

# PRODUCT DATASHEET FA11204\_TINA-O

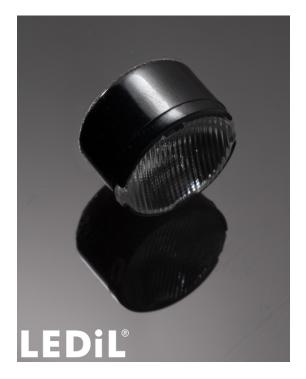
Finish

# TINA-O

 $\sim$ 35° x 15° oval beam. Assembly with holder, installation tape and location pins.

## **SPECIFICATION:**

Dimensions	Ø 16.1 mm
Height	9.5 mm
Fastening	tape, pin
ROHS compliant	yes 🛈



## MATERIALS:

**Component** TINA-XP-O TINA-HLD-PIN-BLK TINA-TAPE3

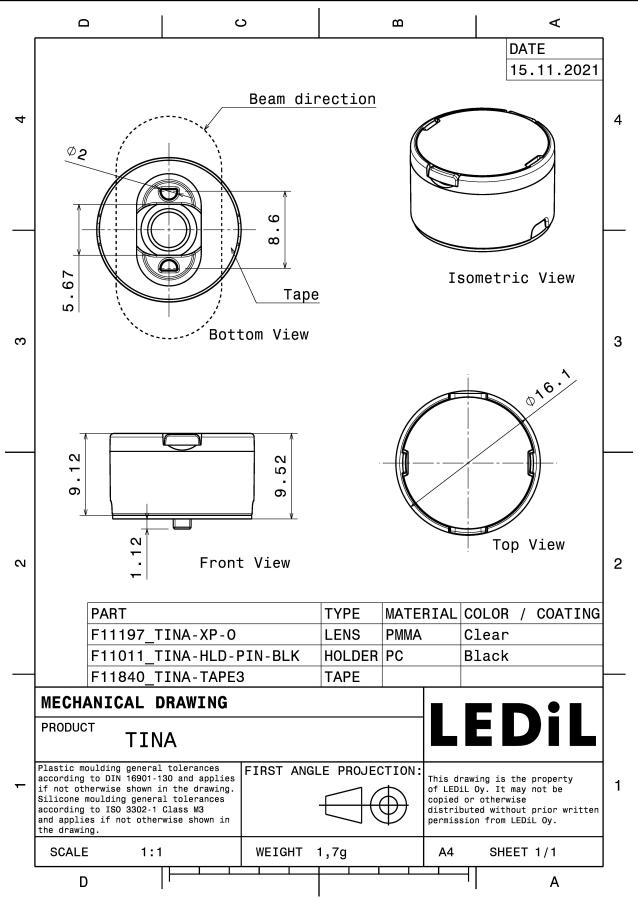
Туре	Material	Colour
Single lens	PMMA	clear
Holder	PC	black
Таре	Acrylic foam	black

## **ORDERING INFORMATION:**

Component		Qty in box	MOQ	MPQ	Box weight (kg)
FA11204_TINA-O	Single lens	2016	288	144	4.1
» Box size:					



# PRODUCT DATASHEET FA11204\_TINA-O



See also our general installation guide: www.ledil.com/installation\_guide



## **OPTICAL RESULTS (MEASURED):**

-		
	D	30 <sup>4</sup> 31 <sup>4</sup>
LED	ХВ-Н	
FWHM / FWTM	38.0 + 16.0° / 63.0 + 37.0°	
Efficiency	83 %	
Peak intensity	3.6 cd/lm	
LEDs/each optic	1	
Light colour	White	er er
Required compone	ents:	
		20" 20
ØNICHI/	۱	
LED	NVSW3x9A	
FWHM / FWTM	37.0 + 20.0° / 67.0 + 41.0°	
Efficiency	82 %	
Peak intensity	2.8 cd/lm	
LEDs/each optic	1	
Light colour	White	er <sup>4</sup> er
Required compone		
		200
OSDAM		
OSRAM Opto Semiconductors		50° 50°
LED	Duris S5 (2 chip)	
FWHM / FWTM	38.0 + 16.0° / 64.0 + 37.0°	
Efficiency	86 %	60× 60
Peak intensity	3.4 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone	ents:	
		305 (p) 157 (p)
OSRAM Opto Semiconductors		90 <sup>4</sup>
LED	OSLON Black Flat	
FWHM / FWTM	40.0 + 10.0° / 57.0 + 22.0°	
Efficiency	86 %	
Peak intensity	5.6 cd/lm	
LEDs/each optic	1	
Light colour	White	e <sup>*</sup> 320 - 5
Required compone		
		30 30
		132 00 132



45

## **OPTICAL RESULTS (MEASURED):**

#### OSRAM Opto Semiconductors

 LED
 OSLON SSL 150

 FWHM / FWTM
 32.0 + 14.0° / 58.0 + 30.0°

 Efficiency
 91 %

 Peak intensity
 3.3 cd/lm

 LEDs/each optic
 1

 Light colour
 White

 Required components:
 Section 1

#### OSRAM

LED	OSLON
FWHM / FWTM	34.0 + 1
Efficiency	80 %
Peak intensity	3.8 cd/l
LEDs/each optic	1
Light colour	White
Required componen	ts:

OSLON SSL 80 34.0 + 12.0° / 56.0 + 32.0° 80 % 3.8 cd/lm 1 White ints:

#### OSRAM Opto Semiconductors

 LED
 SFH 4715S

 FWHM / FWTM
 40.0 + 16.0° / 31.0 + 60.0°

 Efficiency
 0 %

 LEDs/each optic
 1

 Light colour
 White

 Required components:
 Kenter State

#### OSRAM Opto Semiconductors

 LED
 SFH 4725S

 FWHM / FWTM
 39.0 + 15.0° / 62.0 + 32.0°

 Efficiency
 %

 LEDs/each optic
 1

 Light colour
 White

 Required components:
 Kendents



## **OPTICAL RESULTS (MEASURED):**

SAMS	UNG	
LED	LH351A	
FWHM / FWTM	34.0 + 16.0° / 62.0 + 39.0°	
Efficiency	90 %	
Peak intensity	2.5 cd/lm	
LEDs/each optic	1	
Light colour	White	
Required compone	ents:	
SEOUL SEMICONDUCTOR		<b>*</b>
	Z8Y22P	94°
SEOUL SEMICONDUCTOR	Z8Y22P 37.0 + 18.0° / 66.0 + 41.0°	34
SEOUL SEMICONDUCTOR		23°
seoul semiconductor LED FWHM / FWTM	37.0 + 18.0° / 66.0 + 41.0°	
seoul semiconductor LED FWHM / FWTM Efficiency	37.0 + 18.0° / 66.0 + 41.0° 79 %	61
seou semiconductor LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic	37.0 + 18.0° / 66.0 + 41.0° 79 % 2.7 cd/lm	
seoul semiconductor LED FWHM / FWTM Efficiency Peak intensity	37.0 + 18.0° / 66.0 + 41.0° 79 % 2.7 cd/lm 1 White	61



## **OPTICAL RESULTS (SIMULATED):**

<b>ΜΝΙCΗΙΛ</b>		90* 90*
LED	NCSxE17A	
FWHM / FWTM	42.0 + 12.0° / 60.0 + 24.0°	75* 25*
Efficiency	88 %	
Peak intensity	4.8 cd/lm	
LEDs/each optic	1	
Light colour	White	45* 42*
Required components:		200
		30* 30*
		15 <sup>9</sup> 0 <sup>6</sup> 15 <sup>9</sup>
<b>ΜΝΙCΗΙΛ</b>		90* 90*
LED	NVSxx19B/NVSxx19C	75
FWHM / FWTM	38.0 + 17.0°	800
Efficiency	85 %	60° 60°
Peak intensity	3.5 cd/lm	
LEDs/each optic	1	
Light colour	White	45× 43*
Required components:		2430
		30* 32*
OSRAM		
Opto Semiconductors		90* <u>90</u> *
		75°
	SFH 4715AS	<u>z</u>
FWHM / FWTM	44.0 + 15.0° / 62.0 + 30.0°	60°
LED FWHM / FWTM Efficiency	44.0 + 15.0° / 62.0 + 30.0° 89 %	604 804 804
FWHM / FWTM Efficiency LEDs/each optic	44.0 + 15.0° / 62.0 + 30.0° 89 % 1	60°
FWHM / FWTM Efficiency LEDs/each optic Light colour	44.0 + 15.0° / 62.0 + 30.0° 89 %	60°
FWHM / FWTM Efficiency LEDs/each optic Light colour	44.0 + 15.0° / 62.0 + 30.0° 89 % 1	60°
FWHM / FWTM Efficiency LEDs/each optic Light colour	44.0 + 15.0° / 62.0 + 30.0° 89 % 1	60°
FWHM / FWTM Efficiency LEDs/each optic Light colour	44.0 + 15.0° / 62.0 + 30.0° 89 % 1	60°
FWHM / FWTM Efficiency	44.0 + 15.0° / 62.0 + 30.0° 89 % 1	60°
FWHM / FWTM Efficiency LEDs/each optic Light colour Required components:	44.0 + 15.0° / 62.0 + 30.0° 89 % 1	60°
FWHM / FWTM Efficiency LEDs/each optic Light colour Required components:	44.0 + 15.0° / 62.0 + 30.0° 89 % 1 White	200 201 200 200 200 200 200 200
FWHM / FWTM Efficiency LEDs/each optic Light colour Required components:	44.0 + 15.0° / 62.0 + 30.0° 89 % 1 White	200 201 200 200 200 200 200 200
FWHM / FWTM Efficiency LEDs/each optic Light colour Required components: OSRAM Opto Semiconductors LED FWHM / FWTM	44.0 + 15.0° / 62.0 + 30.0° 89 % 1 White SYNIOS S2222 38.0 + 12.0° / 61.0 + 26.0°	94 94 95 95 95 95 95 95 95 95 95 95 95 95 95
FWHM / FWTM Efficiency LEDs/each optic Light colour Required components: OSRAM Opto Semiconductors LED FWHM / FWTM Efficiency	44.0 + 15.0° / 62.0 + 30.0° 89 % 1 White SYNIOS S2222 38.0 + 12.0° / 61.0 + 26.0° 96 %	30*         30*           30*         30*           30*         30*
FWHM / FWTM Efficiency LEDs/each optic Light colour Required components:	44.0 + 15.0° / 62.0 + 30.0° 89 % 1 White SYNIOS S2222 38.0 + 12.0° / 61.0 + 26.0° 96 % 5.2 cd/lm	30*         30*           30*         30*           30*         30*
FWHM / FWTM Efficiency LEDs/each optic Light colour Required components:	44.0 + 15.0° / 62.0 + 30.0° 89 % 1 White SYNIOS S2222 38.0 + 12.0° / 61.0 + 26.0° 96 % 5.2 cd/lm 1	20 20 20 20 20 20 20 20 20 20
FWHM / FWTM Efficiency LEDs/each optic Light colour Required components: Opto Semiconductors LED FWHM / FWTM Efficiency Peak intensity LEDs/each optic Light colour	44.0 + 15.0° / 62.0 + 30.0° 89 % 1 White SYNIOS S2222 38.0 + 12.0° / 61.0 + 26.0° 96 % 5.2 cd/lm	60* 100 100 100 100 100 100 100 1
FWHM / FWTM Efficiency LEDs/each optic Light colour Required components:	44.0 + 15.0° / 62.0 + 30.0° 89 % 1 White SYNIOS S2222 38.0 + 12.0° / 61.0 + 26.0° 96 % 5.2 cd/lm 1	60* 100 100 100 100 100 100 100 1
FWHM / FWTM Efficiency LEDs/each optic Light colour Required components:	44.0 + 15.0° / 62.0 + 30.0° 89 % 1 White SYNIOS S2222 38.0 + 12.0° / 61.0 + 26.0° 96 % 5.2 cd/lm 1	60* 100 100 100 100 100 100 100 1
FWHM / FWTM Efficiency LEDs/each optic Light colour Required components:	44.0 + 15.0° / 62.0 + 30.0° 89 % 1 White SYNIOS S2222 38.0 + 12.0° / 61.0 + 26.0° 96 % 5.2 cd/lm 1	60* 100 100 100 100 100 100 100 1



## **OPTICAL RESULTS (SIMULATED):**

SAMSU	NG	39*	90°
LED	LM302D	77	
FWHM / FWTM	41.0 + 16.0° / 64.0 + 34.0°		$\swarrow$
Efficiency	88 %	604	694
Peak intensity	3.5 cd/lm		$\sim$
LEDs/each optic	1		$\sim \times$
Light colour	White	9×	45*
Required component	s:	200	$\backslash$
			$\prec$
		30.	36.0



## **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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