CUDEVICES

SERIES: HSE-18X | DESCRIPTION: HEAT SINK

FEATURES

- TO-218 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)	@ 1 W, nat conv (°C/W)	@ 1 W, 200 LFM (°C/W)	@ 1 W, 400 LFM (°C/W)	power dissipation[1] @ 75°C ΔT, nat conv (W)
HSE-B18254-0396H	25.4	9.15	11.15	2.29	2.07	8.20
HSE-B18318-0396H	31.8	8.24	9.93	2.57	1.80	9.10
HSE-B18381-0396H	38.1	6.94	8.71	2.29	1.80	10.80
HSE-B18508-0396H	50.8	5.86	7.62	2.45	1.79	12.80
HSE-B18635-0396H	63.5	5.47	7.36	2.78	1.55	13.70

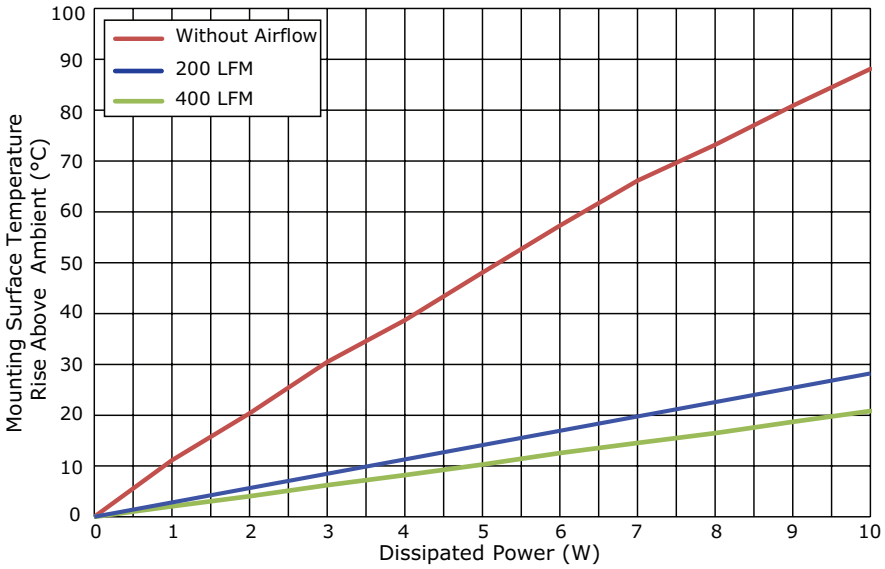
Note: 1. See performance curves for full thermal resistance details.
2. Custom cut to length options available. Thermal data not available on custom lengths.

PERFORMANCE CURVES

HSE-B18254-0396H

	Heatsink Temperature Rise Above Ambient (ΔT = Ths - Ta) (°C)		
Power (W)	Natural Conv.	200 LFM	400 LFM
0	0	0	0
1	11.15	2.29	2.07
2	20.39	4.95	4.07
3	30.47	7.76	6.21
4	38.70	11.00	8.23
5	48.05	13.96	10.29
6	57.30	16.92	12.55
7	66.12	19.68	14.54
8	73.21	22.63	16.48
9	80.86	25.48	18.68
10	88.12	28.22	20.84

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

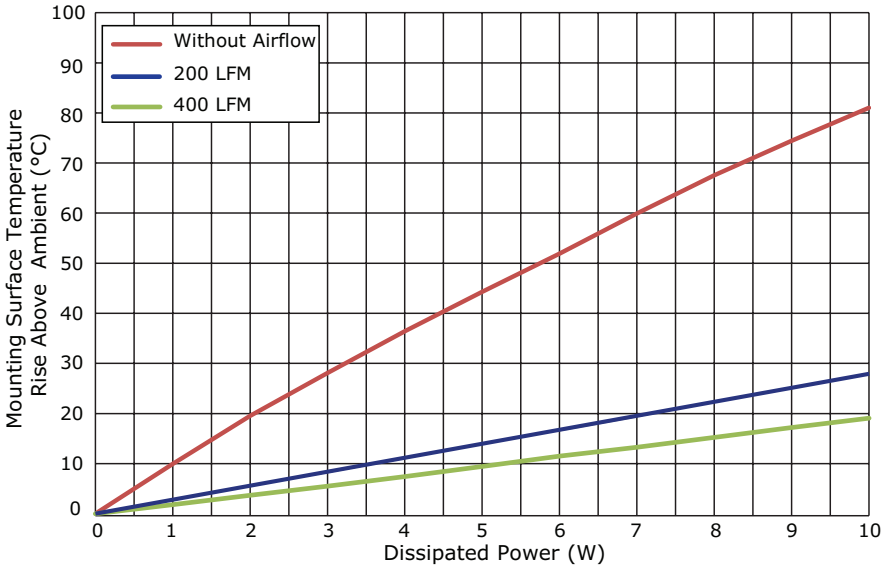


PERFORMANCE CURVES (CONTINUED)

HSE-B18318-0396H

	Heatsink Temperature Rise Above Ambient (ΔT = Ths - Ta) (°C)		
Power (W)	Natural Conv.	200 LFM	400 LFM
0	0	0	0
1	9.93	2.57	1.80
2	19.55	5.41	3.67
3	28.10	8.10	5.47
4	36.39	10.89	7.40
5	44.29	13.77	9.45
6	51.91	16.50	11.49
7	59.92	19.29	13.27
8	67.55	22.14	15.22
9	74.45	24.97	17.22
10	81.01	27.92	19.08

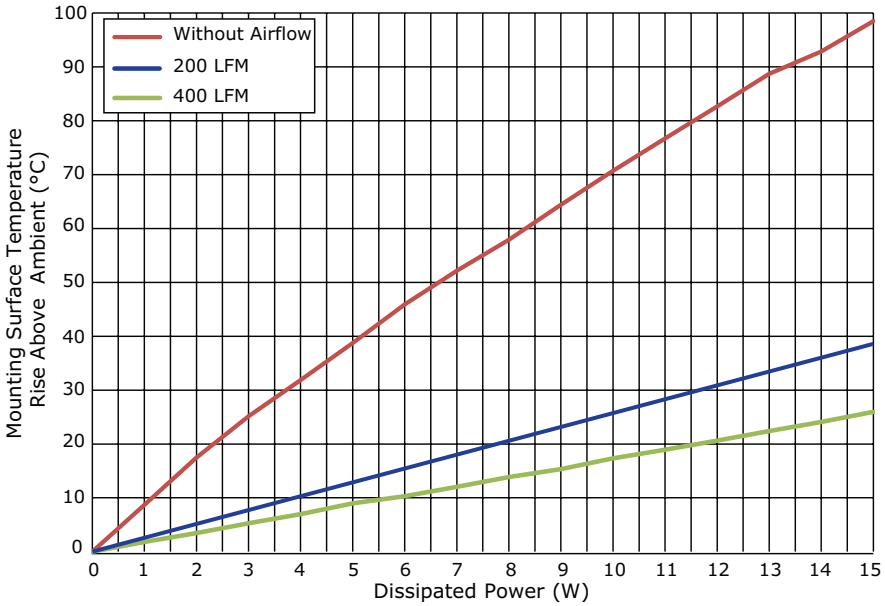
Ths: "hot spot" temperature measured on the heatsink
Ta: ambient temperature



HSE-B18381-0396H

	Heatsink Temperature Rise Above Ambient (ΔT = Ths - Ta) (°C)		
Power (W)	Natural Conv.	200 LFM	400 LFM
0	0	0	0
1	8.71	2.29	1.80
2	17.51	4.67	3.45
3	25.16	6.92	5.27
4	31.88	9.51	6.96
5	38.73	11.93	9.00
6	45.88	14.31	10.31
7	52.16	16.91	12.03
8	57.90	19.57	13.87
9	64.39	22.26	15.35
10	70.70	24.56	17.34
11	76.71	27.23	18.94
12	82.68	30.24	20.62
13	88.72	32.89	22.43
14	92.86	35.95	24.08
15	98.52	38.57	25.96

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

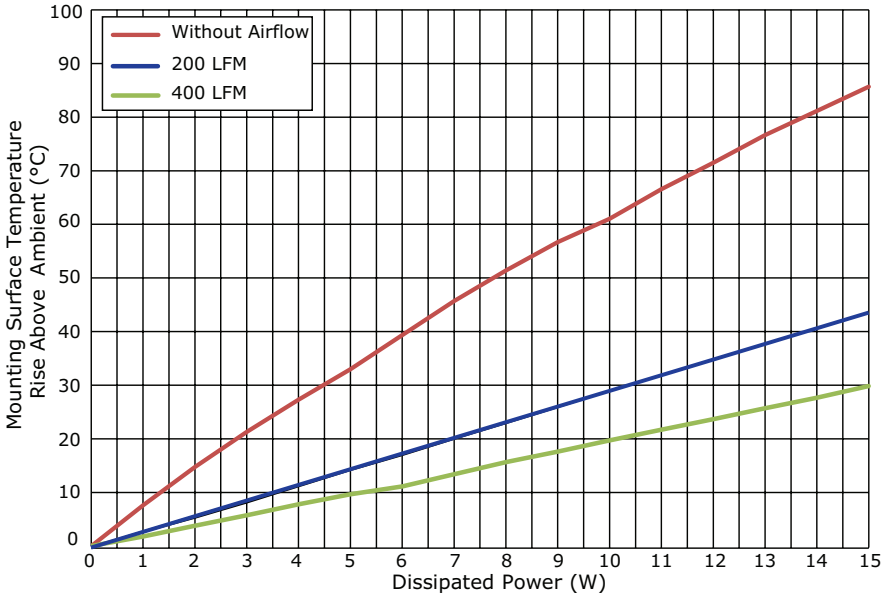


PERFORMANCE CURVES (CONTINUED)

HSE-B18508-0396H

	Heatsink Temperature Rise Above Ambient (ΔT = Ths - Ta) (°C)		
Power (W)	Natural Conv.	200 LFM	400 LFM
0	0	0	0
1	7.62	2.45	1.79
2	14.75	5.07	3.78
3	21.30	7.93	5.77
4	27.29	10.95	7.77
5	33.00	13.97	9.65
6	39.34	16.78	11.13
7	45.69	19.80	13.41
8	51.39	22.76	15.66
9	56.70	25.71	17.63
10	61.04	28.78	19.70
11	66.55	31.89	21.71
12	71.51	34.70	23.68
13	76.66	37.87	25.70
14	81.16	40.44	27.66
15	85.69	43.56	29.84

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

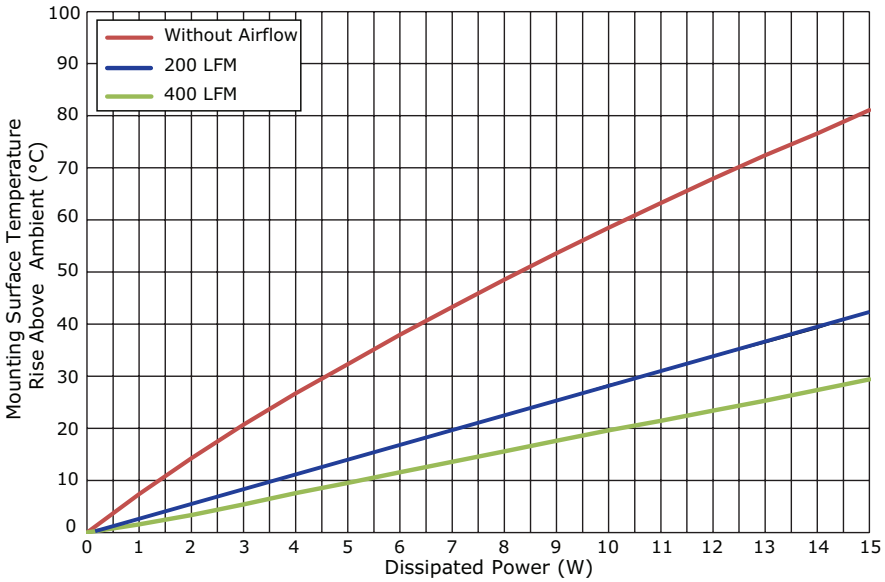


PERFORMANCE CURVES (CONTINUED)

HSE-B18635-0396H

	Heatsink Temperature Rise Above Ambient (ΔT = Ths - Ta) (°C)		
Power (W)	Natural Conv.	200 LFM	400 LFM
0	0	0	0
1	7.36	2.78	1.55
2	14.26	5.51	3.34
3	20.72	8.49	5.38
4	26.71	11.30	7.58
5	32.32	13.90	9.50
6	37.95	17.05	11.58
7	43.27	19.88	13.58
8	48.53	22.56	15.55
9	53.62	25.41	17.59
10	58.48	28.50	19.59
11	63.26	30.79	21.43
12	67.93	33.63	23.37
13	72.42	36.30	25.31
14	76.58	39.06	27.34
15	81.06	42.34	29.38

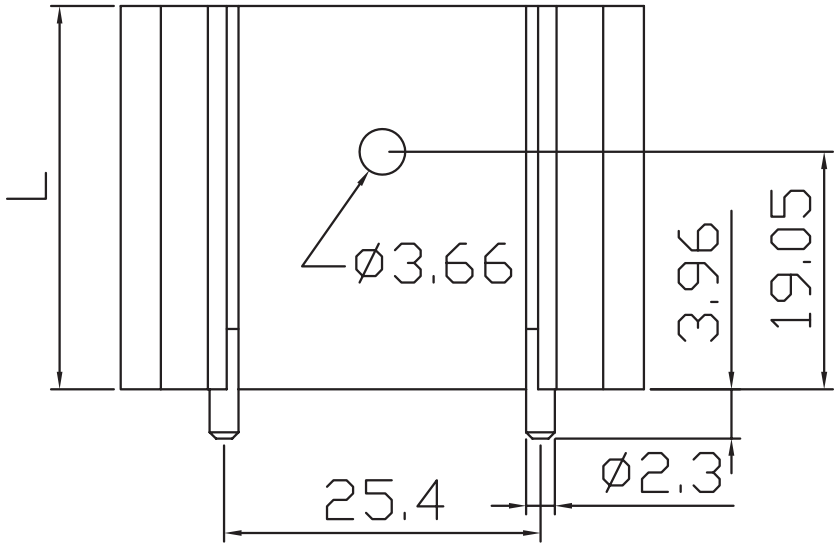
Ths: "hot spot" temperature measured on the heatsink
Ta: ambient temperature

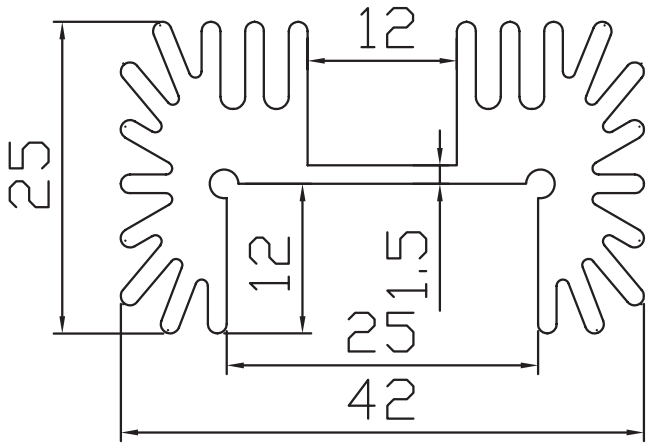


MECHANICAL DRAWING

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-B18254-0396H	25.4	30
HSE-B18318-0396H	31.8	43
HSE-B18381-0396H	38.1	44
HSE-B18508-0396H	50.8	57
HSE-B18635-0396H	63.5	69

REVISION HISTORY

rev.	description	date
1.0	initial release	05/11/2017
1.01	brand update	02/10/2020
1.02	logo, datasheet style update	08/05/2022

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

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

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