

# MechaTronix in LED

## XSA-96 Pin Fin Heat Sink $\phi$ 111mm for Xicato



### Features & Benefits

- Designed for Xicato XSM LED spot modules
- Xicato thermal class Q ( 60° tilt angle, 40°C ambient )
- Thermal resistance Rth 1.07°C/W
- Forged from highly conductive aluminum AL-1070
- Diameter 111mm - height 80mm- weight 567.2g
- Standard colors - clear anodised - black anodised
- Other colors and finishings on request ( all RAL/Pantone colors available )



### Order Information



Example : XSA-96-M3-B

XSA-96 - **1** - **2** - **3**

- 1** XSM Mounting  
"M3" - M3 screw threads
- 2** Finishing  
"B" - Black Anodised  
"C" - Clear Anodised  
"Z" - Custom ( specify )
- 3** Mounting Options - see graphics for details  
Combinations available  
Ex. order code - 13  
means option 1 and 3 combined

MOUNTING OPTION	THREAD	THREAD DEPTH
NONE/BLANC	NONE	NONE
1	M14x1.5	10mm MIN.
2	#9/16-12UNC	0.394" MIN.
3	M111 x 2	Base contour

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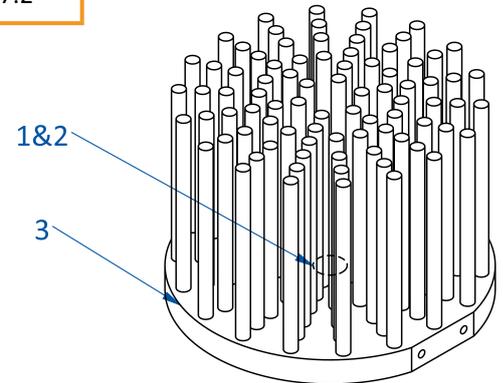
## XSA-96 Pin Fin Heat Sink $\phi$ 111mm for Xicato



### Product Details

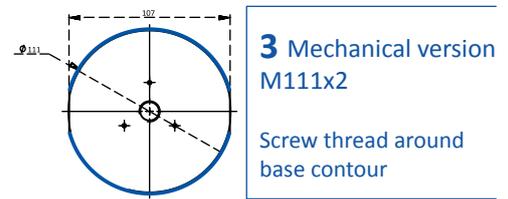
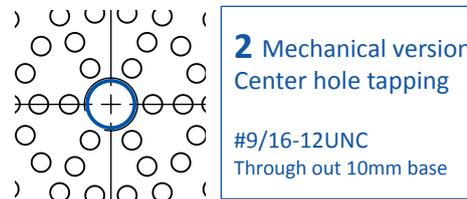
	Total Height <sup>mm</sup>	Rth( <sup>°</sup> C/W)	Volume <sup>mm<sup>3</sup></sup>	Cooling Surface <sup>mm<sup>2</sup></sup>	Weight <sup>gr</sup>
XSA-96	80	1.07	210075.17	115637.47	567.2

### Mounting Options



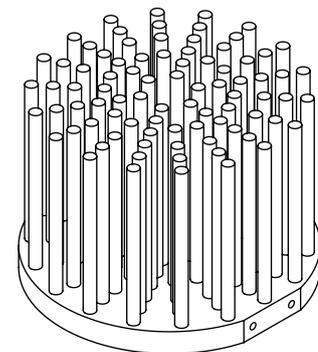
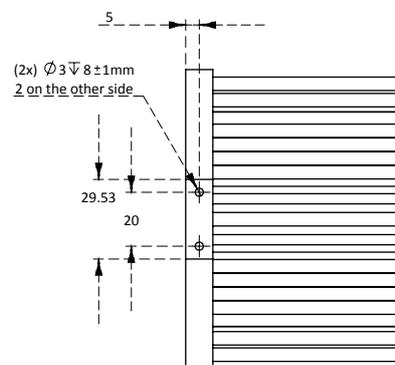
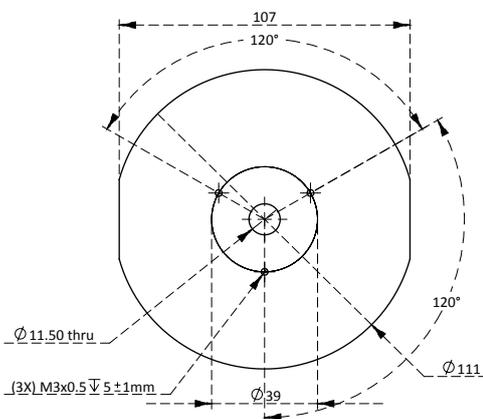
#### Notes:

1. MechaTronix reserves the right to change products or specifications without prior notice.
2. Mentioned models are an extraction of the full product range. For specific mechanical adaptations please contact MechaTronix.
3. All these types are made by forging process from highly conductive aluminum type AL1070 with a typical Thermal Conductivity of 209W/m-K.



### Drawings & Dimensions

### Example: XSA-96-M3



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### Thermal Data

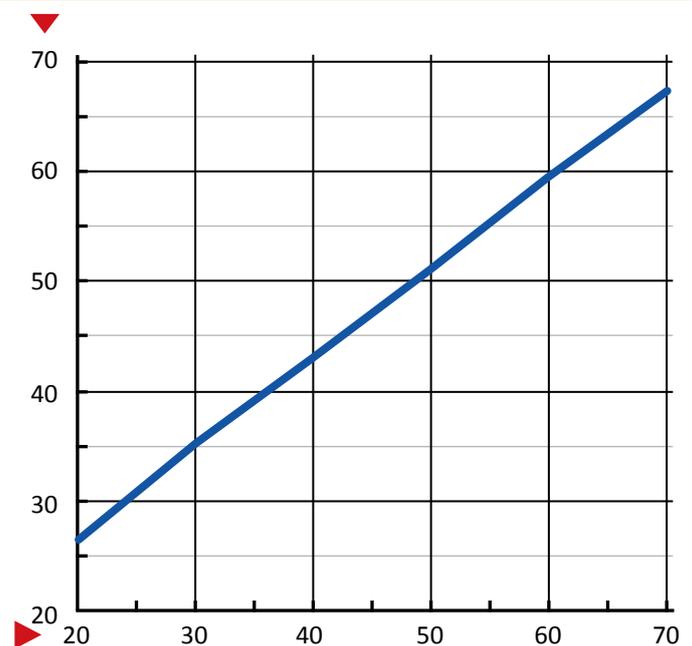
#### Heat sink base to ambient thermal resistance, $R_{hs-amb}$ [K/W]

Power (W)	LPF11180-ZHE
20	1.25
30	1.18
40	1.12
50	1.06
60	1.00
70	0.94

Rth Av.

Heat sink to ambient temperature difference [ $^{\circ}$ C]

XSA-96-M3



#### Spreading resistance, $R_{sp}$ [K/W]

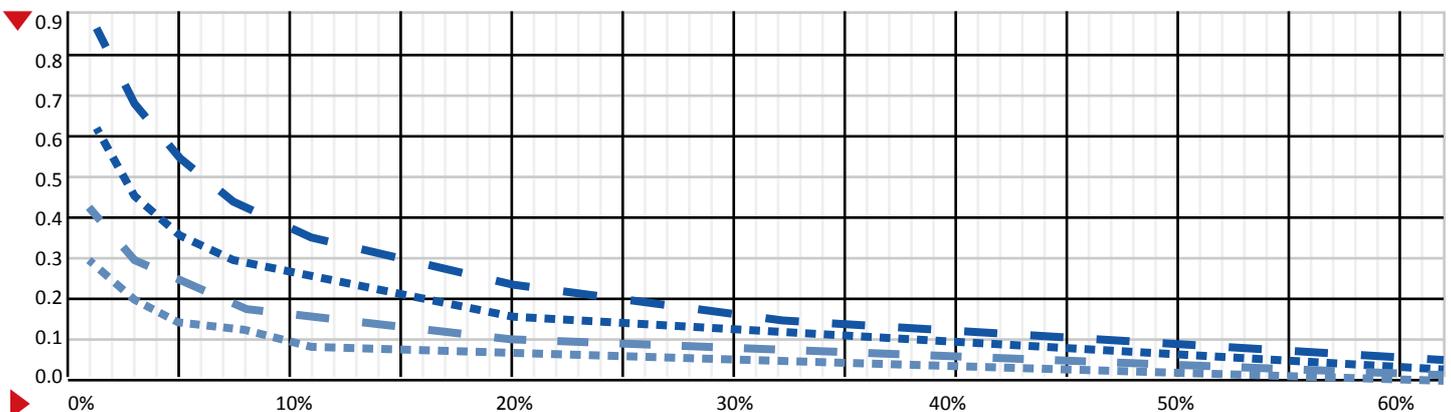
Base thickness	Ratio of light engine (LE) area over heat sink base area, ALE/Ahs [%]	t=2mm	t=3mm	t=5mm	t=10mm
		1%	0.87	0.61	0.41
	3%	0.68	0.47	0.30	0.20
	5%	0.54	0.37	0.24	0.15
	8%	0.44	0.30	0.19	0.12
	11%	0.36	0.24	0.15	0.09
	20%	0.24	0.17	0.10	0.06
	32%	0.16	0.11	0.07	0.04
	62%	0.06	0.04	0.03	0.01

Power [W]

#### Heat sink base spreading resistance, $R_{sp}$ [K/W], based on base thickness, t

Spreading resistance,  $R_{sp}$  [K/W]

t=2mm t=3mm t=5mm t=10mm



Ratio of light engine (LE) area over heat sink base area, ALE/Ahs [%]