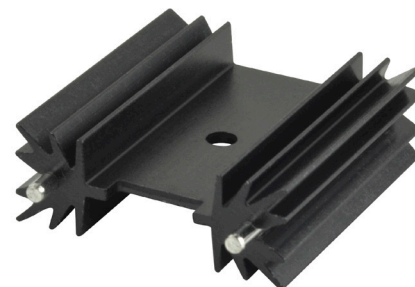



**SERIES:** HSE-BX-035H-01 | **DESCRIPTION:** HEAT SINK

**FEATURES**

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

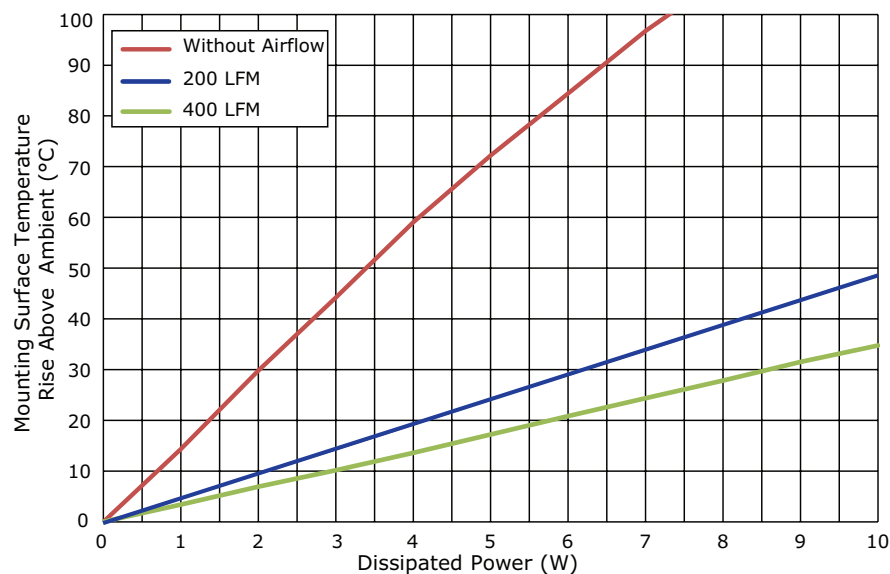

**MODEL**

|                    | length<br>(mm) | thermal resistance <sup>1</sup>  |                              |                             |                             | power<br>dissipation <sup>1</sup><br>@ 75°C ΔT,<br>nat conv<br>(W) |
|--------------------|----------------|----------------------------------|------------------------------|-----------------------------|-----------------------------|--------------------------------------------------------------------|
|                    |                | @ 75°C ΔT,<br>nat conv<br>(°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   |



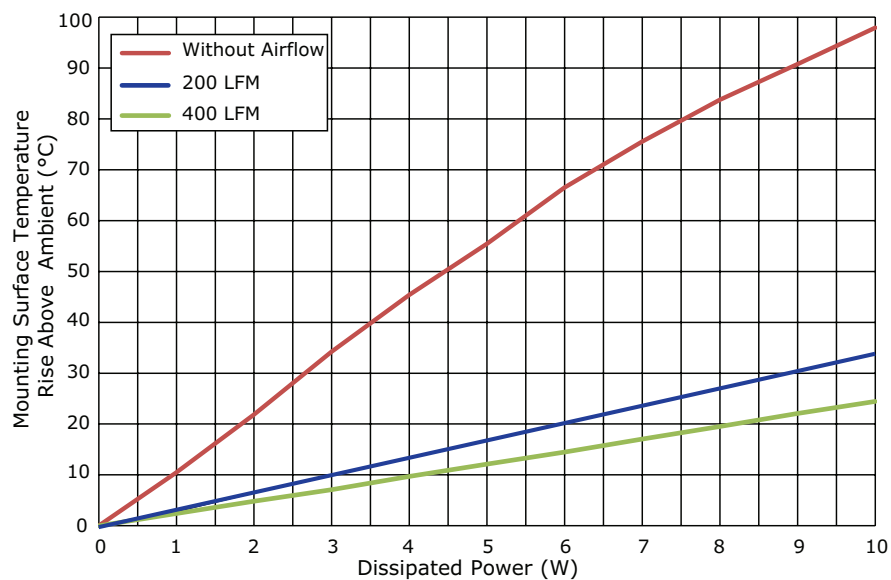
T<sub>hs</sub>: "hot spot" temperature measured on the heatsink  
T<sub>a</sub>: ambient temperature

## PERFORMANCE CURVES (CONTINUED)

### HSE-B20381-035H-01

| Power (W) | Heatsink Temperature Rise Above Ambient ( $\Delta T = T_{hs} - T_a$ ) (°C) |         |         |
|-----------|----------------------------------------------------------------------------|---------|---------|
|           | Natural Conv.                                                              | 200 LFM | 400 LFM |
| 0         | 0                                                                          | 0       | 0       |
| 1         | 10.51                                                                      | 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   |

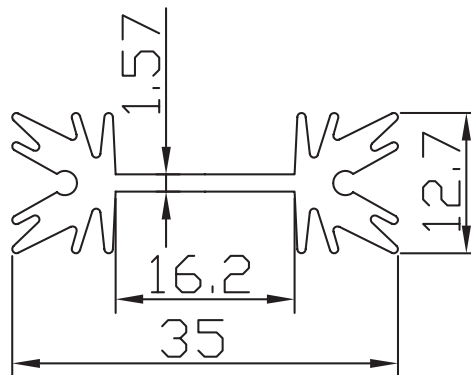
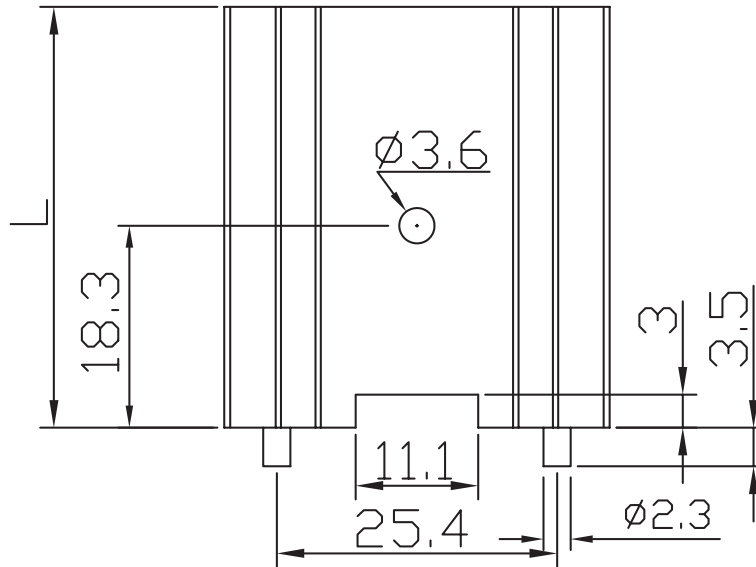
$T_{hs}$ : "hot spot" temperature measured on the heatsink  
 $T_a$ : ambient temperature



## MECHANICAL DRAWING

units: mm  
tolerance:  $\pm 0.5$  mm

|              |                |
|--------------|----------------|
| MATERIAL     | AL 6063-T5     |
| FINISH       | black anodized |
| PIN MATERIAL | steel          |
| PIN PLATING  | tin            |



| MODEL NO.          | LENGTH, L (mm) | WEIGHT (g) |
|--------------------|----------------|------------|
| HSE-B20254-035H-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 |

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

**CUI INC<sup>®</sup>**

**Headquarters**  
20050 SW 112th Ave.  
Tualatin, OR 97062  
**800.275.4899**

Fax 503.612.2383  
**cui.com**  
techsupport@cui.com

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

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