

**SERIES:** HSE-BX-035H-01 | **DESCRIPTION:** HEAT SINK**FEATURES**

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

**MODEL**

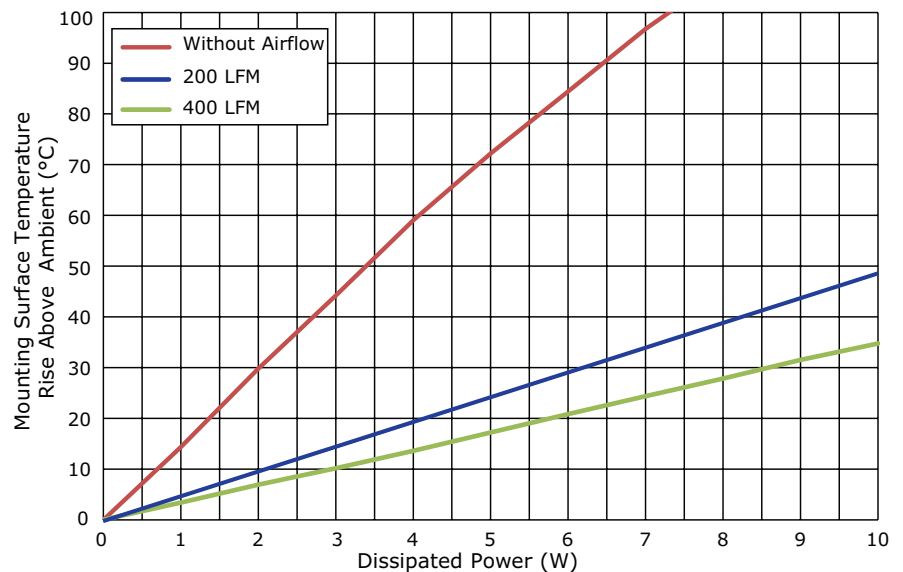
|                    | length<br>[mm] | thermal resistance <sup>1</sup> |                              |                             |                             | power<br>dissipation <sup>1</sup><br>@ 75°C ΔT, nat<br>conv [W] |
|--------------------|----------------|---------------------------------|------------------------------|-----------------------------|-----------------------------|-----------------------------------------------------------------|
|                    |                | @ 75°C ΔT, nat<br>conv [°C/W]   | @ 1 W,<br>nat conv<br>[°C/W] | @ 1 W,<br>200 LFM<br>[°C/W] | @ 1 W,<br>400 LFM<br>[°C/W] |                                                                 |
| HSE-B20254-035H-01 | 25.4           | 14.42                           | 14.36                        | 4.42                        | 3.40                        | 5.20                                                            |
| HSE-B20381-035H-01 | 38.1           | 10.71                           | 10.51                        | 2.67                        | 2.43                        | 7.00                                                            |

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-01**

| Power<br>[W] | Heatsink Temperature Rise Above<br>Ambient (ΔT = T <sub>hs</sub> - T <sub>a</sub> ) [°C] |         |         |
|--------------|------------------------------------------------------------------------------------------|---------|---------|
|              | Natural<br>Conv.                                                                         | 200 LFM | 400 LFM |
| 0            | 0                                                                                        | 0       | 0       |
| 1            | 14.36                                                                                    | 4.42    | 3.40    |
| 2            | 29.79                                                                                    | 9.28    | 6.91    |
| 3            | 44.19                                                                                    | 14.08   | 10.17   |
| 4            | 59.02                                                                                    | 18.94   | 13.61   |
| 5            | 72.18                                                                                    | 23.94   | 17.23   |
| 6            | 84.41                                                                                    | 28.75   | 20.85   |
| 7            | 96.74                                                                                    | 33.59   | 24.38   |
| 8            | 107.41                                                                                   | 38.56   | 27.85   |
| 9            | 118.81                                                                                   | 43.41   | 31.51   |
| 10           | 128.70                                                                                   | 48.60   | 34.77   |

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

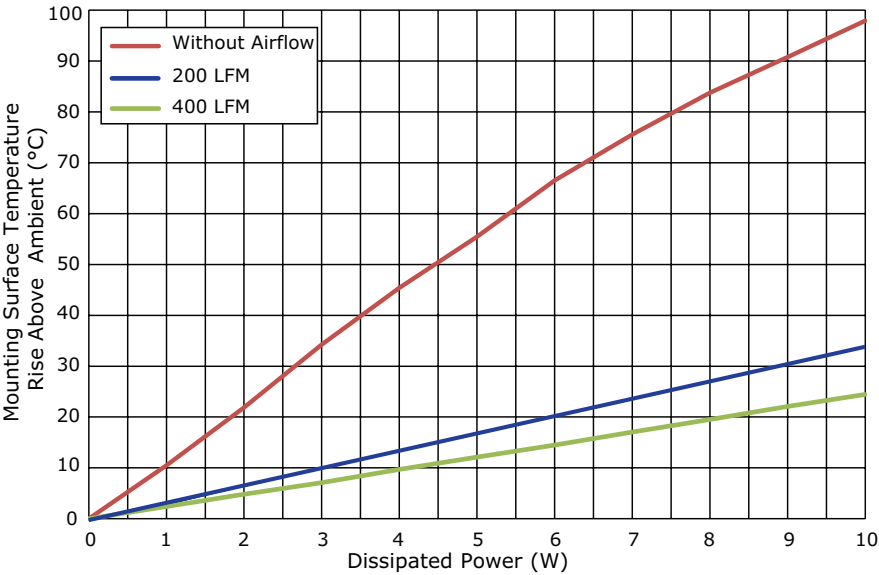


PERFORMANCE CURVES (CONTINUED)

HSE-B20381-035H-01

| Power<br>[W] | Heatsink Temperature Rise Above<br>Ambient ( $\Delta T = T_{hs} - T_a$ ) [°C] |         |         |
|--------------|-------------------------------------------------------------------------------|---------|---------|
|              | Natural<br>Conv.                                                              | 200 LFM | 400 LFM |
| 0            | 0                                                                             | 0       | 0       |
| 1            | 10.51                                                                         | 2.67    | 2.43    |
| 2            | 21.88                                                                         | 6.30    | 4.81    |
| 3            | 34.26                                                                         | 9.73    | 7.11    |
| 4            | 45.39                                                                         | 13.18   | 9.69    |
| 5            | 55.46                                                                         | 16.67   | 12.13   |
| 6            | 66.53                                                                         | 20.13   | 14.51   |
| 7            | 75.57                                                                         | 23.53   | 17.05   |
| 8            | 83.77                                                                         | 27.06   | 19.52   |
| 9            | 90.80                                                                         | 30.38   | 22.06   |
| 10           | 97.95                                                                         | 33.80   | 24.44   |

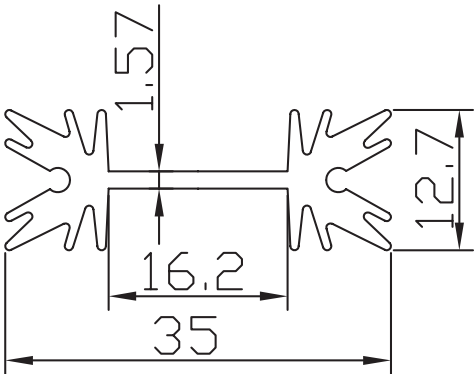
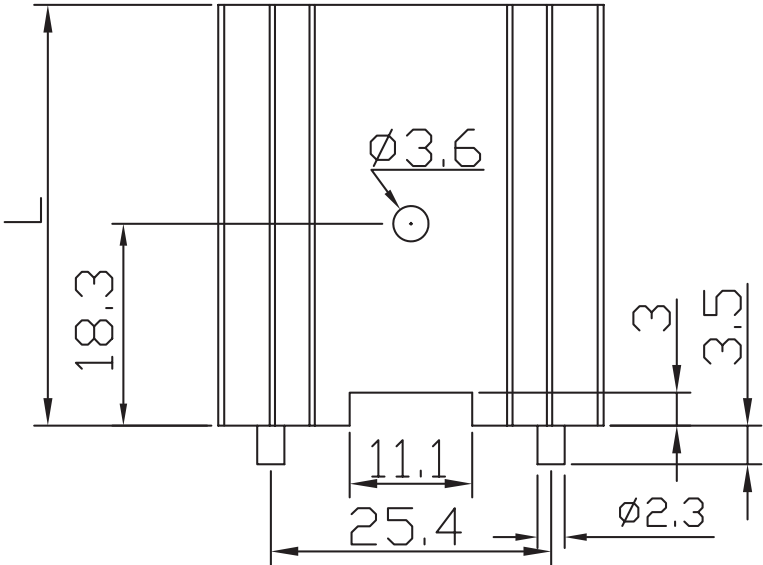
T<sub>hs</sub>: "hot spot" temperature measured on the heatsink  
T<sub>a</sub>: ambient temperature



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<br>[mm] | WEIGHT<br>[g] |
|--------------------|-------------------|---------------|
| HSE-B20254-035H-01 | 25.4              | 11.33         |
| HSE-B20381-035H-01 | 38.1              | 16.67         |

REVISION HISTORY

| rev. | description                       | date       |
|------|-----------------------------------|------------|
| 1.0  | initial release                   | 05/02/2017 |
| 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 offers a one (1) year limited warranty. Complete warranty information is listed on our website.

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