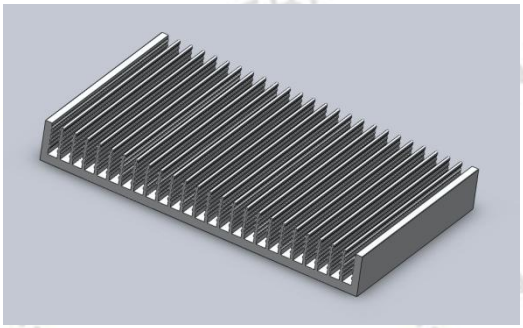
Extruded heat sinks: the most popular mean to cool semiconductors in natural convection. Possibility to optimize shapes under custom specifications.
Hereunder a selection of the most common sections.

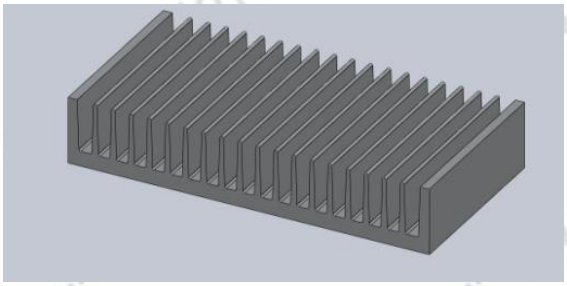
Part Number	Width (mm)	Height (mm)	Linear weight (kg/m)
RMRES0012	168	21	3.85

Rth,n *) (°C/W)	Rth,f **) (°C/W)
0.55	0.23



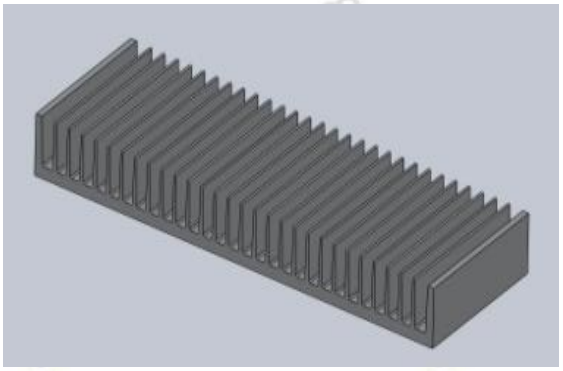
Part Number	Width (mm)	Height (mm)	Linear weight (kg/m)
RMRES0016	200	40	9.89

Rth,n *) (°C/W)	Rth,f **) (°C/W)
0.48	0.17



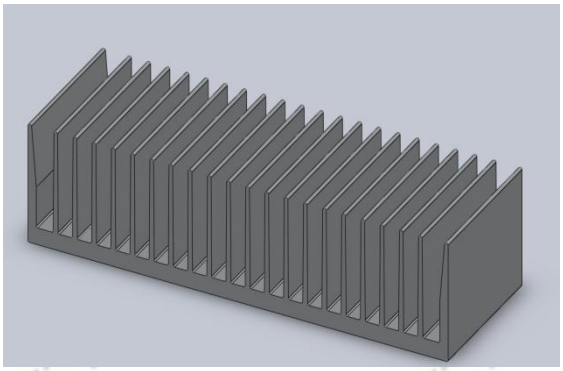
Part Number	Width (mm)	Height (mm)	Linear weight (kg/m)
RMRES0017	300	40	12.74

Rth,n *) (°C/W)	Rth,f **) (°C/W)
0.33	0.13



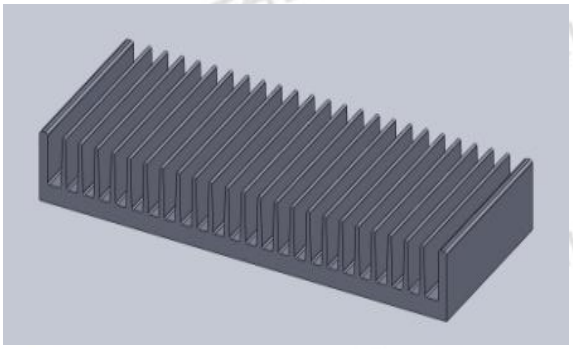
Part Number	Width (mm)	Height (mm)	Linear weight (kg/m)
RMRES0018	300	83	23.06

Rth,n *) (°C/W)	Rth,f **) (°C/W)
0.21	0.09



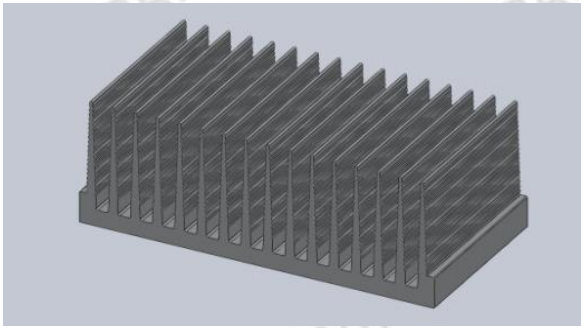
Part Number	Width (mm)	Height (mm)	Linear weight (kg/m)
RMRES0019	250	40	12.75

Rth,n *) (°C/W)	Rth,f **) (°C/W)
0.40	0.13



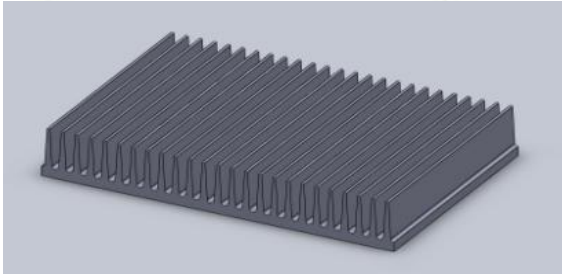
Part Number	Width (mm)	Height (mm)	Linear weight (kg/m)
RMRES0020	201	80.5	16.69

Rth,n *) (°C/W)	Rth,f **) (°C/W)
0.30	0.11



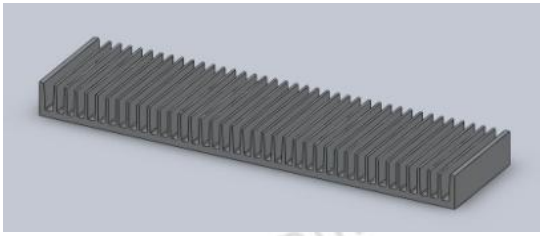
Part Number	Width (mm)	Height (mm)	Linear weight (kg/m)
RMRES0021	150	27	5.24

Rth,n *) (°C/W)	Rth,f **) (°C/W)
0.88	0.23



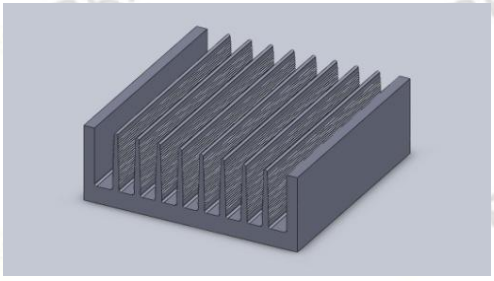
Part Number	Width (mm)	Height (mm)	Linear weight (kg/m)
RMRES0022	400	40	21.43

Rth,n *) (°C/W)	Rth,f **) (°C/W)
0.24	0.07



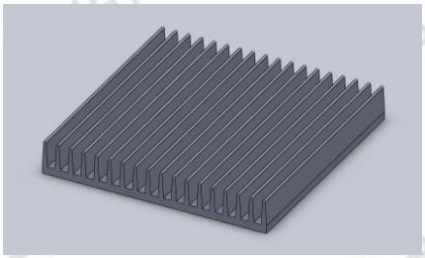
Part Number	Width (mm)	Height (mm)	Linear weight (kg/m)
RMRES0023	100	40	4.90

Rth,n *) (°C/W)	Rth,f **) (°C/W)
0.85	0.31



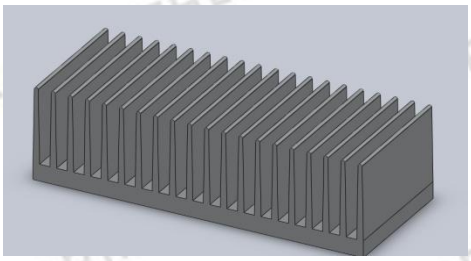
Part Number	Width (mm)	Height (mm)	Linear weight (kg/m)
RMRES0024	100	15	1.93

Rth,n *) (°C/W)	Rth,f **) (°C/W)
1.72	0.55



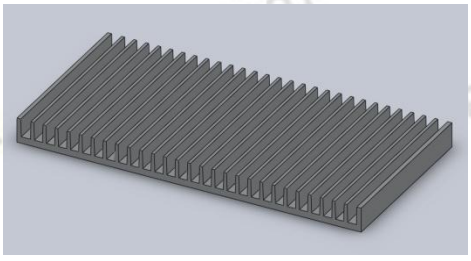
Part Number	Width (mm)	Height (mm)	Linear weight (kg/m)
RMRES0030	250	83	24.68

Rth,n *) (°C/W)	Rth,f **) (°C/W)
0.24	0.10



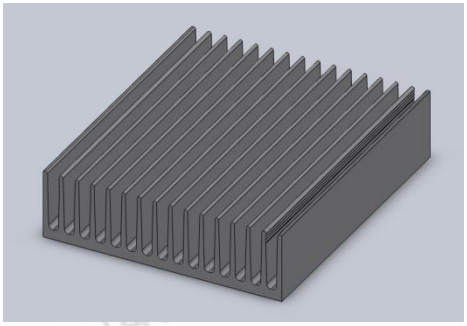
Part Number	Width (mm)	Height (mm)	Linear weight (kg/m)
RMRES0031	200	15	3.9

Rth,n *) (°C/W)	Rth,f **) (°C/W)
0.85	0.30



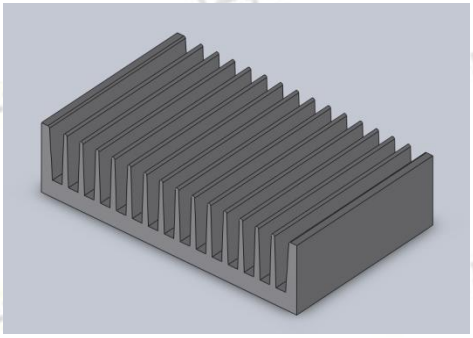
Part Number	Width (mm)	Height (mm)	Linear weight (kg/m)
RMRES0041	85	24.3	2.34

Rth,n *) (°C/W)	Rth,f **) (°C/W)
1.51	0.42



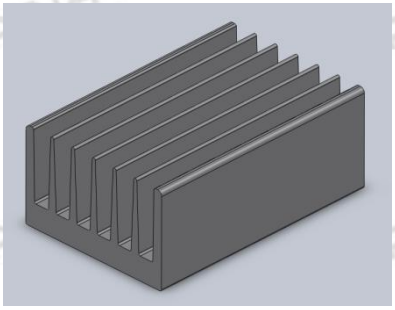
Part Number	Width (mm)	Height (mm)	Linear weight (kg/m)
RMRES0051	160	40	8.64

Rth,n *) (°C/W)	Rth,f **) (°C/W)
0.65	0.24



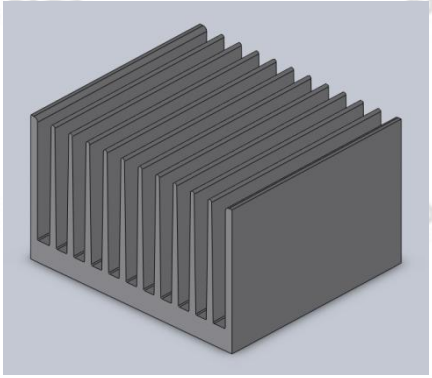
Part Number	Width (mm)	Height (mm)	Linear weight (kg/m)
RMRES0054	66	40	3.47

Rth,n *) (°C/W)	Rth,f **) (°C/W)
1.31	0.46



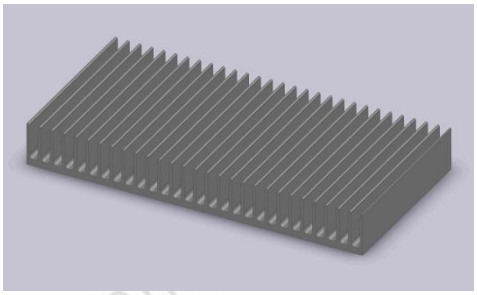
Part Number	Width (mm)	Height (mm)	Linear weight (kg/m)
RMRES0055	111.5	67.5	8.66

Rth,n *) (°C/W)	Rth,f **) (°C/W)
0.95	0.18



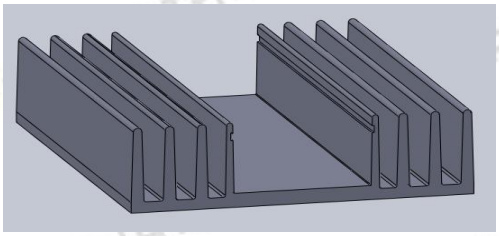
Part Number	Width (mm)	Height (mm)	Linear weight (kg/m)
RMRES0059	200	25	5.38

Rth,n *) (°C/W)	Rth,f **) (°C/W)
0.64	0.20



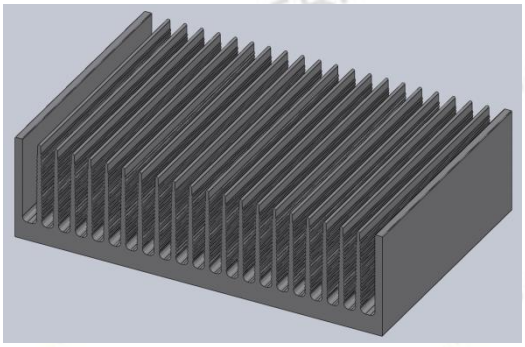
Part Number	Width (mm)	Height (mm)	Linear weight (kg/m)
RMRES0069	80	24	1.76

Rth,n *) (°C/W)	Rth,f **) (°C/W)
1.97	0.71



Part Number	Width (mm)	Height (mm)	Linear weight (kg/m)
RMRES0070	300	84	28.44

Rth,n *) (°C/W)	Rth,f **) (°C/W)
0.21	0.08



Notes about Thermal Resistance values

The Rth values in the tables above have been measured by following conditions:

*) Rth,n = Thermal resistance by natural convention

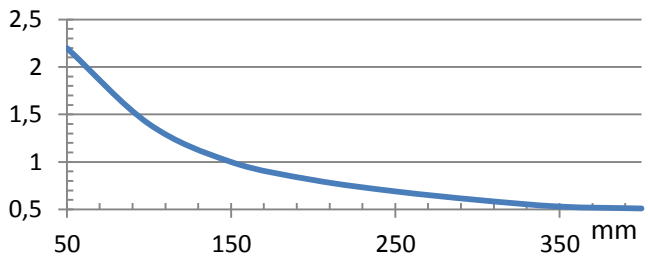
- length = 150 mm
- black anodized surface
- vertical oriented
- $T_{ambient}$ =25°C
- $T_{heatsink}$ = 100°C

**) Rth,f = Thermal resistance by forced convection

- length=150 mm
- fully ducted air flow
- inlet air speed = 2 m/s
- $T_{ambient}$ =25°C
- $T_{heatsink}$ = 100°C

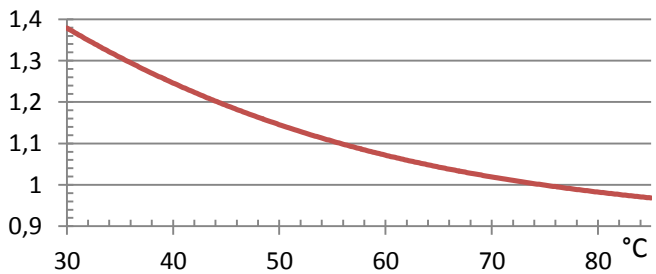
To calculate thermal resistance, in both natural and forced convection, by lengths other than 150 mm, multiply the given value by a corrective factor as plotted in the graph 1

Graph 1: Rth /Rth (150 mm)



To calculate thermal resistance in natural convection by a temperature rise (heatsink vs. ambient) other than 75°C, use correction factors plotted in graph 2

Graph 2: Rth,n / Rth,n (ΔT=75°C)



To calculate thermal resistance in forced convection by inlet air speeds other than 2m/s, use correction factors plotted in graph 3

Graph 3: Rth,f / Rth,f (2 m/s)