

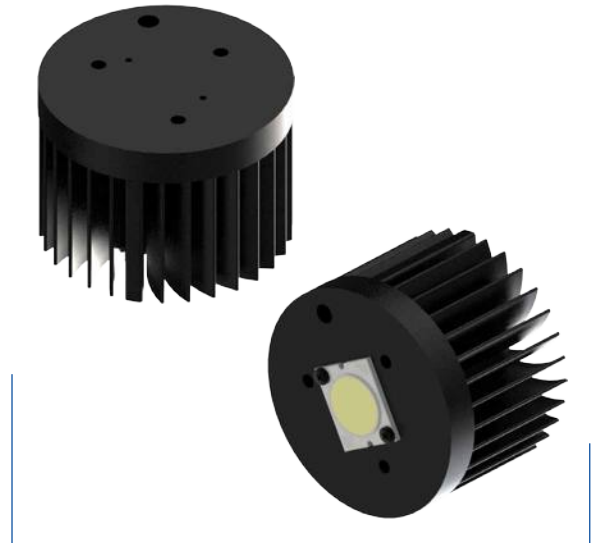
MechaTronix in LED

LSB7050-BRI-ESR Bridgelux LED ES Square Array Heat Sink ϕ 70mm



Features & Benefits

- Designed for Bridgelux LED ES Square Array
- Diameter 70mm base – height 50mm
- Thermal resistance Rth 5.0°C/W
- Required Rth according Bridgelux datasheets at Tamb 40°C
- BXRA-XX1200/1350/1600:3.68°C/W (Tc105°)
- Specific mounting pattern 2xM2.5 + cable guidance hole



Order Information



Example : LSB7050-BRI-ESR-B-1

LSB7050-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

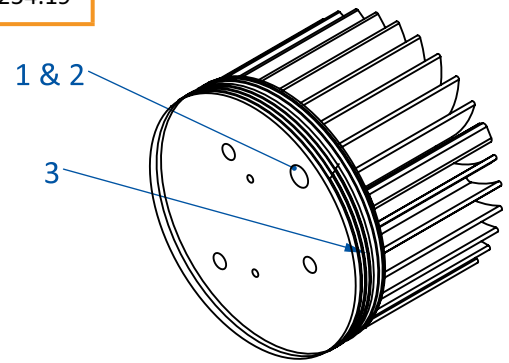
LSB7050-BRI-ESR Bridgelux LED ES Square Array Heat Sink $\phi 70\text{mm}$



Product Details

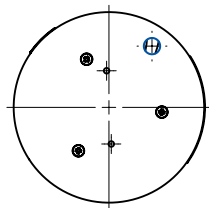
	Total Height ^{mm}	Rth($^{\circ}\text{C}/\text{W}$)	Volume ^{mm³}	Cooling Surface ^{mm²}	Weight ^{gr}
LSB7050-BRI-ESR	50.00	5.0	94427.53	68947.15	254.19

Mounting Options



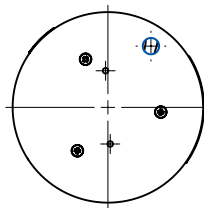
Notes:

- 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.



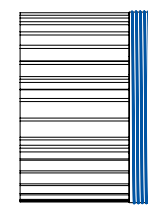
1 Mechanical version
Cable hole tapping

M8x1
Depth: 5mm



2 Mechanical version
Hole tapping

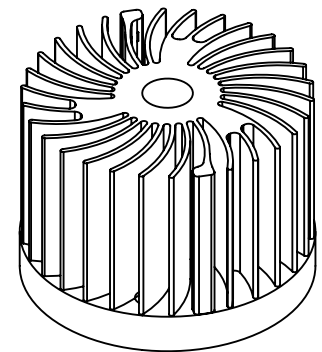
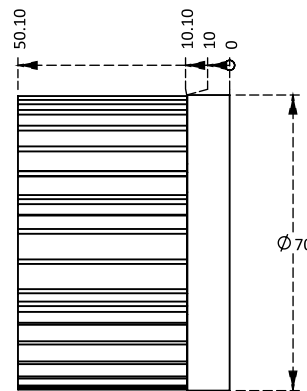
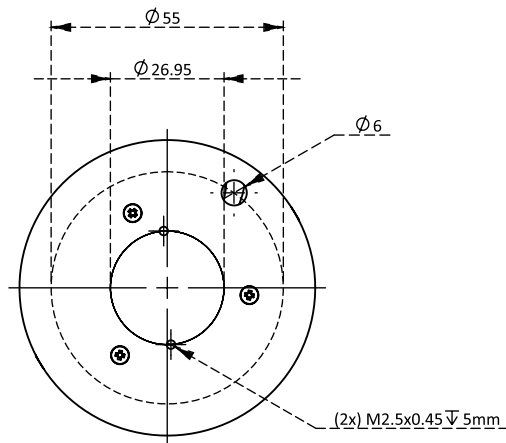
5/16-24 UNC
Depth: 0.197"



3 Mechanical version
M50x2

Screw thread around
base contour

Drawings & Dimensions



Example : LSB7050-BRI-ESR

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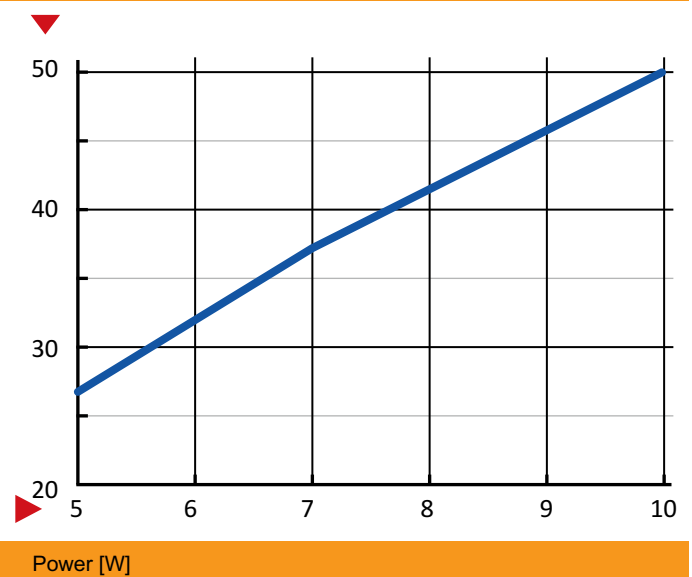
Thermal Data

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

Power (W)	LSB7050-BRI-ESR
5	5.6
7	5.3
10	5.0
Rth Av.	5.0

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

— LSB7050-BRI-ESR



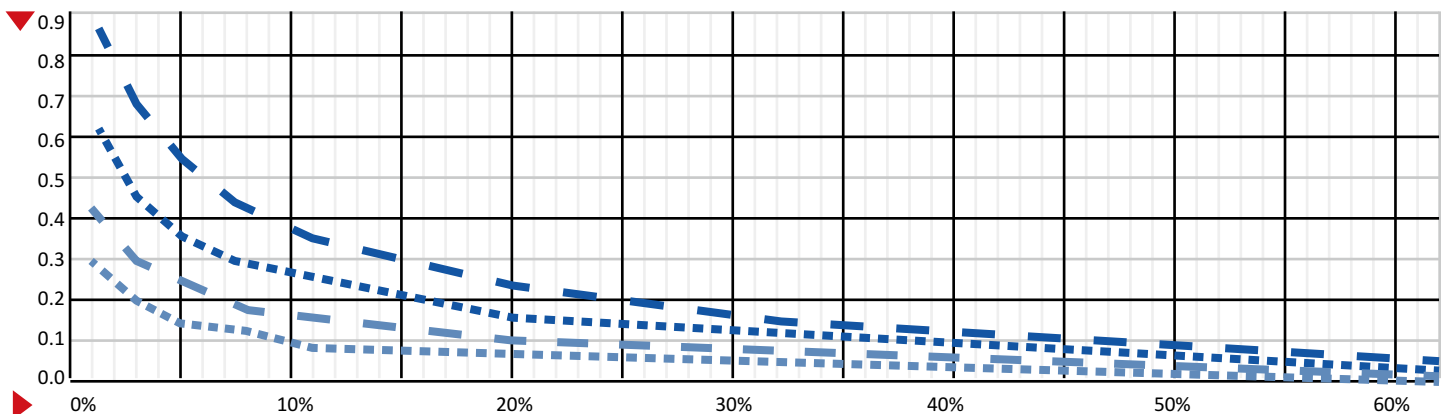
Spreading resistance, R_{sp} [K/W]

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

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 [%]