ¹
opto Semiconductors LED FWHM / FWTM Efficiency LEDs/each optic Light colour	9.0° / 17.0° 84 %	gr 600 07
opto Semiconductors LED FWHM / FWTM Efficiency LEDs/each optic	9.0° / 17.0° 84 % 1	60 60 90 90 90 90 90 90 90 90 90 9
opto Semiconductors LED FWHM / FWTM Efficiency LEDs/each optic Light colour	9.0° / 17.0° 84 % 1	gr gr gr gr gr gr gr gr gr gr gr gr gr g
opto Semiconductors LED FWHM / FWTM Efficiency LEDs/each optic Light colour	9.0° / 17.0° 84 % 1	5100 510 510 510 510 510 510 510
opto Semiconductors LED FWHM / FWTM Efficiency LEDs/each optic Light colour	9.0° / 17.0° 84 % 1	2. 2. 2. 2. 5. 6. 6. 6. 6. 6. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7
opto Semiconductors LED FWHM / FWTM Efficiency LEDS/each optic Light colour Required components:	9.0° / 17.0° 84 % 1	22, 0, 12, 36, 6, 0, 0, 12, 36, 6, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,
opto Semiconductors LED FWHM / FWTM Efficiency LEDS/each optic Light colour Required components: SEOUL SEMICONDUCTOR	9.0° / 17.0° 84 % 1 IR	30. 30. 30. 30. 30. 12.0 0. 0. 20. 12.0 0. 0. 21. 0.0 0. 0. 22. 0. 0. 0. 23. 0. 0. 0. 23. 0. 0. 0. 23. 0. 0. 0. 23. 0. 0. 0. 23. 0. 0. 0.
opto Semiconductors LED FWHM / FWTM Efficiency LEDS/each optic Light colour Required components: SEOUL SEMICONDUCTOR LED	9.0° / 17.0° 84 % 1 IR Z8Y22	
opto Semiconductors LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required components: stoul semiconductor LED FWHM / FWTM	9.0° / 17.0° 84 % 1 IR Z8Y22 15.0° / 29.0°	55 66 60 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
opto Semiconductors LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required components: stoul semiconductor LED FWHM / FWTM Efficiency	9.0° / 17.0° 84 % 1 IR Z8Y22 15.0° / 29.0° 80 %	
opto Semiconductors LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required components: stoul semiconductor LED FWHM / FWTM Efficiency Peak intensity	9.0° / 17.0° 84 % 1 IR Z8Y22 15.0° / 29.0° 80 % 5.4 cd/lm	25 26 27 27 27 27 27 27 27 27 27 27
opto Semiconductors LED FWHM / FWTM Efficiency LEDS/each optic Light colour Required components: SECOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDS/each optic	9.0° / 17.0° 84 % 1 IR Z8Y22 15.0° / 29.0° 80 % 5.4 cd/lm 1	25 26 27 27 27 27 27 27 27 27 27 27
opto Semiconductors LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required components: SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	9.0° / 17.0° 84 % 1 IR Z8Y22 15.0° / 29.0° 80 % 5.4 cd/lm	
opto Semiconductors LED FWHM / FWTM Efficiency LEDS/each optic Light colour Required components: SECOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDS/each optic	9.0° / 17.0° 84 % 1 IR Z8Y22 15.0° / 29.0° 80 % 5.4 cd/lm 1	
opto Semiconductors LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required components: SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	9.0° / 17.0° 84 % 1 IR Z8Y22 15.0° / 29.0° 80 % 5.4 cd/lm 1	
opto Semiconductors LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required components: SEOUL SEMICONDUCTOR LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	9.0° / 17.0° 84 % 1 IR Z8Y22 15.0° / 29.0° 80 % 5.4 cd/lm 1	



GENERAL INFORMATION:

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

MATERIALS:

As part of our continuous research and improvement processes, and to ensure the best possible quality and availability of our products, LEDiL reserves the right to change material grades without notice.

PRODUCT DATA USER AGREEMENT AND DISCLAIMER:

The measured data in the provided downloadable LEDiL Product Datasheets and Mechanical 2D-Drawings is rounded and provided as reference for planning. LEDiL Oy's optical specifications have been verified by conducting performance testing of the products in accordance with the company's quality system. The reported data are averaged results of multiple measurements with typical variation. LEDiL Oy reserves the right to without prior notification make changes and improvements to its products.

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