

date 08/05/2022

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SERIES: HSE-BX-040H | 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 | | | | |
|-----------------|--------|--------------------------------------|--------------------|-------------------|-------------------|------------------------|
| | length | @ 75°C ∆T, nat conv (°C/W) | @ 1 W, nat conv | @ 1 W, 200 LFM | @ 1 W, 400 LFM | @ 75°C ∆T, nat conv |
| | (mm) | | (°C/W) | (°C/W) | (°C/W) | (W) |
| HSE-B20254-040H | 25.4 | 13.16 | 16.13 | 7.74 | 5.77 | 5.70 |
| HSE-B20381-040H | 38.1 | 11.54 | 12.28 | 3.62 | 2.88 | 6.50 |

Note:

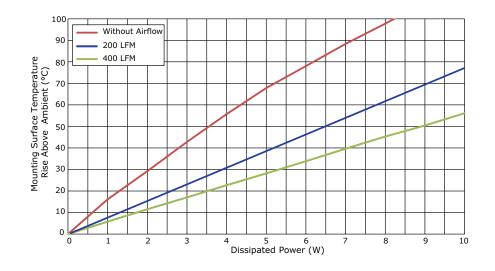
PERFORMANCE CURVES

HSE-B20254-040H

| Heatsink Temperature Rise Above Ambient (ΔT = Ths - Ta) (°C) | | | |
|---|--|---|--|
| Natural Conv. | 200 LFM | 400 LFM | |
| 0 | 0 | 0 | |
| 16.13 | 7.74 | 5.77 | |
| 29.25 | 15.62 | 11.53 | |
| 42.80 | 23.81 | 17.04 | |
| 55.72 | 31.68 | 22.66 | |
| 67.84 | 39.53 | 28.21 | |
| 78.06 | 47.35 | 33.83 | |
| 88.34 | 54.42 | 39.65 | |
| 97.77 | 62.21 | 45.28 | |
| 107.55 | 69.81 | 50.42 | |
| 117.33 | 77.16 | 56.11 | |
| | Ambier Natural Conv. 0 16.13 29.25 42.80 55.72 67.84 78.06 88.34 97.77 107.55 | Ambient (ΔT = Ths - Ths | |



Ta: ambient temperature



^{1.} See performance curves for full thermal resistance details.

^{2.} Custom cut to length options available. Thermal data not available on custom lengths.

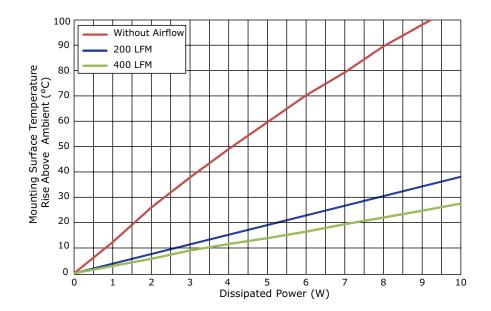
PERFORMANCE CURVES (CONTINUED)

HSE-B20381-040H

| | Heatsink Temperature Rise Above Ambient (ΔT = Ths - Ta) (°C) | | | |
|--------------|---|---------|---------|--|
| Power (W) | Natural Conv. | 200 LFM | 400 LFM | |
| 0 | 0 | 0 | 0 | |
| 1 | 12.28 | 3.62 | 2.88 | |
| 2 | 25.96 | 7.21 | 5.70 | |
| 3 | 37.80 | 11.15 | 8.98 | |
| 4 | 49.04 | 14.86 | 11.55 | |
| 5 | 59.64 | 18.82 | 13.90 | |
| 6 | 70.27 | 22.54 | 16.43 | |
| 7 | 79.30 | 26.31 | 19.41 | |
| 8 | 89.57 | 30.28 | 21.97 | |
| 9 | 98.10 | 34.00 | 24.72 | |
| 10 | 106.51 | 38.10 | 27.50 | |





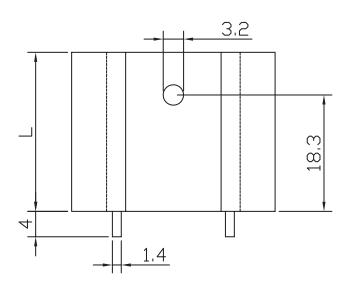


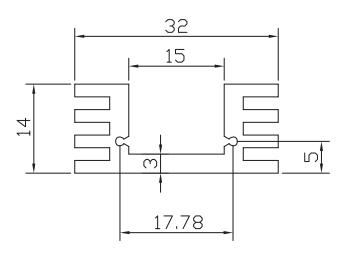
MECHANICAL DRAWING

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-B20254-040H | 25.4 | 15.5 |
| HSE-B20381-040H | 38.1 | 23.19 |

REVISION HISTORY

| rev. | description | date |
|------|------------------------------|------------|
| 1.0 | initial release | 05/04/2017 |
| 1.01 | brand update | 02/11/2020 |
| 1.02 | 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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