

**SERIES:** HSE-B18X-035H | **DESCRIPTION:** HEAT SINK

**FEATURES**

- TO-218 package
- placement pins for secure PCB attachment
- round hole for component attachment
- multiple available cut lengths

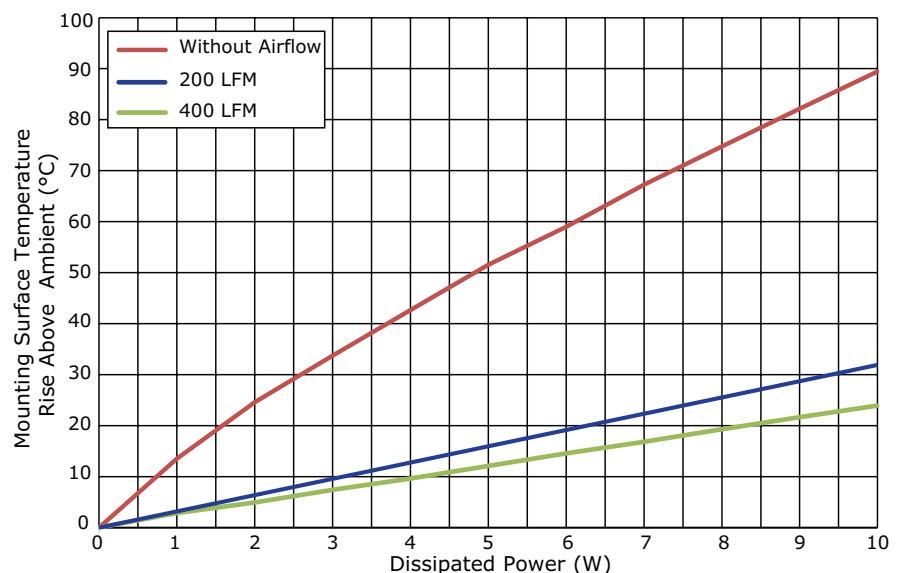

**MODEL**

	length [mm]	thermal resistance <sup>1</sup>				power dissipation <sup>1</sup> @ 75°C ΔT, nat conv [W]
		@ 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]	
HSE-B18254-035H	25.4	9.26	13.52	3.09	2.86	8.10
HSE-B18317-035H	31.75	7.65	10.96	3.63	2.80	9.80
HSE-B18381-035H	38.1	6.25	8.34	3.52	2.48	12.00
HSE-B18508-035H	50.8	5.86	8.63	2.98	2.21	12.80
HSE-B18635-035H	63.5	4.49	6.61	2.24	1.22	16.70

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-B18254-035H**

Power [W]	Heatsink Temperature Rise Above Ambient [ΔT = T <sub>hs</sub> - T <sub>a</sub> ] [°C]		
	Natural Conv.	200 LFM	400 LFM
0	0	0	0
1	13.52	3.09	2.86
2	24.58	6.19	4.94
3	33.71	9.47	7.42
4	42.65	12.64	9.60
5	51.54	15.85	12.11
6	58.98	18.94	14.54
7	67.25	22.34	16.84
8	74.76	25.54	19.31
9	82.16	28.87	21.66
10	89.43	31.89	23.95

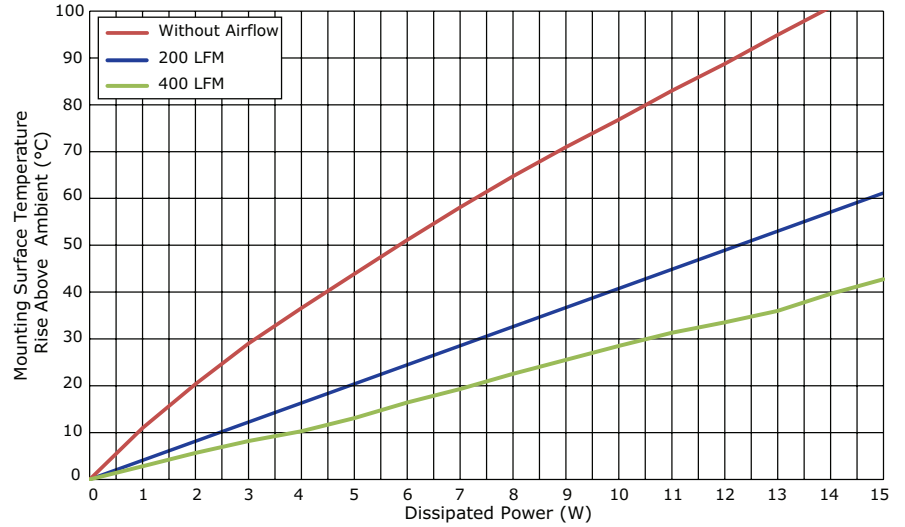


T<sub>hs</sub>: "hot spot" temperature measured on the heatsink  
T<sub>a</sub>: ambient temperature

## PERFORMANCE CURVES (CONTINUED)

### HSE-B18317-035H

Power [W]	Heatsink Temperature Rise Above Ambient ( $\Delta T = T_{hs} - T_a$ ) [°C]		
	Natural Conv.	200 LFM	400 LFM
0	0	0	0
1	10.96	3.63	2.80
2	20.38	7.98	5.65
3	29.02	12.37	8.21
4	36.58	16.50	10.28
5	43.86	20.35	13.11
6	51.12	24.67	16.43
7	58.09	28.82	19.32
8	64.74	33.13	22.54
9	70.97	37.07	25.55
10	76.83	41.01	28.51
11	83.01	45.19	31.32
12	88.74	49.10	33.54
13	94.93	53.11	35.98
14	100.86	57.05	39.63
15	106.26	61.16	42.76

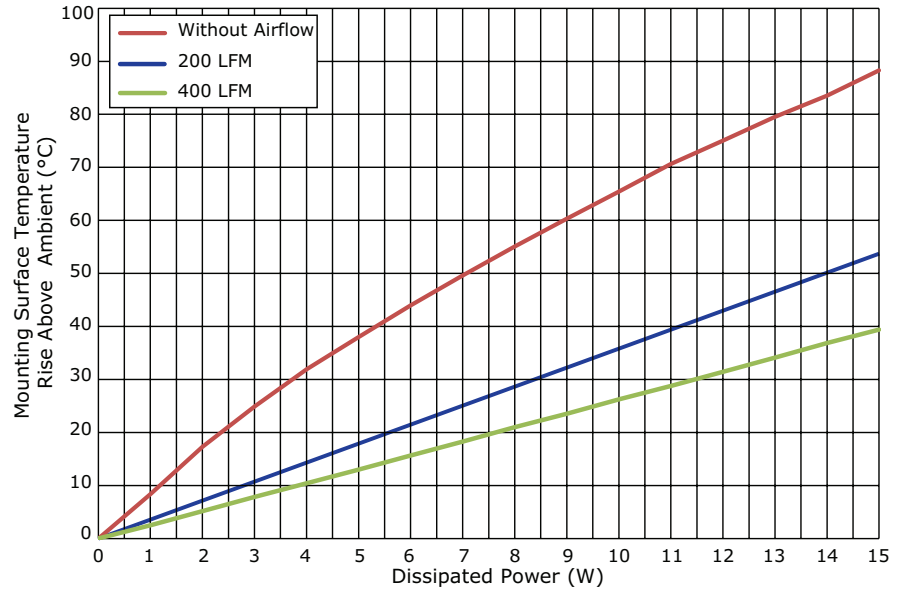


T<sub>hs</sub>: "hot spot" temperature measured on the heatsink  
 T<sub>a</sub>: ambient temperature

## PERFORMANCE CURVES (CONTINUED)

### HSE-B18381-035H

Power [W]	Heatsink Temperature Rise Above Ambient ( $\Delta T = T_{hs} - T_a$ ) [°C]		
	Natural Conv.	200 LFM	400 LFM
0	0	0	0
1	8.34	3.52	2.48
2	17.28	7.15	5.14
3	24.87	10.93	7.81
4	31.91	13.98	10.40
5	37.99	17.64	12.99
6	43.96	21.23	15.68
7	49.59	24.98	18.29
8	55.07	28.39	20.98
9	60.30	32.32	23.53
10	65.45	36.09	26.23
11	70.65	39.56	28.77
12	75.05	43.04	31.44
13	79.53	46.43	34.11
14	83.55	49.75	36.86
15	88.31	53.73	39.41

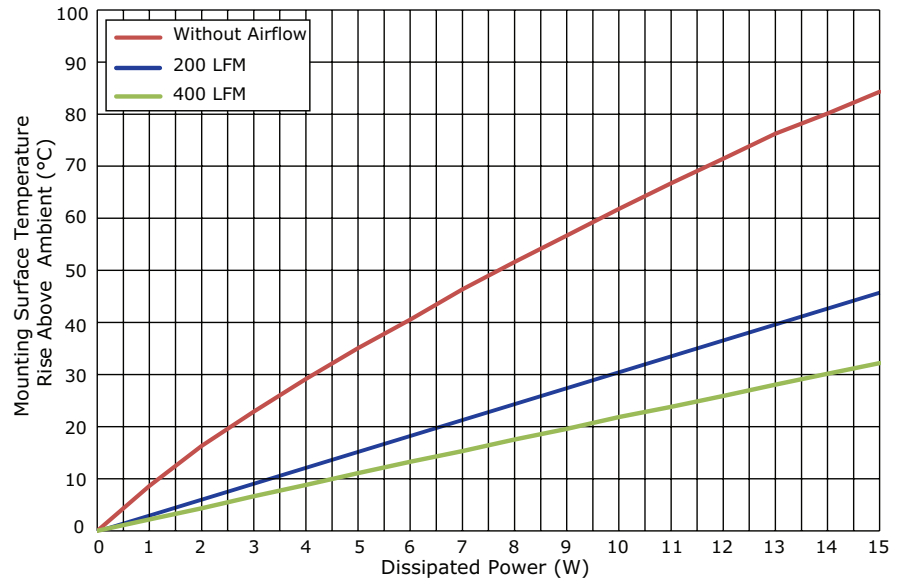


T<sub>hs</sub>: "hot spot" temperature measured on the heatsink  
 T<sub>a</sub>: ambient temperature

## PERFORMANCE CURVES (CONTINUED)

### HSE-B18508-035H

Power [W]	Heatsink Temperature Rise Above Ambient ( $\Delta T = T_{hs} - T_a$ ) [°C]		
	Natural Conv.	200 LFM	400 LFM
0	0	0	0
1	8.63	2.98	2.21
2	16.33	6.10	4.34
3	22.88	9.00	6.65
4	29.17	12.06	8.83
5	35.07	15.23	11.09
6	40.52	18.23	13.25
7	46.34	21.19	15.32
8	51.61	24.37	17.51
9	56.70	27.50	19.57
10	61.77	30.65	21.84
11	66.74	33.54	23.78
12	71.44	36.80	25.90
13	76.25	39.62	28.07
14	80.09	42.73	30.17
15	84.32	45.73	32.21

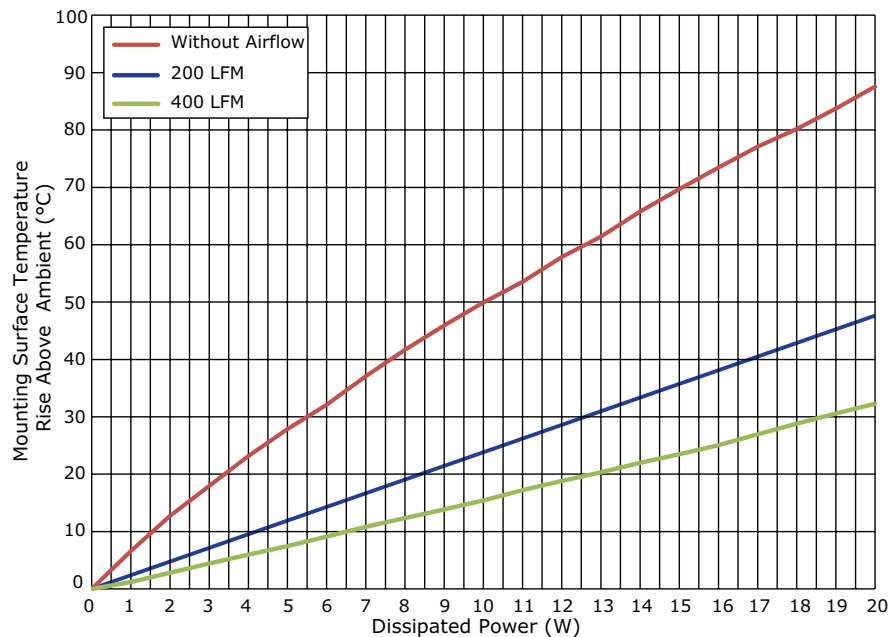


$T_{hs}$ : "hot spot" temperature measured on the heatsink  
 $T_a$ : ambient temperature

## PERFORMANCE CURVES (CONTINUED)

### HSE-B18635-035H

Power [W]	Heatsink Temperature Rise Above Ambient ( $\Delta T = T_{hs} - T_a$ ) [°C]		
	Natural Conv.	200 LFM	400 LFM
0	0	0	0
1	6.61	2.24	1.22
2	12.73	4.57	2.80
3	17.96	7.08	4.43
4	23.17	9.36	5.95
5	27.87	11.84	7.45
6	32.13	14.18	9.12
7	37.08	16.65	10.83
8	41.69	19.14	12.37
9	45.91	21.56	13.84
10	49.93	24.05	15.42
11	53.54	26.41	17.20
12	57.87	28.59	18.81
13	61.43	31.04	20.31
14	65.76	33.48	21.97
15	69.68	35.82	23.48
16	73.44	38.17	25.05
17	77.08	40.51	26.93
18	80.18	42.90	28.82
19	83.71	45.25	30.61
20	87.57	47.63	32.29

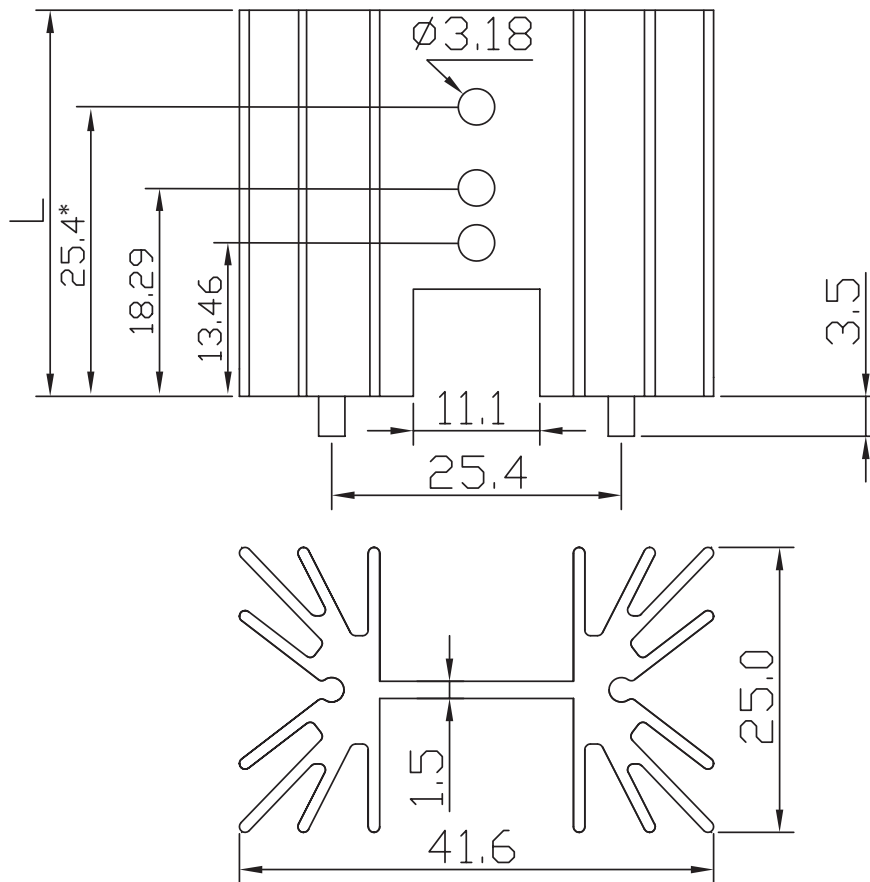


T<sub>hs</sub>: "hot spot" temperature measured on the heatsink  
 T<sub>a</sub>: ambient temperature

## 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-B18254-035H*	25.4	20
HSE-B18317-035H	31.75	23
HSE-B18381-035H	38.1	28.34
HSE-B18508-035H	50.8	37.8
HSE-B18635-035H	63.5	50

Note: \* Mounting hole not present on 25.4 mm length model.

## REVISION HISTORY

rev.	description	date
1.0	initial release	05/11/2017
1.01	updated datasheet	09/07/2017
1.02	brand update	02/10/2020
1.03	added pin dimensions	08/17/2020
1.04	logo, datasheet style update	08/05/2022

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



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