CUI DEVICES

date 02/10/2020

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SERIES: HSE-BX-02 | DESCRIPTION: HEAT SINK

FEATURES

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





MODEL	thermal resistance ¹				power dissipation ¹	
	length (mm)	<pre>@ 75°C ΔT, nat conv (°C/W)</pre>	@ 1 W, nat conv (°C/W)	@ 1 W, 200 LFM (°C/W)	@ 1 W, 400 LFM (°C/W)	@ 75°C ∆T, nat conv (W)
HSE-B20254-035H	25.4	12.93	14.40	3.28	2.49	5.80
HSE-B20381-035H	38.1	11.54	13.64	3.66	2.76	6.50
HSE-B20508-035H	50.8	9.62	12.98	5.17	3.28	7.80
HSE-B20508-035H-W ²	50.8	9.62	12.98	5.17	3.28	7.80
HSE-B20635-035H	63.5	8.15	10.92	4.35	2.86	9.20
HSE-B20635-035H-W ²	63.5	8.15	10.92	4.35	2.86	9.20

Note:

- 1. See performance curves for full thermal resistance details.
- 2. Placement pins with standoffs.
- 3. Custom cut to length options available. Thermal data not available on custom lengths.

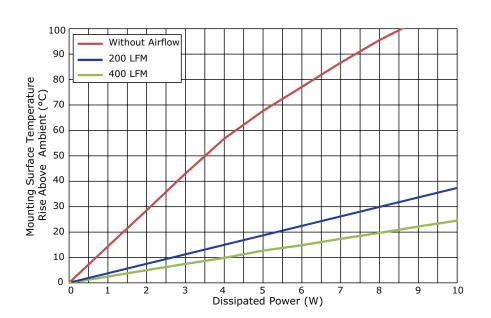
PERFORMANCE CURVES

HSE-B20254-035H

	Heatsink Temperature Rise Above Ambient (ΔT = Ths - Ta) (°C)			
Power (W)	Natural Conv.	200 LFM	400 LFM	
0	0	0	0	
1	14.40	3.28	2.49	
2	28.52	6.90	5.02	
3	43.03	10.51	7.48	
4	56.78	13.98	9.87	
5	67.70	17.81	12.71	
6	77.09	21.84	14.82	
7	86.63	25.55	17.33	
8	95.53	29.43	19.68	
9	103.32	33.25	22.19	
10	112.39	37.35	24.51	

Ths: "hot spot" temperature measured on the heatsink

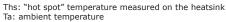
Ta: ambient temperature

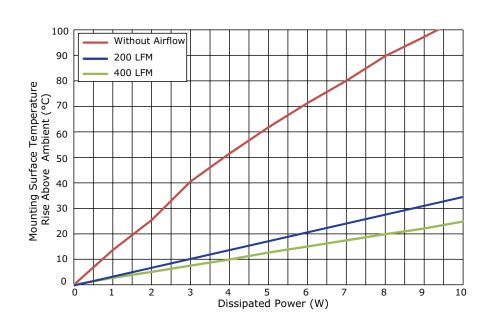


PERFORMANCE CURVES (CONTINUED)

HSE-B20381-035H

	Heatsink Temperature Rise Above Ambient (ΔT = Ths - Ta) (°C)			
Power (W)	Natural Conv.	200 LFM	400 LFM	
0	0	0	0	
1	13.64	3.66	2.76	
2	25.38	6.96	5.06	
3	40.52	10.35	7.51	
4	51.51	13.65	9.97	
5	61.79	17.05	12.65	
6	71.27	20.69	15.04	
7	80.06	24.37	17.45	
8	89.74	27.82	19.84	
9	97.27	30.95	22.10	
10	105.15	34.45	24.85	



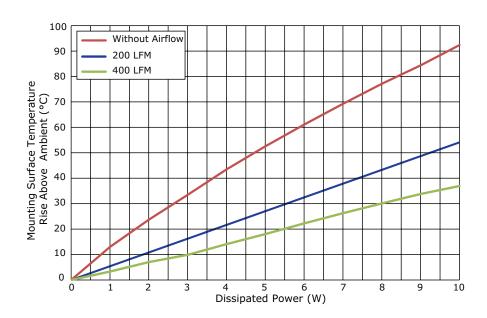


HSE-B20508-035H(-W)

	Heatsink Temperature Rise Above Ambient (ΔT = Ths - Ta) (°C)			
Power (W)	Natural Conv.	200 LFM	400 LFM	
0	0	0	0	
1	12.98	5.17	3.28	
2	23.69	10.43	7.01	
3	33.43	16.23	9.87	
4	43.43	22.15	14.05	
5	52.51	27.62	18.06	
6	61.06	33.03	22.24	
7	69.25	38.72	26.25	
8	77.11	43.92	30.07	
9	84.38	49.28	33.81	
10	92.34	54.09	36.92	

Ths: "hot spot" temperature measured on the heatsink

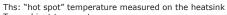
Ta: ambient temperature



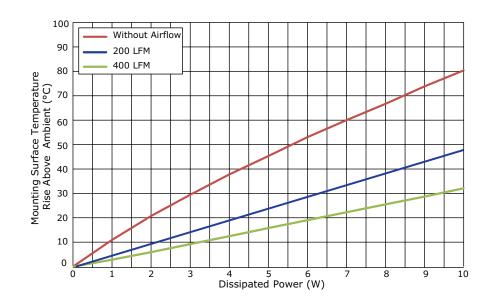
PERFORMANCE CURVES (CONTINUED)

HSE-20635-035H(-W)

	Heatsink Temperature Rise Above Ambient ($\Delta T = Ths - Ta$) (°C)			
Power (W)	Natural Conv.	200 LFM	400 LFM	
0	0	0	0	
1	10.92	4.35	2.86	
2	20.75	9.46	5.94	
3	29.43	14.60	9.20	
4	37.74	19.72	12.44	
5	45.32	24.84	15.80	
6	53.03	29.05	19.04	
7	59.98	33.85	22.26	
8	66.72	38.44	25.51	
9	73.88	43.38	28.69	
10	80.40	47.80	32.10	



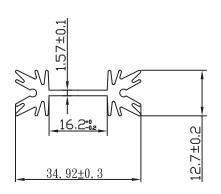
Ta: ambient temperature

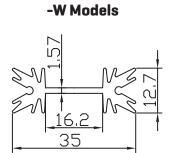


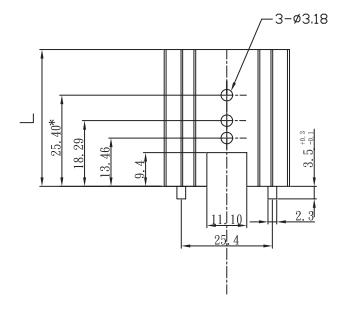
MECHANICAL DRAWING

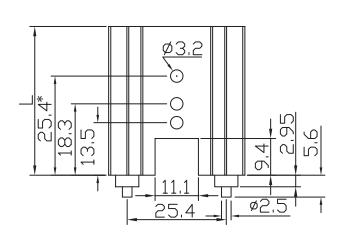
units: mm tolerance: ±0.5 mm

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









MODEL NO.	LENGTH, L (mm)	WEIGHT (g)
HSE-B20254-035H*	25.4	11.33
HSE-B20381-035H	38.1	16.67
HSE-B20508-035H	50.8	22.22
HSE-B20508-035H-W	50.8	22.22
HSE-B20635-035H	63.5	27.5
HSE-B20635-035H-W	63.5	27.5

Note: * Mounting hole not present on 25.4 mm length model. Additional Resources: Product Page | 3D Model

CUI Devices | SERIES: HSE-BX-02 | DESCRIPTION: HEAT SINK date 02/10/2020 | page 5 of 5

REVISION HISTORY

rev.	description	date
1.0	initial release	05/09/2017
1.01	updated datasheet	09/11/2017
1.02	brand update	02/10/2020

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

CUI DEVICES

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CUI Devices:

<u>HSE-B20508-035H</u> <u>HSE-B20635-035H-W</u> <u>HSE-B20635-035H</u> <u>HSE-B20508-035H-W</u> <u>HSE-B20381-035H</u> <u>HSE-B20254-035H</u>