

PRODUCT DATASHEET CA12378_TINA2-W

TINA2-W

~45° wide beam. Assembly with holder, installation tape and location pins.

SPECIFICATION:

Dimensions	Ø 16.0 mm
Height	9.5 mm
Fastening	tape, pin
ROHS compliant	yes 🛈



MATERIALS:

Component TINA2-W-XP TINA2-HLD-BLK TINA-TAPE3

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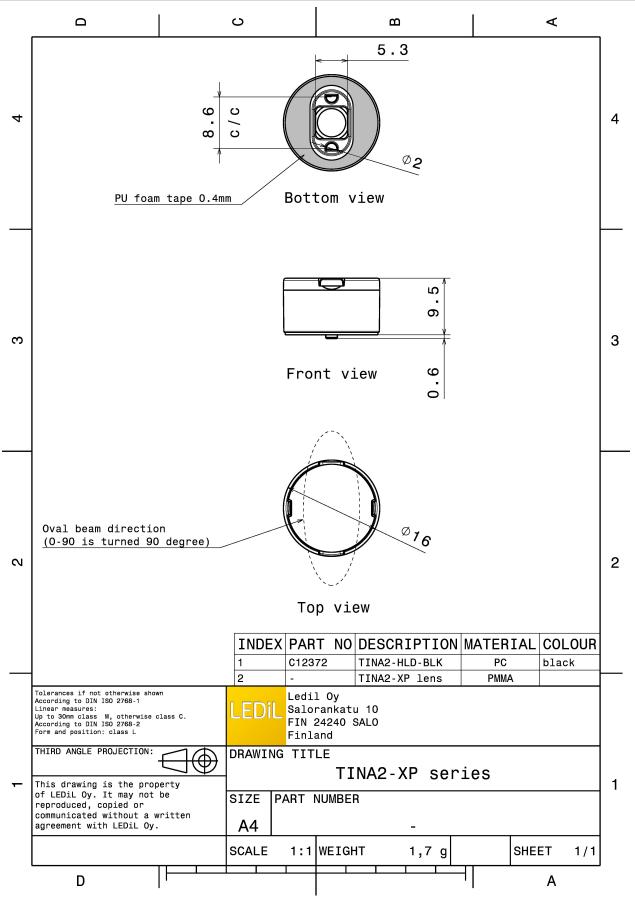
Material	Colour	Finish
PMMA	clear	
PC	black	
Acrylic foam	black	

ORDERING INFORMATION:

Component		Qty in box	MOQ	MPQ	Box weight (kg)
CA12378_TINA2-W	Single lens	4140	230	230	8.3
» Box size:					



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



OPTICAL RESULTS (MEASURED):

	0		50° 9
LED			
FWHM / FWTM	40.0° / 61.0°		73
Efficiency	83 %		
Peak intensity	1.8 cd/lm		
LEDs/each optic	1		
Light colour	White		97
Required compone			1200 - 1200 - I
			1630
			30°
A			15' 00 15'
UMIL	.EDS		90*9
LED	LUXEON CZ		75*
FWHM / FWTM	39.0° / 61.0°		
Efficiency	92 %		60*
Peak intensity	2.2 cd/lm		
LEDs/each optic	1		$\blacksquare \times / \blacksquare \land \times$
Light colour	White		
Required compone	ents:		1630
			30° 3
UMIL	.EDS		50°
LED	LUXEON TX		
FWHM / FWTM	49.0° / 68.0°		27.
Efficiency	88 %		400
Peak intensity	1.6 cd/lm		60
LEDs/each optic	1		
Light colour	White		07 ¹
Poquirod company			
Required compone	ents:		
	ents:	-	
rrequired compone	ents:	-	
Required compone	nts:	-	
<i>∭</i> NICHI∕	•		135° 0 ⁸ 133
	NVSxx19B/NVSxx19C		135° 0 ⁸ 133
NICHIA LED FWHM / FWTM	NVSxx19B/NVSxx19C 52.0° / 70.0°	-	135° 0 ⁸ 133
ED FWHM / FWTM Efficiency	NVSxx19B/NVSxx19C 52.0° / 70.0° 87 %		135° 0 ⁸ 133
ED FWHM / FWTM Efficiency Peak intensity	NVSxx19B/NVSxx19C 52.0° / 70.0° 87 % 1.4 cd/lm		135° 0 ⁸ 133
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	NVSxx19B/NVSxx19C 52.0° / 70.0° 87 % 1.4 cd/lm 1		135° 0 ⁸ 133
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	NVSxx19B/NVSxx19C 52.0° / 70.0° 87 % 1.4 cd/lm 1 White		
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	NVSxx19B/NVSxx19C 52.0° / 70.0° 87 % 1.4 cd/lm 1 White		
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	NVSxx19B/NVSxx19C 52.0° / 70.0° 87 % 1.4 cd/lm 1 White		
ED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	NVSxx19B/NVSxx19C 52.0° / 70.0° 87 % 1.4 cd/lm 1 White		



OPTICAL RESULTS (MEASURED):

ØNICHI			90* 90*
LED	NWSx229A		
FWHM / FWTM	55.0° / 77.0°		73.
Efficiency	84 %		
Peak intensity	1 cd/lm		60°
LEDs/each optic	1		
Light colour	White		97° (6°
Required component			
			15° 0° 15°
OSRAM Opto Semiconductors			90 ⁴
LED	OSLON Square EC		21 ⁶
FWHM / FWTM	52.0° / 72.0°		
Efficiency	85 %		60° 400 60°
Peak intensity	1.2 cd/lm		
LEDs/each optic	1		
Light colour	White		95* 45*
Required component	nts:		
			30° 12200 36°
			15° 0° 15°
OSDVW			7
OSRAM Opto Semiconductors			90 ¹⁴ 90 ¹⁴
OSRAM Opto Semiconductors LED	OSLON Square EC		30 ⁴ 70 ⁵
Opto Semiconductors	50.0° / 73.0°		32 35 36 36 20
opto Semiconductors LED FWHM / FWTM Efficiency			60 60 22 22 25 25 25 25
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity	50.0° / 73.0°		80°
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	50.0° / 73.0° 84 % 1.1 cd/lm 1		50 ⁴ 50 ⁴ 50 ⁴ 50 ⁴
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	50.0° / 73.0° 84 % 1.1 cd/lm 1 White		g*
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	50.0° / 73.0° 84 % 1.1 cd/lm 1 White		6. 6. 9. 9. 9. 9.
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	50.0° / 73.0° 84 % 1.1 cd/lm 1 White		91 ⁴ 92 ⁴ 92 ⁴ 90 90 90
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	50.0° / 73.0° 84 % 1.1 cd/lm 1 White		gr
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	50.0° / 73.0° 84 % 1.1 cd/lm 1 White		25° Cr 25
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	50.0° / 73.0° 84 % 1.1 cd/lm 1 White		34 th 35 th 12 th 34 th
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component	50.0° / 73.0° 84 % 1.1 cd/lm 1 White nts:		24 ⁴ 25 ⁷ (4 ⁴ 15 ⁴ 34 ⁴
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Opto Semiconductors LED	50.0° / 73.0° 84 % 1.1 cd/lm 1 White nts:		34 th 35 th 12 th 34 th
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Opto Semiconductors LED FWHM / FWTM	50.0° / 73.0° 84 % 1.1 cd/lm 1 White nts: OSLON SSL 150 53.0° / 70.0°		34 th 35 th 12 th 34 th
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Opto Semiconductors LED FWHM / FWTM Efficiency	50.0° / 73.0° 84 % 1.1 cd/lm 1 White nts: OSLON SSL 150 53.0° / 70.0° 84 %		34 th 35 th 12 th 34 th
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity	50.0° / 73.0° 84 % 1.1 cd/lm 1 White hts: OSLON SSL 150 53.0° / 70.0° 84 % 1.2 cd/lm		34 th 35 th 12 th 34 th
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Opto SERAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	50.0° / 73.0° 84 % 1.1 cd/lm 1 White nts: OSLON SSL 150 53.0° / 70.0° 84 % 1.2 cd/lm 1		34 th 35 th 12 th 34 th
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	50.0° / 73.0° 84 % 1.1 cd/lm 1 White hts: OSLON SSL 150 53.0° / 70.0° 84 % 1.2 cd/lm 1 White		6 ^t 60 5 ^t 25 6 ^t 60 5 ^t 25 6 ^t 6 ^t 6 ^t 5
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	50.0° / 73.0° 84 % 1.1 cd/lm 1 White hts: OSLON SSL 150 53.0° / 70.0° 84 % 1.2 cd/lm 1 White		6 ^t 60 5 ^t 25 6 ^t 60 5 ^t 25 6 ^t 6 ^t 6 ^t 5
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	50.0° / 73.0° 84 % 1.1 cd/lm 1 White hts: OSLON SSL 150 53.0° / 70.0° 84 % 1.2 cd/lm 1 White		6 ^t 60 5 ^t 25 6 ^t 60 5 ^t 25 6 ^t 6 ^t 6 ^t 5
opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required component Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	50.0° / 73.0° 84 % 1.1 cd/lm 1 White hts: OSLON SSL 150 53.0° / 70.0° 84 % 1.2 cd/lm 1 White		6 ^t 60 5 ^t 25 6 ^t 60 5 ^t 25 6 ^t 6 ^t 6 ^t 5



OPTICAL RESULTS (MEASURED):

OSRAM Opto Semiconductors				
Opto Semiconductors				
LED	SFH 4170S			
FWHM / FWTM	38.0° / 61.0°			
Efficiency	%			
LEDs/each optic	1			
Light colour	IR			
Required compone				
required compone				
OSRAM				
Opto Semiconductors				
	SFH 4180S			
FWHM / FWTM	34.0° / 60.0°			
Efficiency	%			
LEDs/each optic	1			
Light colour	IR			
Required compone	nts:			
OSRAM				
Opto Semiconductors				
LED	SFH 4715S			
FWHM / FWTM	36.0° / 80.0°			
Efficiency	%			
LEDs/each optic	1			
Light colour	White			
Required compone	nts:			
SEOUL				7
SEOUL SEMICONDUCTOR			90*	90*
LED	Z5M3			
FWHM / FWTM	50.0° / 72.0°		25*	
Efficiency	86 %		ent	400
	/ •			
Peak intensity				
Peak intensity	1.3 cd/lm 1			
Peak intensity LEDs/each optic	1.3 cd/lm		45*	000
Peak intensity LEDs/each optic Light colour	1.3 cd/lm 1 White		8.	
Peak intensity LEDs/each optic	1.3 cd/lm 1 White			
Peak intensity LEDs/each optic Light colour	1.3 cd/lm 1 White		e.	00 OT
Peak intensity LEDs/each optic Light colour	1.3 cd/lm 1 White			00



		90*
LED	XB-D	75-
FWHM / FWTM	40.0° / 64.0°	400
Efficiency	89 %	60°
Peak intensity	1.9 cd/lm	
LEDs/each optic	1	
Light colour	White	43*
Required components:		
		1630
		30° 2000 30° 30°
		50° 50°
LED	XQ-E HI	
FWHM / FWTM	42.0° / 64.0°	23* 25*
Efficiency	92 %	
Peak intensity	1.9 cd/lm	
LEDs/each optic	1	
Light colour	White	45 ⁴ 12200 45 ⁴
Required components:		
		1600
		36° 3000 36° 35°
)S	90°
LED	LUXEON C	
FWHM / FWTM	44.0° / 65.0°	78° 75° 75°
Efficiency	91 %	60°
Peak intensity	1.8 cd/lm	
LEDs/each optic	1	
Light colour	White	₽ ^x
Required components:		
		1600
		36° 30° 30°
)S	
LED	LUXEON IR Compact	
FWHM / FWTM	51.0° / 64.0°	
Efficiency	84 %	
LEDs/each optic	1	
Light colour	White	
Required components:		



	05	50° 50'
LED	LUXEON Rubix	25
FWHM / FWTM	45.0° / 68.0°	
Efficiency	93 %	
Peak intensity	1.7 cd/lm	
LEDs/each optic		
Light colour	Red	er e
Required components:		
		1600
		39°30°30
	05	50*
LED	LUXEON Rubix	
FWHM / FWTM	47.0° / 68.0°	100 100
Efficiency	93 %	605
Peak intensity	1.7 cd/lm	
LEDs/each optic	1	
Light colour	White	95* 45
Required components:		1200
		1600
		30* 30
<i>•</i>		135 [°] 0 ⁰ 155 [°]
)S	90* 90'
LED	LUXEON Rubix	75
FWHM / FWTM	47.0° / 68.0°	400
Efficiency	93 %	60* 60
Peak intensity	1.7 cd/lm	
LEDs/each optic	1	
Light colour		
	Blue	e7' e3
Required components:	Blue	e. 100
	Blue	
	Blue	
	Blue	
Required components:		
Required components:)S	120 120 100 100 100 100 100 100 100
Required components:		
Required components:	DS LUXEON Z ES	
Required components:	DS LUXEON Z ES 43.0° / 62.0°	120 120 100 100 100 100 100 100 100
Required components:	S LUXEON Z ES 43.0° / 62.0° 93 %	120 120 100 100 100 100 100 100 100
Required components:	DS LUXEON Z ES 43.0° / 62.0° 93 % 2 cd/lm	120 120 100 100 100 100 100 100 100
Required components:	DS LUXEON Z ES 43.0° / 62.0° 93 % 2 cd/lm 1	120 120 100 100 100 100 100 100 100
Required components:	DS LUXEON Z ES 43.0° / 62.0° 93 % 2 cd/lm 1	120 120 100 100 100 100 100 100 100
Required components:	DS LUXEON Z ES 43.0° / 62.0° 93 % 2 cd/lm 1	220 250 250 250 250 257 257 257 257 257 257 257 257 257 257



WICHIA LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	NCSxE17A 29.0° / 56.0° 90 % 3 cd/lm 1 White	200 200 200 200 200 200 200 200
OSRAM Opto Semiconductors		
LED FWHM / FWTM Efficiency LEDs/each optic Light colour Required components:	SFH 4770S 32.0° / 61.0° 88 % 1 White	
OSRAM Opto Semiconductors		90°
LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Synios P2720 1 mm 31.0° / 60.0° 92 % 2.7 cd/lm 1 White	30, 20, 20, 20, 20, 20, 00, 00, 22, 24, 25, 25, 25, 25, 25, 25, 25, 25, 25, 25
OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour Required components:	Synios P2720 1/2 mm 30.0° / 58.0° 92 % 2.8 cd/lm 1 White	30° 20° 20° 20° 50° 20° 50° 20° 50° 20° 50° 20° 50° 20° 50° 20°



OSRAM Opto Semiconductors		90 ⁴ 90 ⁴
LED	Synios P2720 1/4 mm	74
FWHM / FWTM	31.0° / 60.0°	
Efficiency	92 %	60° 60°
Peak intensity	2.6 cd/lm	
LEDs/each optic	1	
Light colour	White	9 ⁴ 60
Required components		20- 20- 20- 20- 20- 20- 20- 20- 20-
SAMSU	NG	50° 50°
LED	LH181B	
FWHM / FWTM	43.0° / 61.0°	75
Efficiency	93 %	60* · · · · · · · · · · · · · · · · · · ·
Peak intensity	2 cd/lm	
LEDs/each optic	1	
Light colour	White	\$*12>
Required components		



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.

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