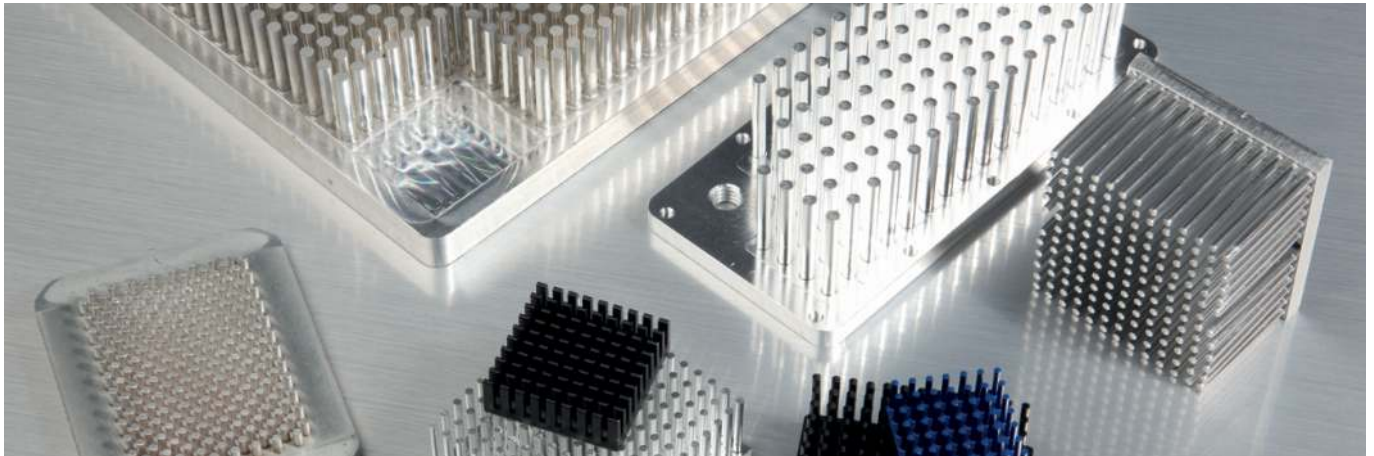


**Table of Content**

Pin Heat Sinks Overview..... 4

Pin Heat Sinks Square..... 6

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Our pin heat sinks are forged piece by piece from almost pure aluminum alloy (99.5%).

This ensures very low tolerances and excellent thermal conductivity.

You will also find the right solution from a large variety of versions.

Be it with thermally conducting foils or mechanically machined (with boreholes / threads):

You will get your ready-to-assemble solution quickly, economically and reliably.

If you are unable to find solution you are looking for in this catalogue, please call us up.

We are constantly expanding our range of products, and you can also get the latest information by visiting our website at [www.alutronic.de](http://www.alutronic.de)

The thermal values specified have been determined with passive or active lateral ventilation.

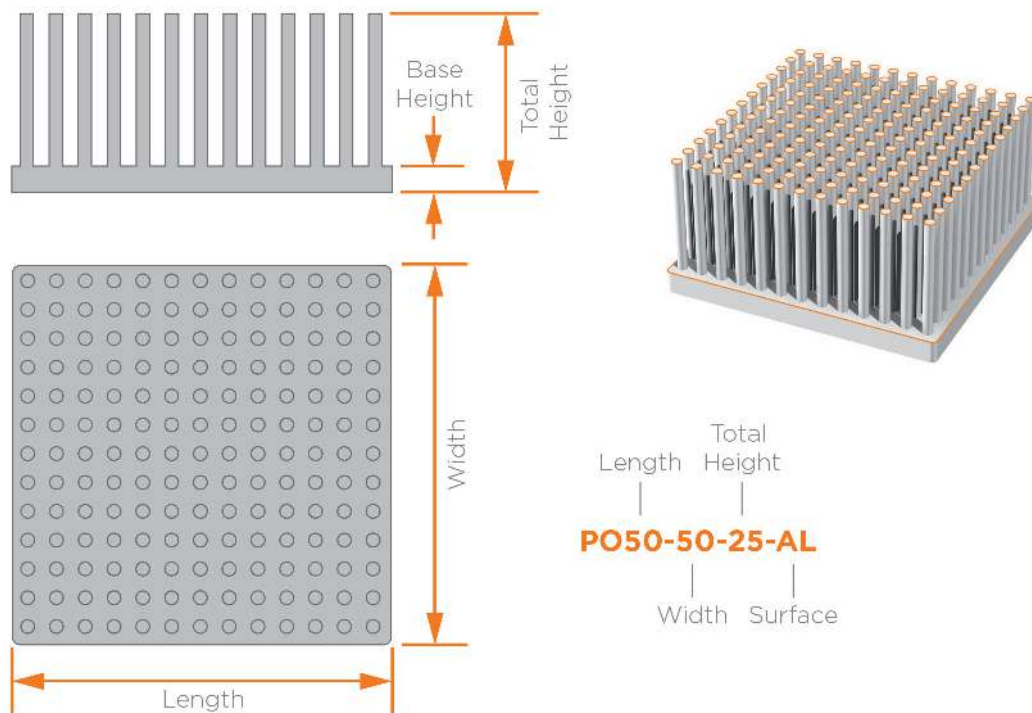
Please request from us other thermal data such as for free convection or other flow directions (from above).

Apart from our standard designs, customised dimensions (floor thickness, number of pins etc.) and mechanical machining are possible.

All Powerbloccs can be supplied with the surfaces AL = aluminium blank, CR = chrome-plated, NE = natural colours anodised, SE = black anodised or BL = blue anodised.

Similarly, we supply thermally conductive film adhesive on both sides on request, pre-assembled or for your own assembly and packaging.

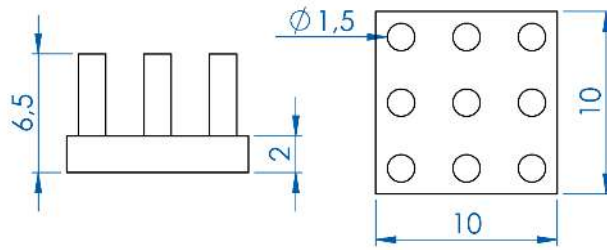
This is how easily the article names of the power blocks are composed:



## Overview Standard Shapes

Mounting surface - rectangular	Lenght x Width [mm]	Base height [mm]	Total height [mm]	RthK [K/W]	Powerloss [W]	Pins
PO 10-10	10x10	2	6,5 / 12,5	112,5 / 84,5	0,5	9
PO 14-14	14x14	2	6 / 10	72,5 / 58,3	0,75	16
PO 17-17	17x17	3,5	15 / 25	7,2 / 5,3	5	25
PO 18-18	18x18	2	6,5 / 12,5	6,8 / 4,8	8	49
PO 25-25	25x25	2	6,5 / 10 / 12,5 / 18,5	6,1 - 3,2	9	49
PO30-30	30x30	3	13 / 33	2,5 / 1,6	20	64
PO 36-36	36x36	3,5	10 / 20	2,2 / 1,4	25	100
PO 40-40	40x40	3,5	10 / 20	1,5 / 1,1	40	121
PO 45-45	45x45	3,5	10 / 20	1,9 / 1,1	30	144
PO 50-50	50x50	3,5	25 / 45	0,9 / 0,7	65	81
	50x50	3,5	20 / 25	0,9 / 0,8	65	169
PO 75-50	75x50	5	15 / 35	1 / 0,6	55	96
PO 98-98	98x98	5	20 / 40	0,6 / 0,3	100 / 170	256
PO 100-75	100x75	5	15 / 35	0,4 / 0,3	80 / 120	255
PO 100-100	100x100	5	15 / 35	0,6 / 0,4	100	340
PO 120-60	120x60	5	25 / 45	0,4 / 0,3	120	240
PO 130-100	130x100	5	35	0,3	190	300
	130x100	5	35	0,3	200	638
PO 200-120	200x120	10	40	0,2	400	589
	200x120	10	40	0,1	550	1215
Mounting surface - round	Diameter [mm]	Base height [mm]	Total height [mm]	RthK [K/W]	Powerloss [W]	Pins
POR 28,5	28,5	2	6,5 / 18,5	48,3 / 26,5	1,2	44
POR 32,5	32,5	3	10 / 20	20,6 / 14,4	2,8	61
POR 36,5	36,5	3,5	10 / 20	18,6 / 13,1	3	68
POR 40	40	3	10 / 20	3,5 / 2,5	15	91
POR 50	50	3	10 / 20	2,2 / 1,5	25	127

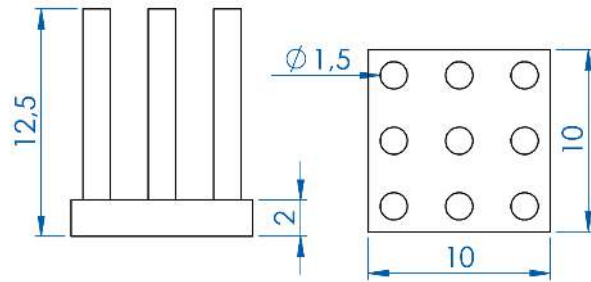
**PO 10-10-6,5-AL**



Rthk: [K/W]: **112.5**

Maximum Power Dissipation: [W]: **0.5** Convection type: **Passive**

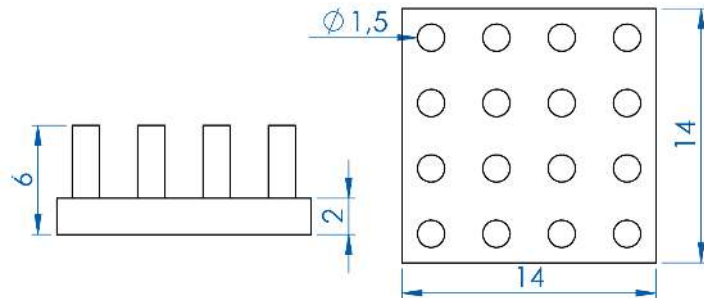
**PO 10-10-12,5-AL**



Rthk: [K/W]: **84.5**

Maximum Power Dissipation: [W]: **0.5** Convection type: **Passive**

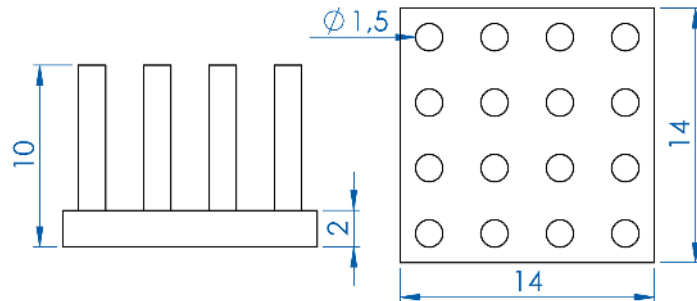
**PO 14-14-6-AL**



Rthk: [K/W]: **72.5**

Maximum Power Dissipation: [W]: **0.75** Convection type: **Passive**

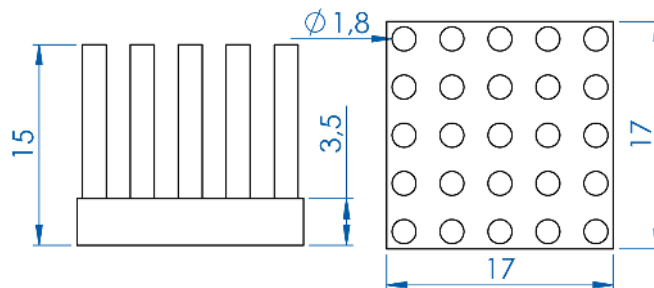
**PO 14-14-10-AL**



Rthk: [K/W]: **58.3**

Maximum Power Dissipation: [W]: **0.75** Convection type: **Passive**

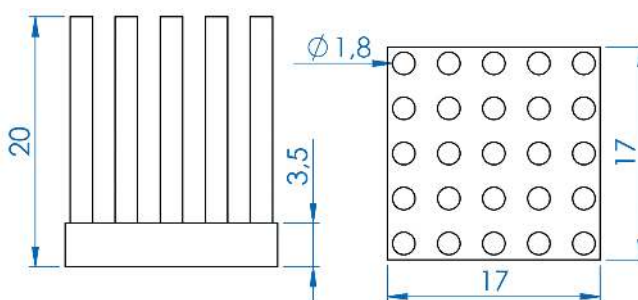
## PO 17-17-15-AL



Rthk: [K/W]: **7.2**

Maximum Power Dissipation: [W]: **5** Convection type: **Active (1 m/sec)**

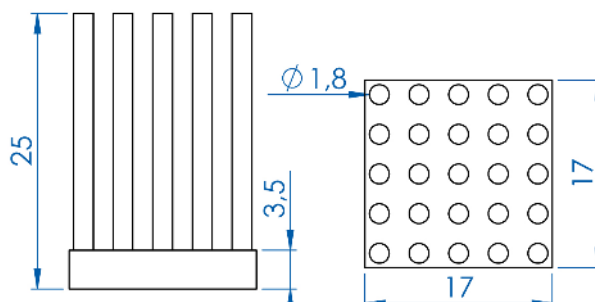
## PO 17-17-20-AL



Rthk: [K/W]: **6.35**

Maximum Power Dissipation: [W]: **5** Convection type: **Active (1 m/sec)**

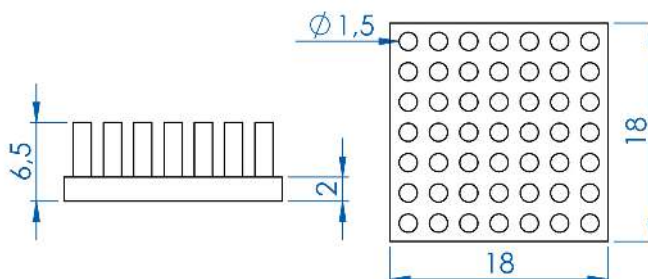
## PO 17-17-25-AL



Rthk: [K/W]: **5.3**

Maximum Power Dissipation: [W]: **5** Convection type: **Active (1 m/sec)**

## PO 18-18-6,5-AL

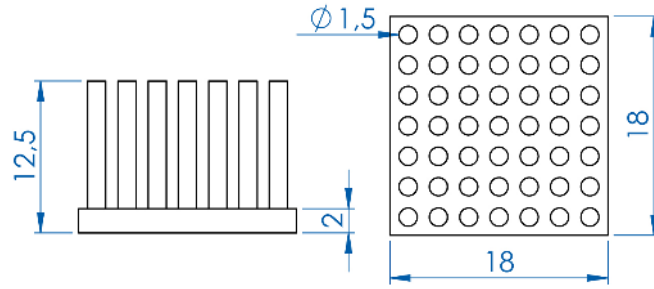


Rthk: [K/W]: **6.8**

Maximum Power Dissipation: [W]: **8** Convection type: **Active (1 m/sec)**



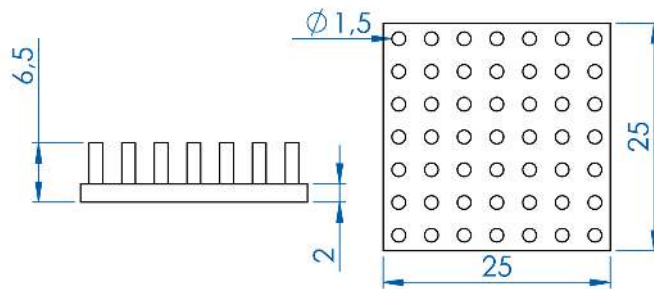
## PO 18-18-12,5-AL



Rthk: [K/W]: **4.8**

Maximum Power Dissipation: [W]: **8** Convection type: **Active (1 m/sec)**

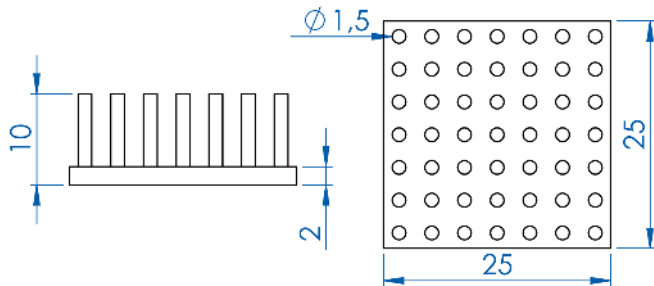
## PO 25-25-6,5-AL



Rthk: [K/W]: **6.1**

Maximum Power Dissipation: [W]: **9** Convection type: **Active (1 m/sec)**

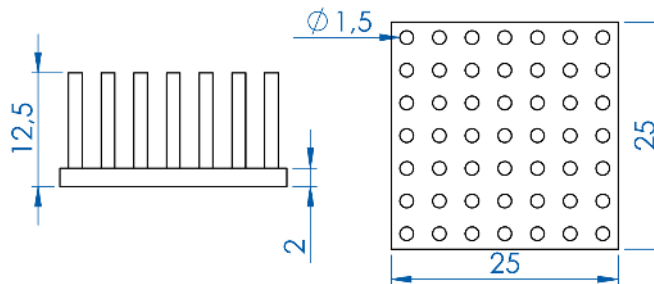
## PO 25-25-10-AL



Rthk: [K/W]: **5.4**

Maximum Power Dissipation: [W]: **9** Convection type: **Active (1 m/sec)**

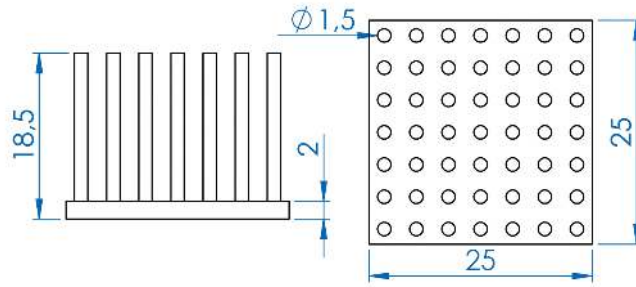
## PO 25-25-12,5-AL



Rthk: [K/W]: **3.9**

Maximum Power Dissipation: [W]: **9** Convection type: **Active (1 m/sec)**

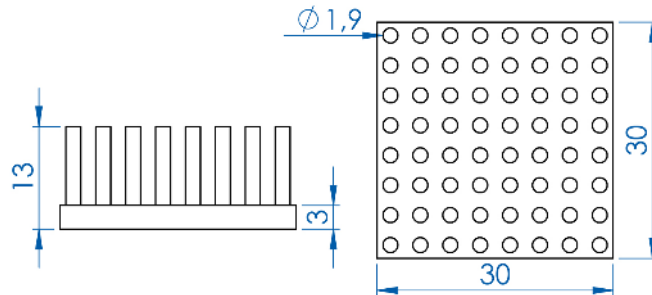
## PO 25-25-18,5-AL



Rthk: [K/W]: **3.2**

Maximum Power Dissipation: [W]: **9** Convection type: **Active (1 m/sec)**

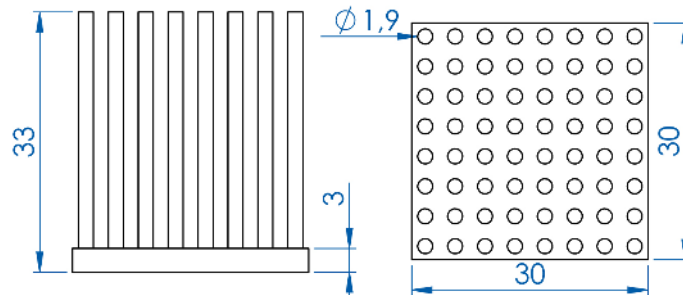
## PO 30-30-13-AL



Rthk: [K/W]: **2.5**

Maximum Power Dissipation: [W]: **20** Convection type: **Active (2 m/sec)**

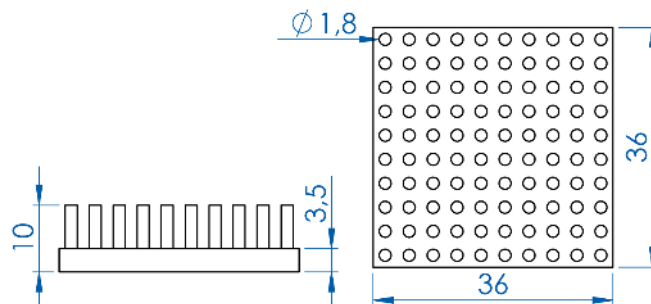
## PO 30-30-33-AL



Rthk: [K/W]: **1.6**

Maximum Power Dissipation: [W]: **20** Convection type: **Active (2 m/sec)**

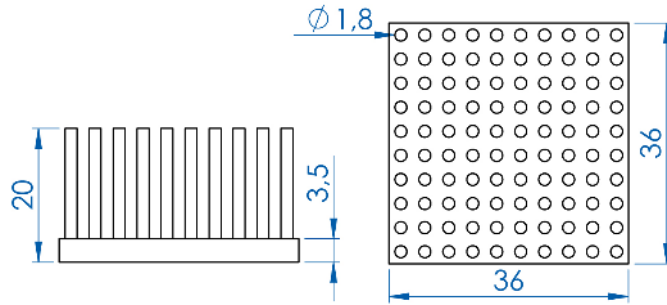
## PO 36-36-10-AL



Rthk: [K/W]: **2.2**

Maximum Power Dissipation: [W]: **25** Convection type: **Active (2 m/sec)**

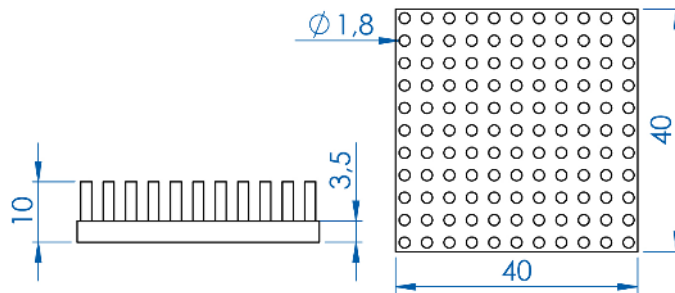
## PO 36-36-20-AL



Rthk: [K/W]: **1.4**

Maximum Power Dissipation: [W]: **25** Convection type: **Active (2 m/sec)**

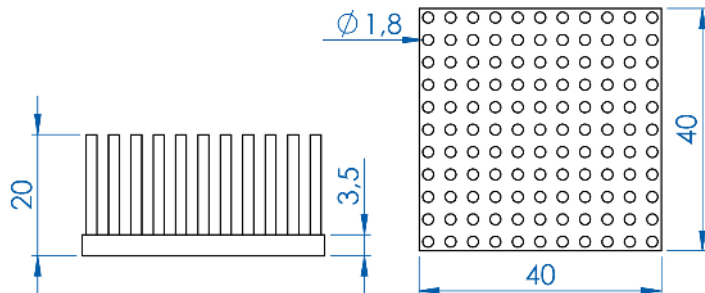
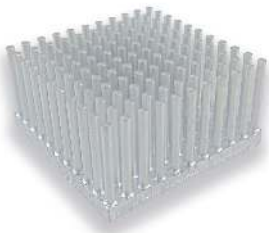
## PO 40-40-10-AL



Rthk: [K/W]: **1.5**

Maximum Power Dissipation: [W]: **40** Convection type: **Active (2 m/sec)**

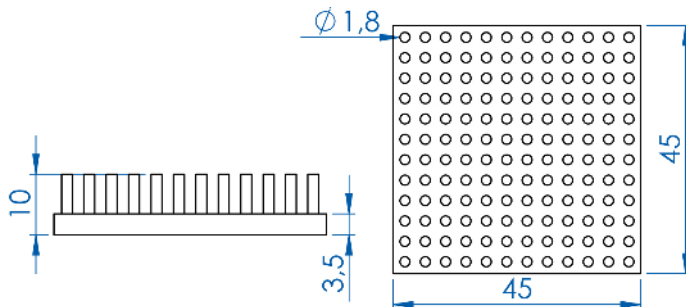
## PO 40-40-20-AL



Rthk: [K/W]: **1.1**

Maximum Power Dissipation: [W]: **40** Convection type: **Active (2 m/sec)**

## PO 45-45-10-AL

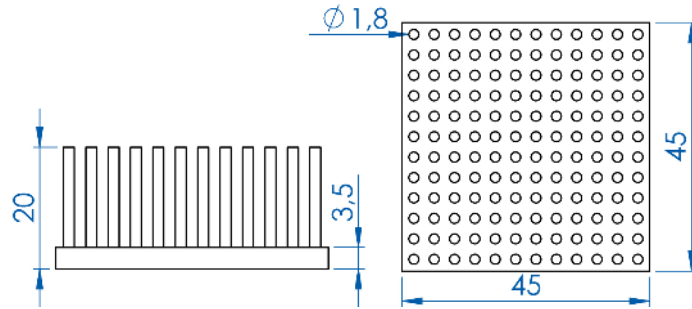


Rthk: [K/W]: **1.9**

Maximum Power Dissipation: [W]: **30** Convection type: **Active (2 m/sec)**



**PO 45-45-20-AL**

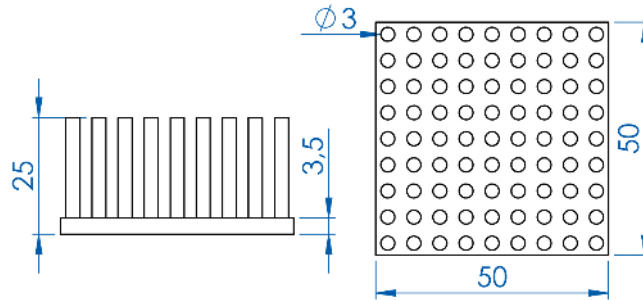


Rthk: [K/W]: **1.1**

Maximum Power Dissipation: [W]: **30** Convection type: **Active (2 m/sec)**

**PO 50-50-25-AL**

Features 81 pins

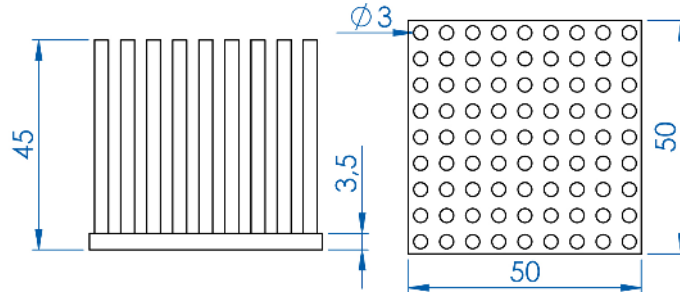


Rthk: [K/W]: **0.87**

Maximum Power Dissipation: [W]: **65** Convection type: **Active (2 m/sec)**

**PO 50-50-45-AL**

Features 81 pins

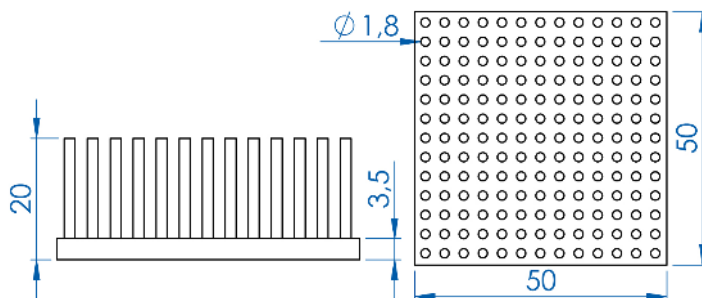


Rthk: [K/W]: **0.7**

Maximum Power Dissipation: [W]: **65** Convection type: **Active (2 m/sec)**

**PO50-50-20-AL**

Features 169 pins

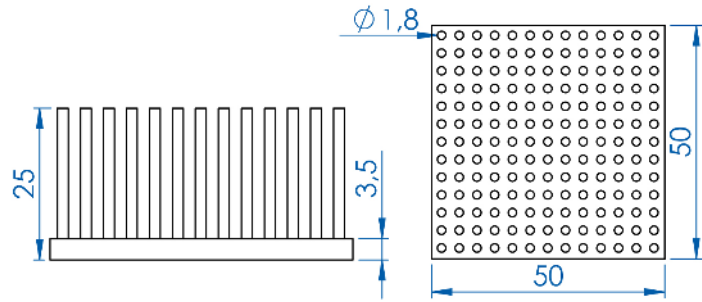


Rthk: [K/W]: **0.87**

Maximum Power Dissipation: [W]: **65** Convection type: **Active (2 m/sec)**

## PO 50-50-25-AL-1

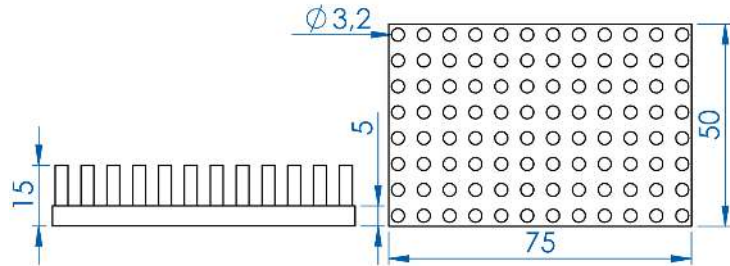
Features 169 pins



Rthk: [K/W]: **0.8**

Maximum Power Dissipation: [W]: **65** Convection type: **Active (2 m/sec)**

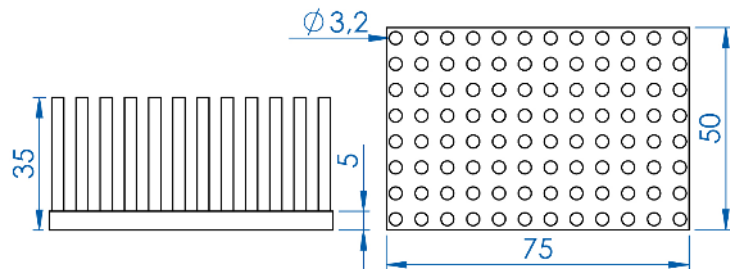
## PO 75-50-15-AL



Rthk: [K/W]: **1**

Maximum Power Dissipation: [W]: **55** Convection type: **Active (2 m/sec)**

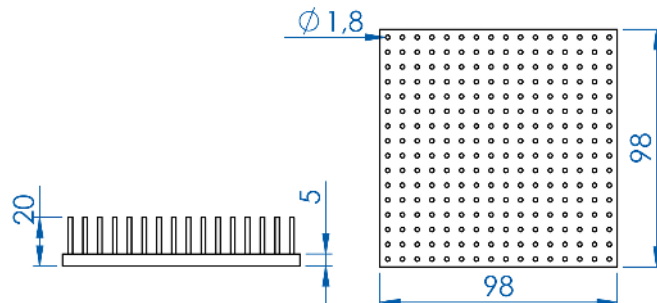
## PO75-50-35-AL



Rthk: [K/W]: **0.6**

Maximum Power Dissipation: [W]: **55** Convection type: **Active (2 m/sec)**

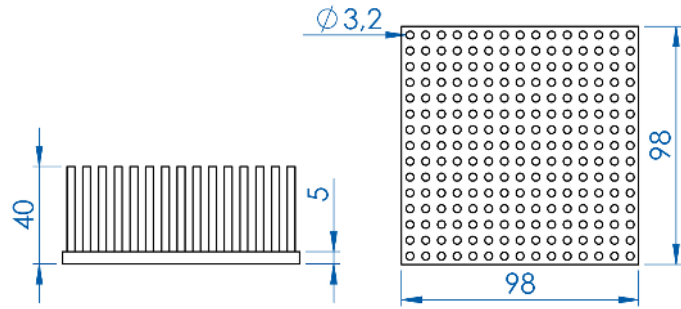
## PO 98-98-20-AL



Rthk: [K/W]: **0.55**

Maximum Power Dissipation: [W]: **100** Convection type: **Active (2 m/sec)**

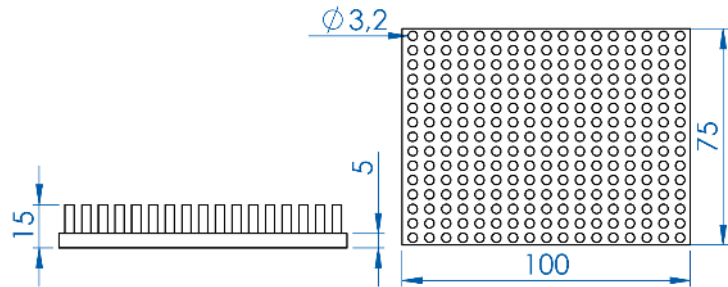
## PO 98-98-40-AL



Rthk: [K/W]: **0.3**

Maximum Power Dissipation: [W]: **170** Convection type: **Active (2 m/sec)**

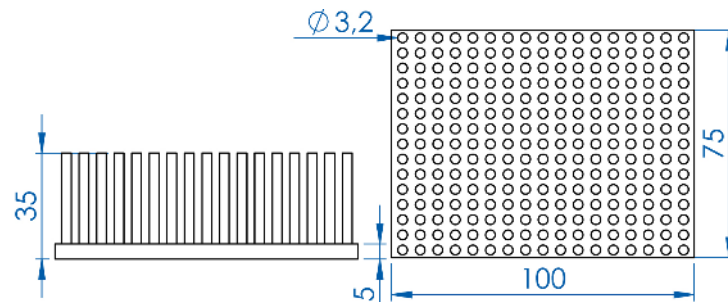
## PO 100-75-15-AL



Rthk: [K/W]: **0.4**

Maximum Power Dissipation: [W]: **80** Convection type: **Active (2 m/sec)**

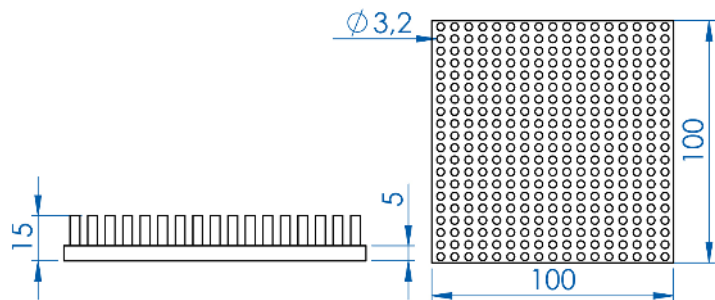
## PO 100-75-35-AL



Rthk: [K/W]: **0.25**

Maximum Power Dissipation: [W]: **120** Convection type: **Active (2 m/sec)**

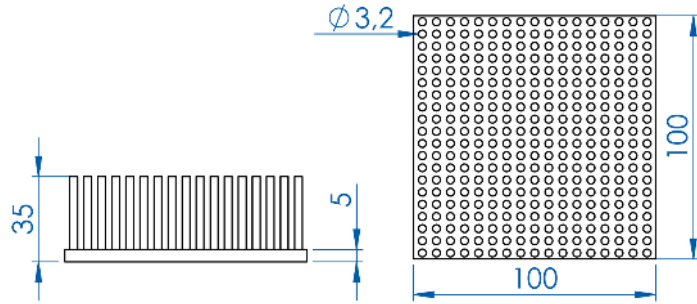
## PO 100-100-15-AL



Rthk: [K/W]: **0.57**

Maximum Power Dissipation: [W]: **100** Convection type: **Active (2 m/sec)**

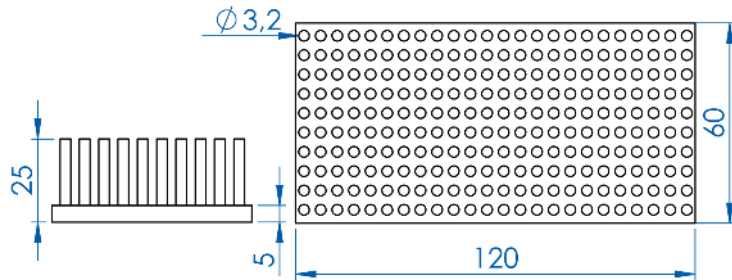
## PO 100-100-35-AL



Rthk: [K/W]: **0.37**

Maximum Power Dissipation: [W]: **100** Convection type: **Active (2 m/sec)**

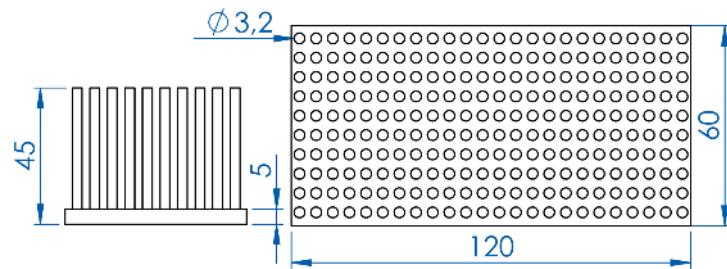
## PO 120-60-25-AL



Rthk: [K/W]: **0.35**

Maximum Power Dissipation: [W]: **120** Convection type: **Active (2 m/sec)**

## PO 120-60-45-AL

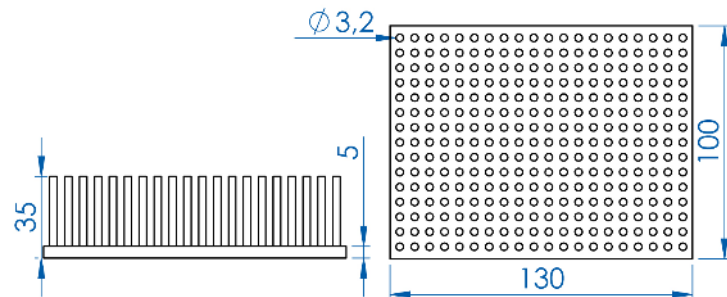


Rthk: [K/W]: **0.3**

Maximum Power Dissipation: [W]: **120** Convection type: **Active (2 m/sec)**

## PO 130-100-35-AL

Features 300 pins



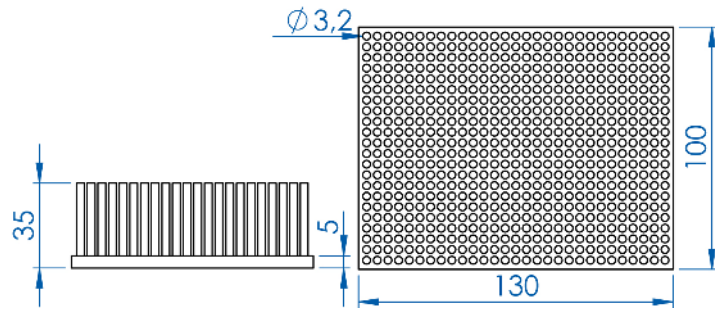
Rthk: [K/W]: **0.3**

Maximum Power Dissipation: [W]: **190** Convection type: **Active (2 m/sec)**



## PO130-100-35-AL-1

Features 638 pins



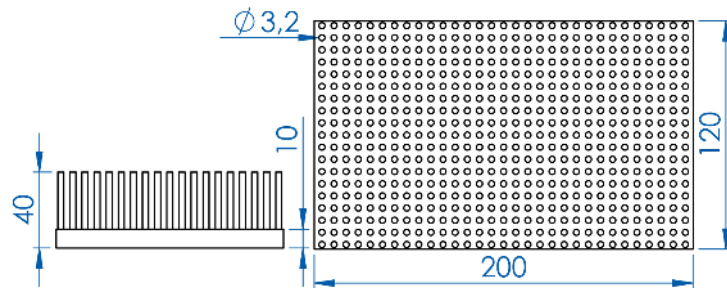
Rthk: [K/W]: **0.3**

Maximum Power Dissipation: [W]: **200**

Convection type: **Active (2 m/sec)**

## PO 200-120-40-AL

Design with 689 pins  
Power values with lateral ventilation



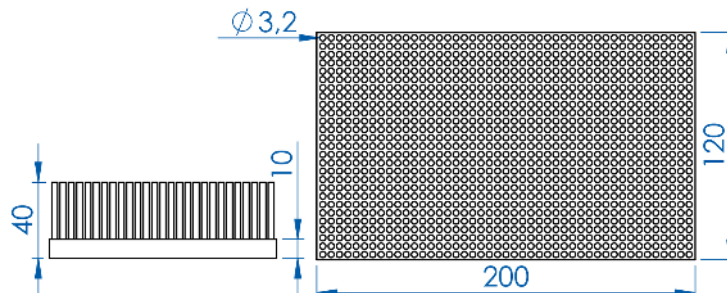
Rthk: [K/W]: **0.15**

Maximum Power Dissipation: [W]: **400**

Convection type: **Active (2 m/sec)**

## PO 200-120-40-AL-1

Design with 1.215 pins  
Power values with lateral ventilation



Rthk: [K/W]: **0.12**

Maximum Power Dissipation: [W]: **550**

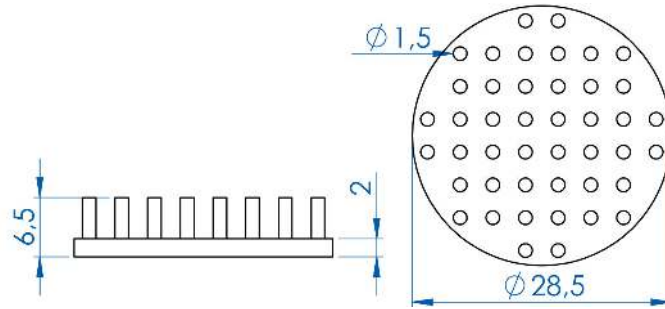
Convection type: **Active (2 m/sec)**



Alutronic offers thermal simulations to support your project!



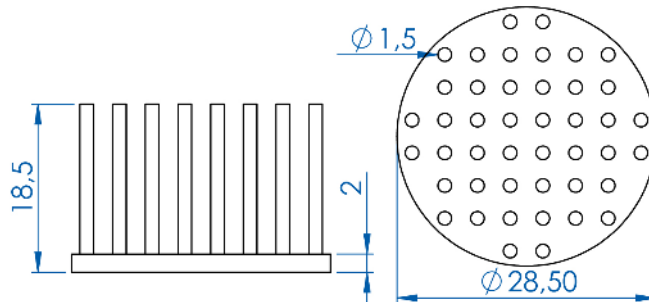
**POR 28,5-6,5-AL**



Rthk: [K/W]: **48.3**

Maximum Power Dissipation: [W]: **1.2** Convection type: **Passive**

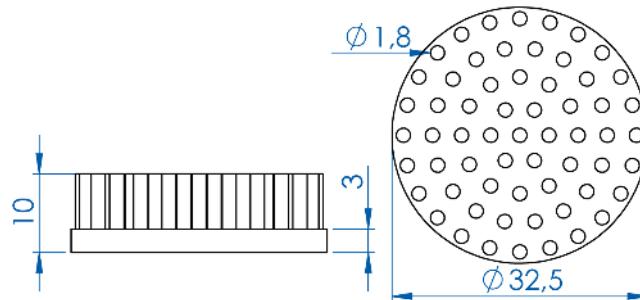
**POR 28,5-18,5-AL**



Rthk: [K/W]: **26.5**

Maximum Power Dissipation: [W]: **1.2** Convection type: **Passive**

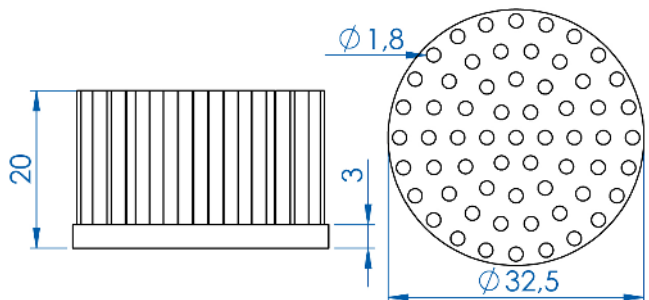
**POR 32,5-10-AL**



Rthk: [K/W]: **20.6**

Maximum Power Dissipation: [W]: **2.8** Convection type: **Passive**

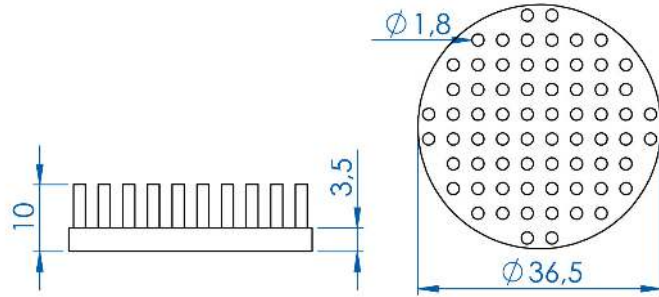
**POR 32,5-20-AL**



Rthk: [K/W]: **14.4**

Maximum Power Dissipation: [W]: **2.8** Convection type: **Passive**

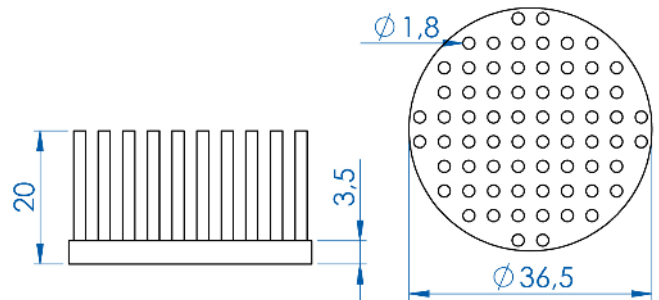
## POR 36,5-10-AL



Rthk: [K/W]: **18.6**

Maximum Power Dissipation: [W]: **3** Convection type: **Passive**

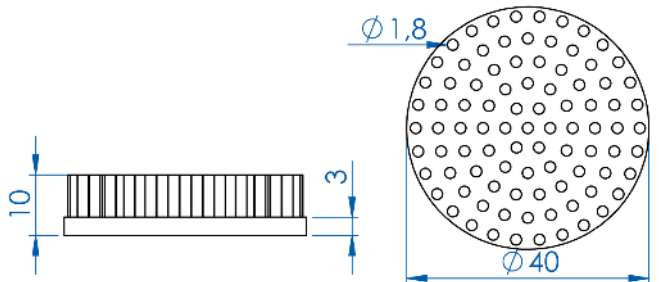
## POR 36,5-20-AL



Rthk: [K/W]: **13.1**

Maximum Power Dissipation: [W]: **3** Convection type: **Passive**

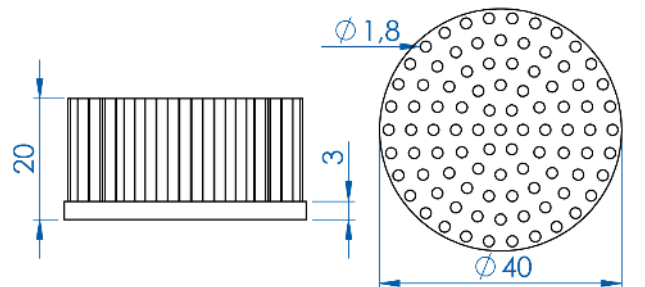
## POR 40-10-AL



Rthk: [K/W]: **3.5**

Maximum Power Dissipation: [W]: **15** Convection type: **Active (2 m/sec)**

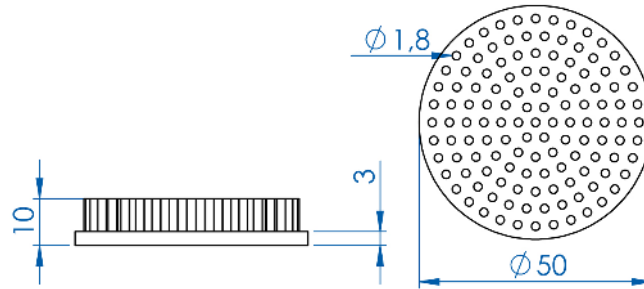
## POR 40-20-AL



Rthk: [K/W]: **2.5**

Maximum Power Dissipation: [W]: **15** Convection type: **Active (2 m/sec)**

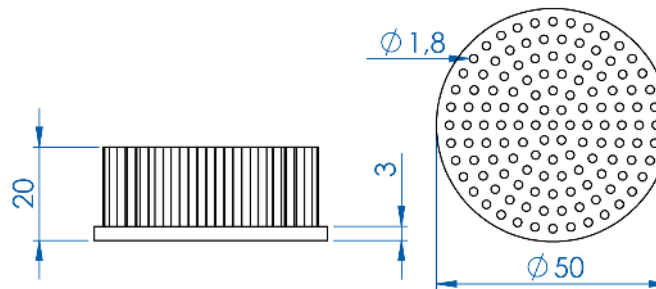
## POR 50-10-AL



Rthk: [K/W]: **2.2**

Maximum Power Dissipation: [W]: **25** Convection type: **Active (2 m/sec)**

## POR 50-20-AL



Rthk: [K/W]: **1.5**

Maximum Power Dissipation: [W]: **25** Convection type: **Active (2 m/sec)**



Alutronic is certified since 2004 according to ISO 9001

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