

date 08/05/2022

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## MODEL: HSE-BX-056H | DESCRIPTION: HEAT SINK

#### **FEATURES**

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





| MODEL           | thermal resistance <sup>1</sup> |                                      |                    |                   | power<br>dissipation <sup>1</sup> |                        |
|-----------------|---------------------------------|--------------------------------------|--------------------|-------------------|-----------------------------------|------------------------|
|                 | length                          | <b>@ 75°C ∆T, nat</b><br>conv (°C/W) | @ 1 W,<br>nat conv | @ 1 W,<br>200 LFM | @ 1 W,<br>400 LFM                 | @ 75°C ∆T, nat<br>conv |
|                 | (mm)                            |                                      | (°C/W)             | (°C/W)            | (°C/W)                            | (W)                    |
| HSE-B20254-056H | 25.4                            | 13.64                                | 17.13              | 8.36              | 6.41                              | 5.50                   |
| HSE-B20381-056H | 38.1                            | 11.19                                | 15.00              | 3.53              | 2.56                              | 6.70                   |

- See performance curves for full thermal resistance details.
  Custom cut to length options available. Thermal data not available on custom lengths.

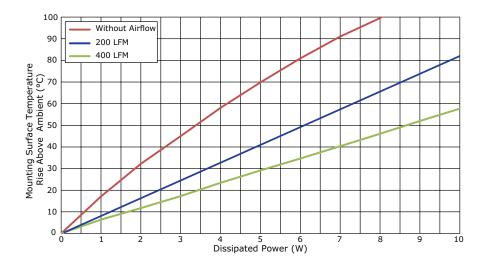
### **PERFORMANCE CURVES**

#### HSE-B20254-056H

|              | Heatsink Temperature Rise Above<br>Ambient (ΔT = Ths - Ta) (°C) |         |         |  |
|--------------|---|---------|---------|--|
| Power<br>(W) | Natural<br>Conv.  | 200 LFM | 400 LFM |  |
| 0            | 0   | 0       | 0       |  |
| 1            | 17.13   | 8.36    | 6.41    |  |
| 2            | 32.20   | 17.46   | 11.75   |  |
| 3            | 45.00   | 24.87   | 17.28   |  |
| 4            | 58.12   | 32.88   | 23.43   |  |
| 5            | 69.84   | 40.99   | 29.16   |  |
| 6            | 80.93   | 48.89   | 34.64   |  |
| 7            | 91.01   | 56.79   | 40.37   |  |
| 8            | 99.56   | 65.43   | 46.09   |  |
| 9            | 110.81  | 72.66   | 52.01   |  |
| 10           | 118.44  | 82.03   | 57.73   |  |



Ta: ambient temperature



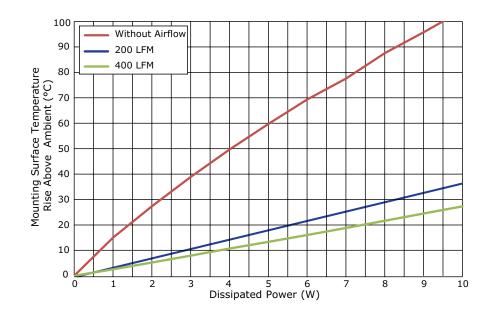
# PERFORMANCE CURVES (CONTINUED)

### HSE-B20381-056H

|              | Heatsink Temperature Rise Above<br>Ambient (ΔT = Ths - Ta) (°C) |         |         |  |
|--------------|---|---------|---------|--|
| Power<br>(W) | Natural<br>Conv.  | 200 LFM | 400 LFM |  |
| 0            | 0   | 0       | 0       |  |
| 1            | 15.00   | 3.53    | 2.56    |  |
| 2            | 27.32   | 7.15    | 5.23    |  |
| 3            | 38.89   | 10.82   | 7.90    |  |
| 4            | 49.63   | 14.38   | 10.72   |  |
| 5            | 59.72   | 17.90   | 13.32   |  |
| 6            | 69.31   | 21.80   | 16.03   |  |
| 7            | 77.53   | 25.42   | 18.80   |  |
| 8            | 87.53   | 28.89   | 21.65   |  |
| 9            | 95.75   | 32.68   | 24.48   |  |
| 10           | 104.38  | 36.30   | 27.29   |  |



Ta: ambient temperature

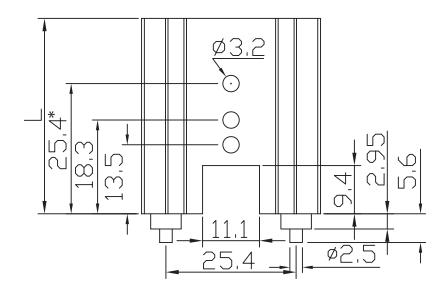


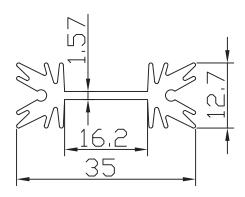
## **MECHANICAL DRAWING**

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-B20254-056H* | 25.4              | 11.33         |
| HSE-B20381-056H  | 38.1              | 16.67         |

### **REVISION HISTORY**

| rev. | description                  | date       |
|------|------------------------------|------------|
| 1.0  | initial release              | 05/05/2017 |
| 1.01 | updated datasheet            | 09/07/2017 |
| 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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