CUI Devices is now Same Sky! Learn More

SERIES: HSE-BX-04H-01 | DESCRIPTION: HEAT SINK

FEATURES

- TO-220 package
- placement pins for secure PCB attachment
- round hole for component attachment
- multiple available cut lengths

RoHS

MODEL

	length (mm)	thermal resistance[1] @ 75°C ΔT, nat conv (°C/W)	thermal resistance[1] @ 1 W, nat conv (°C/W)	thermal resistance[1] @ 1 W, 200 LFM (°C/W)	thermal resistance[1] @ 1 W, 400 LFM (°C/W)	power dissipation[1] @ 75°C ΔT, nat conv (W)
HSE-B250-04H	25	9.38	13.60	3.26	2.25	8.00
HSE-B500-04H	50	6.15	8.05	2.88	2.12	12.20
HSE-B630-04H	63	5.21	9.37	2.31	1.86	14.40

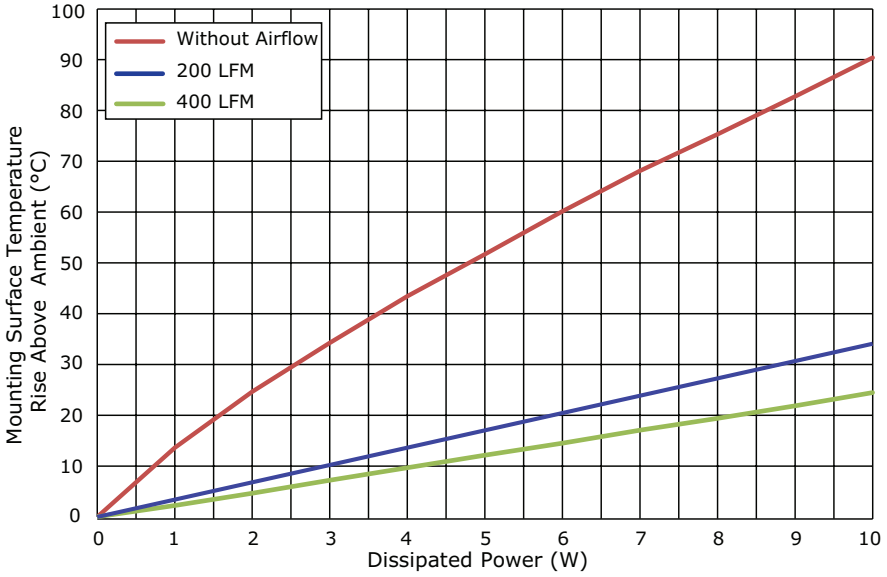
Note:
1. See performance curves for full thermal resistance details.
2. Custom cut to length options available. Thermal data not available on custom lengths.

PERFORMANCE CURVES

HSE-B250-04H

	Heatsink Temperature Rise Above Ambient (ΔT = Ths - Ta) (°C)		
Power (W)	Natural Conv.	200 LFM	400 LFM
0	0	0	0
1	13.60	3.26	2.25
2	24.62	6.61	4.65
3	34.26	10.05	7.18
4	43.45	13.46	9.67
5	51.69	16.85	12.11
6	60.18	20.16	14.49
7	68.13	23.72	17.06
8	75.33	27.06	19.37
9	82.77	30.36	21.85
10	90.41	34.06	24.45

Ths: "hot spot" temperature measured on the heatsink
Ta: ambient temperature

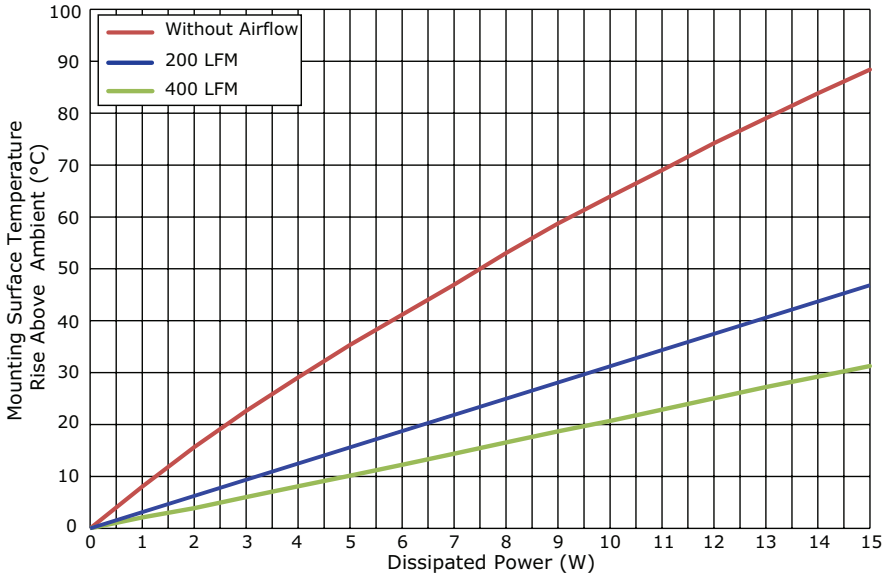


PERFORMANCE CURVES (CONTINUED)

HSE-B500-04H

	Heatsink Temperature Rise Above Ambient (ΔT = Ths - Ta) (°C)		
Power (W)	Natural Conv.	200 LFM	400 LFM
0	0	0	0
1	8.05	2.88	2.12
2	15.65	6.20	3.91
3	22.61	9.34	6.03
4	29.06	12.43	8.12
5	35.34	15.82	10.15
6	41.17	18.99	12.26
7	46.96	22.14	14.37
8	53.06	24.84	16.58
9	58.73	28.02	18.67
10	63.92	31.30	20.68
11	69.02	34.30	22.85
12	74.20	37.50	25.06
13	78.99	40.75	27.25
14	83.83	43.67	29.22
15	88.40	46.82	31.27

Ths: "hot spot" temperature measured on the heatsink
Ta: ambient temperature

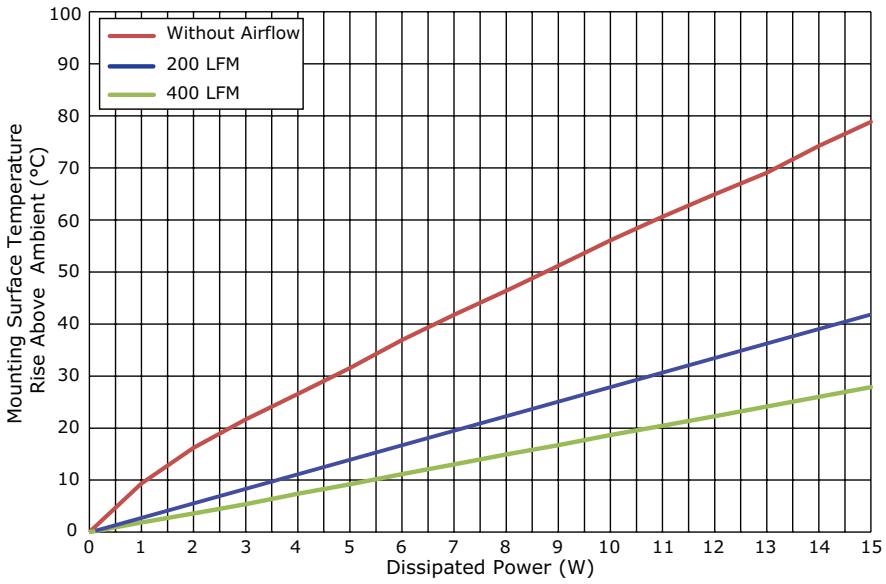


PERFORMANCE CURVES (CONTINUED)

HSE-B630-04H

	Heatsink Temperature Rise Above Ambient (ΔT = Ths - Ta) (°C)		
Power (W)	Natural Conv.	200 LFM	400 LFM
0	0	0	0
1	9.37	2.31	1.86
2	16.20	5.02	3.59
3	21.68	7.73	5.38
4	26.57	10.57	7.35
5	31.54	13.41	9.19
6	36.91	16.34	11.16
7	41.76	19.19	13.04
8	46.40	22.17	14.92
9	51.20	24.95	16.72
10	56.07	27.66	18.66
11	60.60	30.53	20.46
12	64.94	33.33	22.27
13	69.05	36.12	24.13
14	74.21	38.78	26.01
15	78.87	41.82	27.89

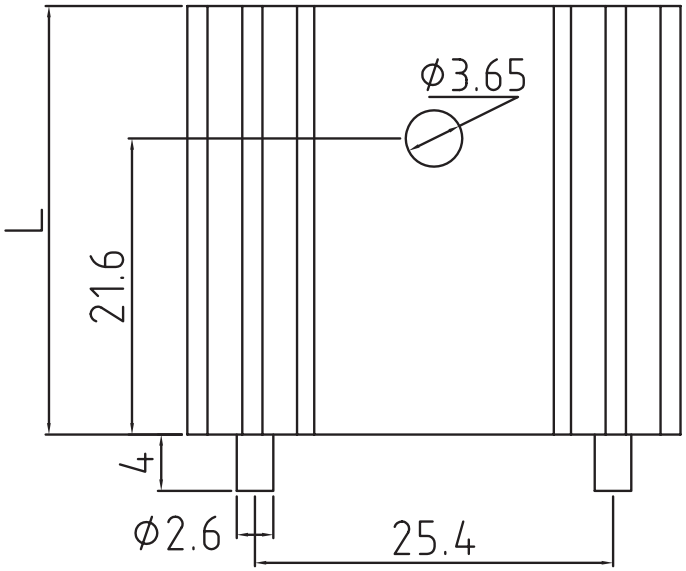
Ths: "hot spot" temperature measured on the heatsink
Ta: ambient temperature

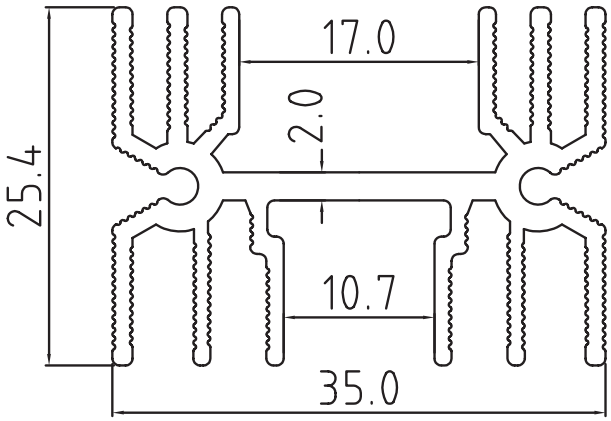


MECHANICAL DRAWING

units: mm
tolerance: ±0.5 mm

MATERIAL	AL 6063-T5
FINISH	black anodized
PIN MATERIAL	steel
PIN PLATING	tin





MODEL NO.	LENGTH, L (mm)	WEIGHT (g)
HSE-B250-04H	25	21.33
HSE-B500-04H	50	35.7
HSE-B630-04H	63	43.4

REVISION HISTORY

rev.	description	date
1.0	initial release	05/08/2017
1.01	brand update	02/11/2020
1.02	logo, datasheet style update	08/05/2022
1.03	CUI Devices rebranded to Same Sky	09/12/2024

The revision history provided is for informational purposes only and is believed to be accurate.

same sky

Same Sky offers a one (1) year limited warranty. Complete warranty information is listed on our website.

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Same Sky products are not authorized or warranted for use as critical components in equipment that requires an extremely high level of reliability. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

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