

**SERIES:** HSE-BX-035H-02 | **DESCRIPTION:** HEAT SINK

**FEATURES**

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



**MODEL**

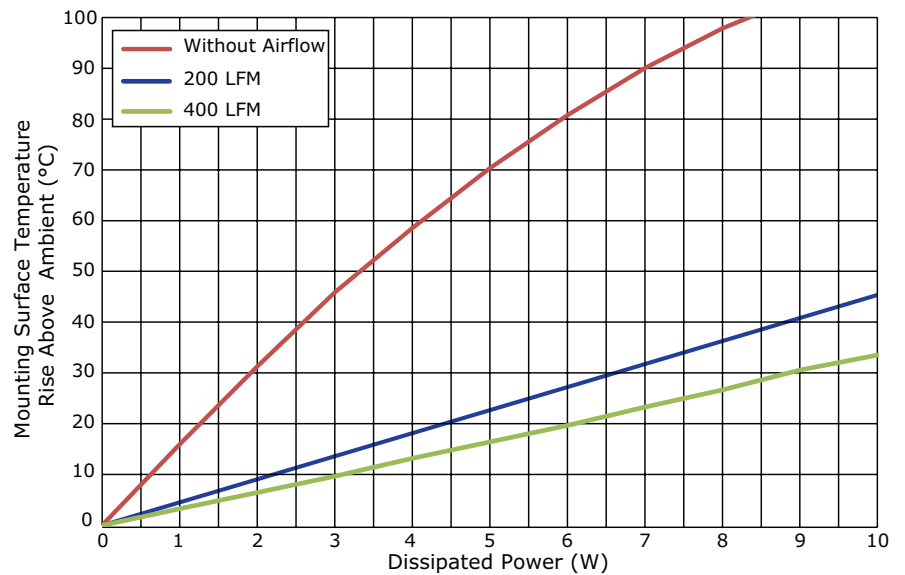
	length (mm)	thermal resistance <sup>1</sup>				power dissipation <sup>1</sup> @ 75°C ΔT, nat conv [W]
		@ 75°C ΔT, nat conv [°C/W]	@ 1 W, nat conv [°C/W]	@ 1 W, 200 LFM [°C/W]	@ 1 W, 400 LFM [°C/W]	
HSE-B20254-035H-02	25.4	13.64	15.97	4.39	3.27	5.50
HSE-B20381-035H-02	38.1	10.87	13.97	3.32	2.14	6.90
HSE-B20508-035H-01	50.8	9.15	13.03	4.76	3.21	8.20
HSE-B20635-035H-01	63.5	7.98	11.06	4.49	3.31	9.40

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-B20254-035H-02**

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	15.97	4.39	3.27
2	31.26	8.90	6.45
3	45.86	13.39	9.63
4	58.55	17.73	13.18
5	70.33	21.93	16.39
6	80.76	26.48	19.66
7	90.04	30.88	23.26
8	97.89	35.46	26.64
9	104.05	40.56	30.58
10	112.16	45.35	33.51



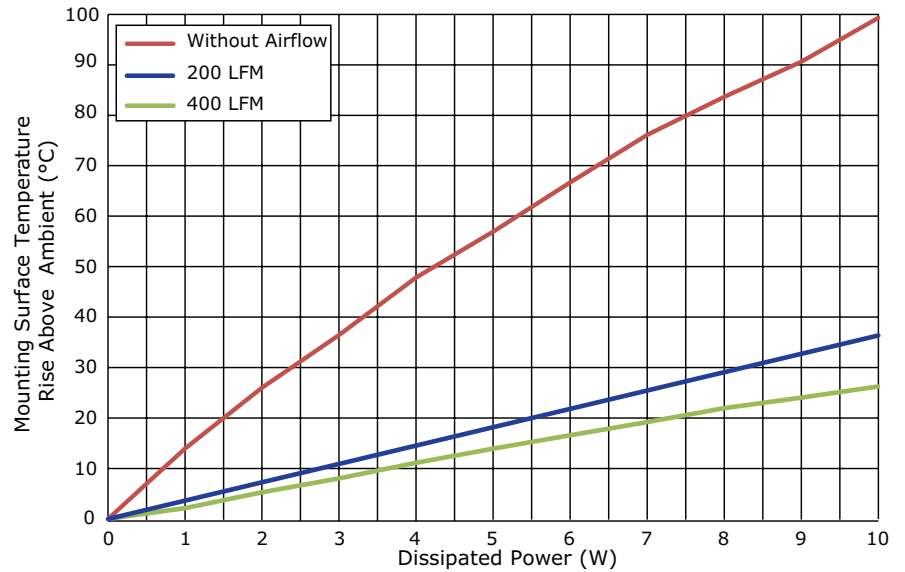
T<sub>hs</sub>: "hot spot" temperature measured on the heatsink  
T<sub>a</sub>: ambient temperature

## PERFORMANCE CURVES (CONTINUED)

### HSE-B20381-035H-02

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	13.97	3.32	2.14
2	26.02	7.06	5.29
3	36.45	10.74	8.06
4	47.83	14.35	11.12
5	56.91	18.07	13.94
6	66.68	21.87	16.57
7	76.12	25.59	19.23
8	83.63	29.34	21.97
9	90.62	33.16	24.05
10	99.30	36.38	26.25

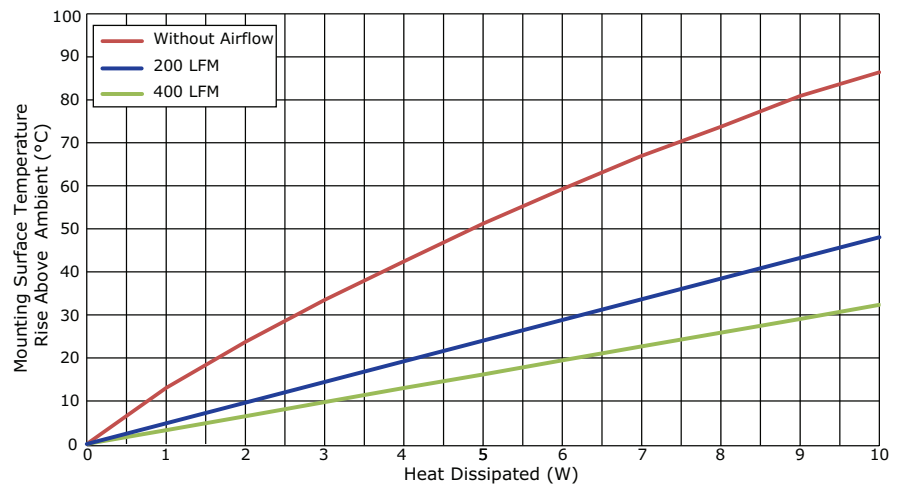
T<sub>hs</sub>: "hot spot" temperature measured on the heatsink  
 T<sub>a</sub>: ambient temperature



### HSE-B20508-035H-01

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	13.03	4.76	3.21
2	23.71	9.71	6.44
3	33.48	14.54	9.72
4	42.45	19.34	12.99
5	51.22	24.34	16.17
6	59.26	29.08	19.43
7	66.97	33.72	22.66
8	73.76	38.43	25.87
9	80.91	43.29	29.05
10	86.41	48.07	32.37

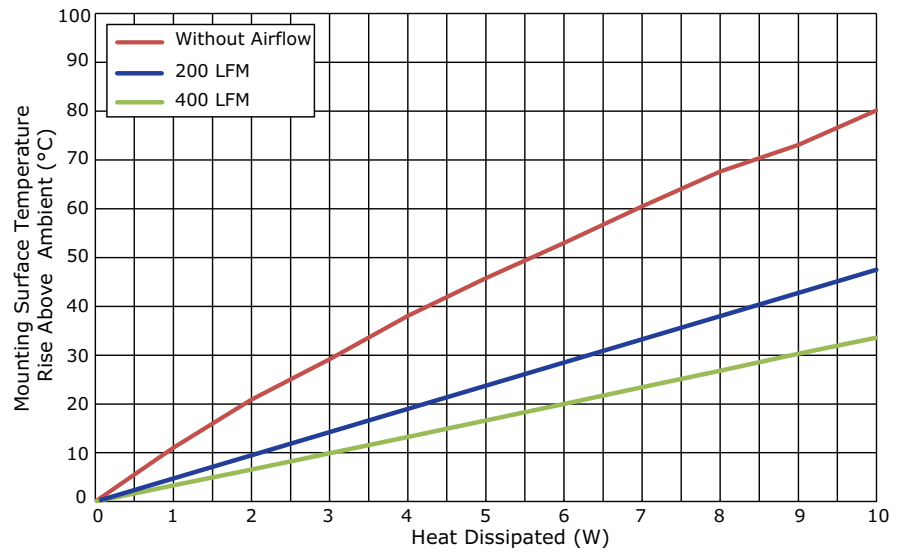
T<sub>hs</sub>: "hot spot" temperature measured on the heatsink  
 T<sub>a</sub>: ambient temperature



## PERFORMANCE CURVES (CONTINUED)

### HSE-B20635-035H-01

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	11.06	4.49	3.31
2	20.90	9.06	6.55
3	29.15	14.11	9.89
4	38.05	18.83	13.25
5	45.79	23.74	16.62
6	52.98	28.44	19.99
7	60.48	33.15	23.42
8	67.65	38.24	26.83
9	73.09	42.81	30.28
10	80.13	47.53	33.57

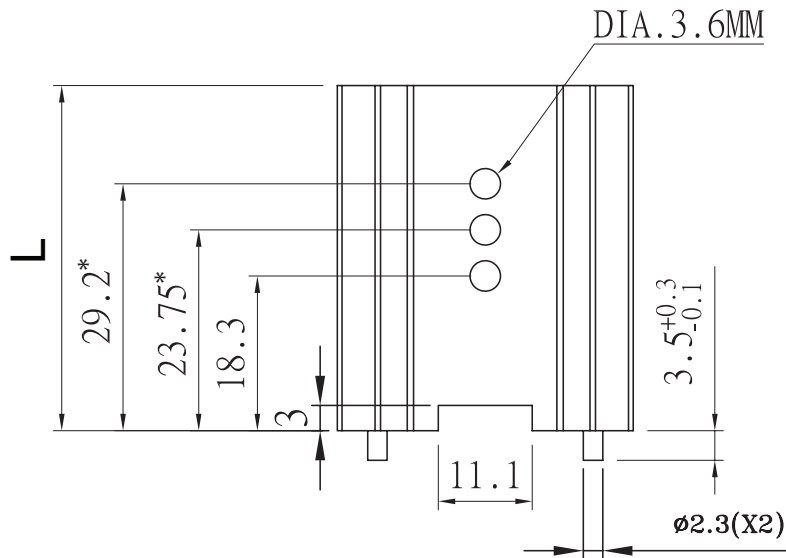
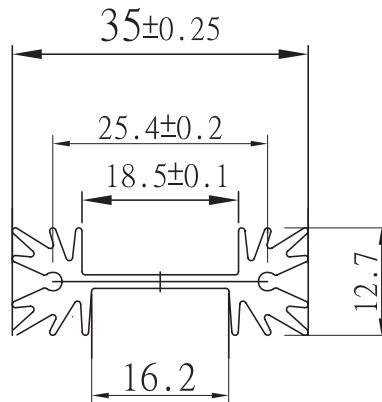


T<sub>hs</sub>: "hot spot" temperature measured on the heatsink  
 T<sub>a</sub>: ambient temperature

## 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-B20254-035H-02*	25.4	11.33
HSE-B20381-035H-02	38.1	16.67
HSE-B20508-035H-01	50.8	22.22
HSE-B20635-035H-01	63.5	27.5

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

## REVISION HISTORY

rev.	description	date
1.0	initial release	05/04/2017
1.01	updated datasheet	09/11/2017
1.02	brand update	02/11/2020
1.03	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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