

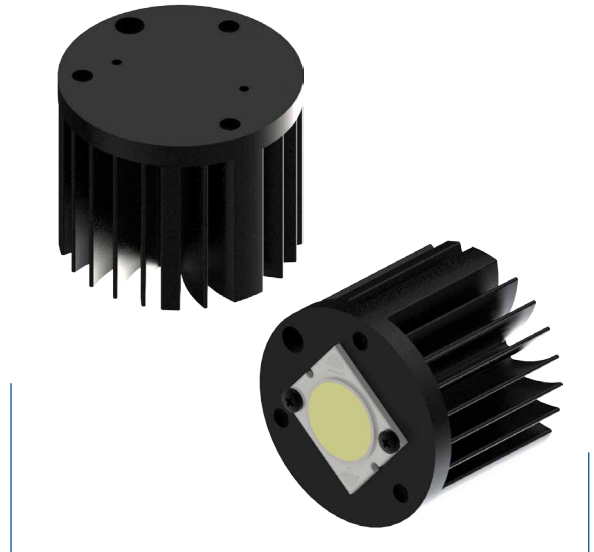
MechaTronix in LED

LSB5040-BRI-ESR Bridgelux LED ES Square Array Heat Sink ø50mm



Features & Benefits

- Designed for Bridgelux LED ES Square Array
- Diameter 50mm base – height 40mm
- Thermal resistance Rth heat sink 6.5°C/W
- Required Rth according Bridgelux datasheets at Tamb 40°C
- BXRA-XX0800/0950/1100:5.43°C/W (Tc105°)
- Specific mounting pattern 2xM2.5 + cable guidance hole



Order Information



Example : LSB5040-BRI-ESR-B-1

LSB5040-BRI-ESR - **1** - **2**

- 1** Anodising color
 "B" - Black Anodised
 "C" - Clear Anodised
 "Z" - Custom (specify)
- 2** 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	M8 x 1	5mm MIN.
2	#5/16-24 UNC	0.197" MIN.
3	M50 x 2	Base contour

MechaTronix in LED

LSB5040-BRI-ESR Bridgelux LED ES Square Array Heat Sink $\phi 50\text{mm}$



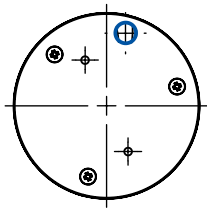
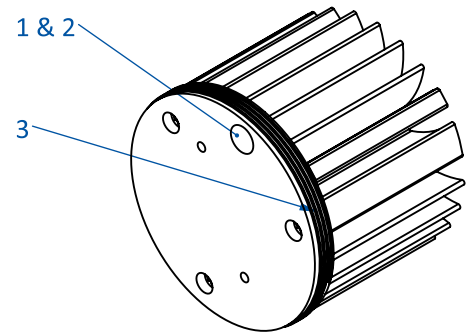
Product Details

	Total Height ^{mm}	Rth(°C/W)	Volume ^{mm³}	Cooling Surface ^{mm²}	Weight ^{gr}
LSB5040-BRI-ESR	40.00	6.5	37164.37	29520.43	100.34

Mounting Options

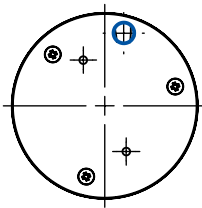
Notes:

- MechaTronix reserves the right to change products or specifications without prior notice.
- Mentioned models are an extraction of the full product range. For specific mechanical adaptations please contact MechaTronix.
- All these types are made by forging process from highly conductive aluminum type AL6063 T5 with a typical Thermal Conductivity of 209W/m-K.



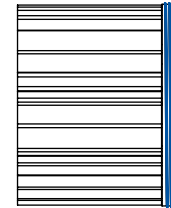
1 Mechanical version
Cable hole tapping

M8x1
Depth: 5mm



2 Mechanical version
Hole tapping

5/16-24 UNC
Depth: 0.197"

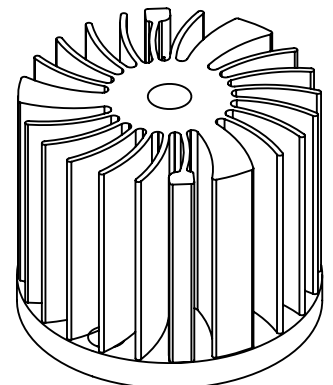
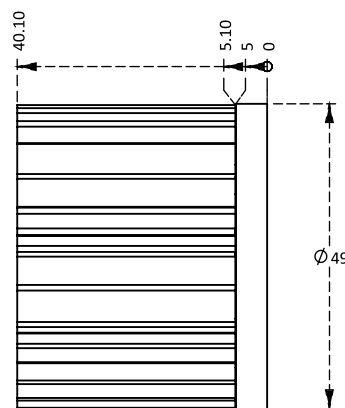
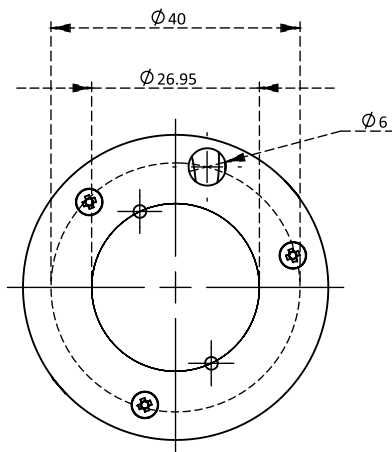


3 Mechanical version
M50x2

Screw thread around
base contour

Drawings & Dimensions

Example : LSB5040-BRI-ESR



MechaTronix in LED

LSB5040-BRI-ESR Bridgelux LED ES Square Array Heat Sink ϕ 50mm



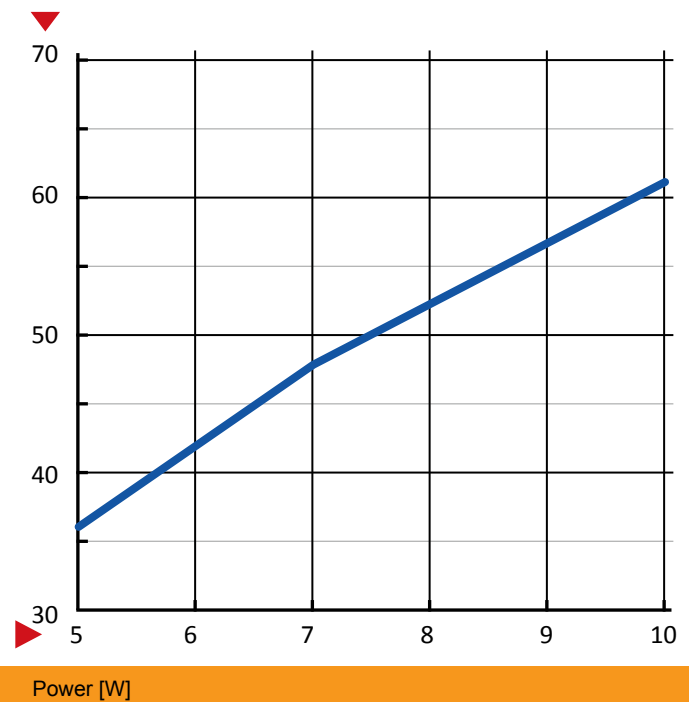
Thermal Data

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

Power (W)	LSB5040-BRI-ESR
5	7.3
7	6.7
10	6.1
Rth Av.	6.5

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

— LSB5040-BRI-ESR



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

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

