

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

FEATURES

- TO-218 package
- placement pins for secure PCB attachment
- clip on style for component attachment
- multiple available cut lengths



MODEL

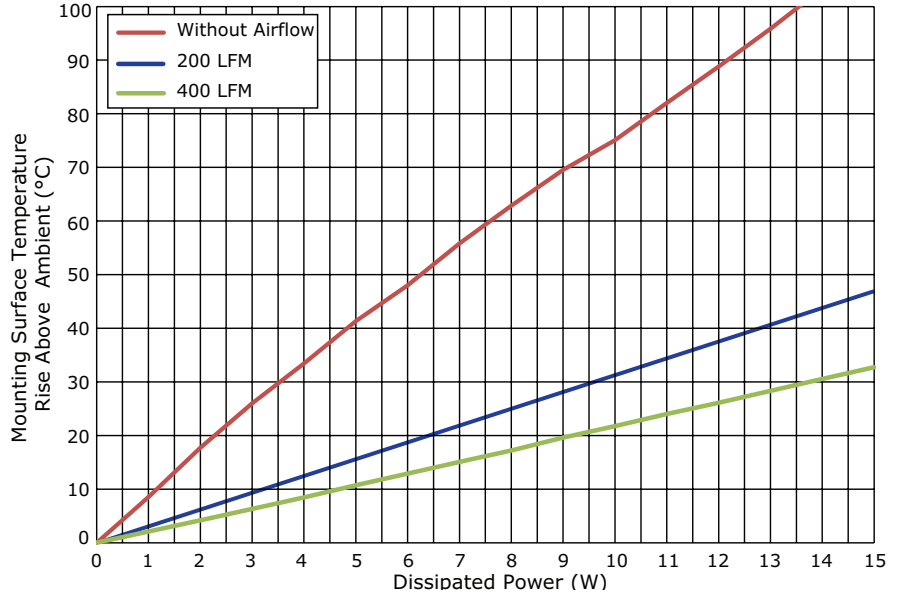
| | length (mm) | thermal resistance ¹ | | | | power dissipation ¹ @ 75°C ΔT, nat conv (W) |
|--------------------|----------------|----------------------------------|------------------------------|-----------------------------|-----------------------------|--|
| | | @ 75°C ΔT, nat conv (°C/W) | @ 1 W, nat conv (°C/W) | @ 1 W, 200 LFM (°C/W) | @ 1 W, 400 LFM (°C/W) | |
| HSE-B18254-035H-00 | 25.4 | 7.50 | 8.51 | 4.03 | 2.09 | 10.00 |
| HSE-B18317-035H-01 | 31.75 | 7.50 | 10.49 | 4.33 | 2.50 | 10.00 |
| HSE-B18381-035H-02 | 38.1 | 6.25 | 9.81 | 3.79 | 2.60 | 12.00 |
| HSE-B18508-035H-03 | 50.8 | 5.77 | 8.94 | 3.44 | 2.09 | 13.00 |
| HSE-B18635-035H-04 | 63.5 | 4.97 | 7.90 | 2.38 | 1.66 | 15.10 |

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-B18254-035H-00

| 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 | 8.51 | 4.03 | 2.09 |
| 2 | 17.71 | 8.25 | 4.19 |
| 3 | 25.98 | 11.41 | 6.31 |
| 4 | 33.43 | 14.51 | 8.46 |
| 5 | 41.33 | 17.65 | 10.72 |
| 6 | 48.00 | 20.68 | 12.91 |
| 7 | 55.82 | 23.05 | 15.08 |
| 8 | 62.87 | 26.42 | 17.23 |
| 9 | 69.51 | 29.15 | 19.61 |
| 10 | 75.10 | 32.19 | 21.76 |
| 11 | 82.03 | 34.47 | 24.00 |
| 12 | 88.82 | 37.70 | 26.09 |
| 13 | 95.84 | 40.70 | 28.34 |
| 14 | 103.36 | 43.79 | 30.54 |
| 15 | 109.24 | 46.92 | 32.70 |

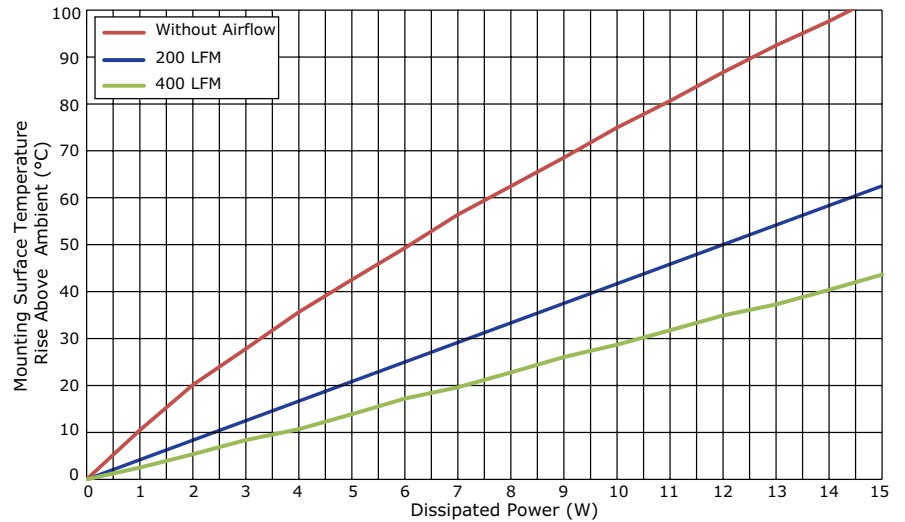


T_{hs}: "hot spot" temperature measured on the heatsink
 T_a: ambient temperature

PERFORMANCE CURVES (CONTINUED)

HSE-B18317-035H-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 | 10.49 | 4.33 | 2.50 |
| 2 | 20.11 | 8.77 | 5.33 |
| 3 | 27.82 | 13.00 | 8.38 |
| 4 | 35.65 | 17.48 | 10.70 |
| 5 | 42.56 | 21.57 | 13.86 |
| 6 | 49.31 | 25.42 | 17.23 |
| 7 | 56.42 | 29.92 | 19.64 |
| 8 | 62.46 | 34.18 | 22.78 |
| 9 | 68.54 | 38.43 | 26.07 |
| 10 | 74.96 | 42.08 | 28.67 |
| 11 | 80.66 | 46.41 | 31.77 |
| 12 | 86.72 | 50.78 | 34.93 |
| 13 | 92.47 | 54.93 | 37.27 |
| 14 | 97.61 | 58.30 | 40.39 |
| 15 | 103.34 | 62.54 | 43.64 |

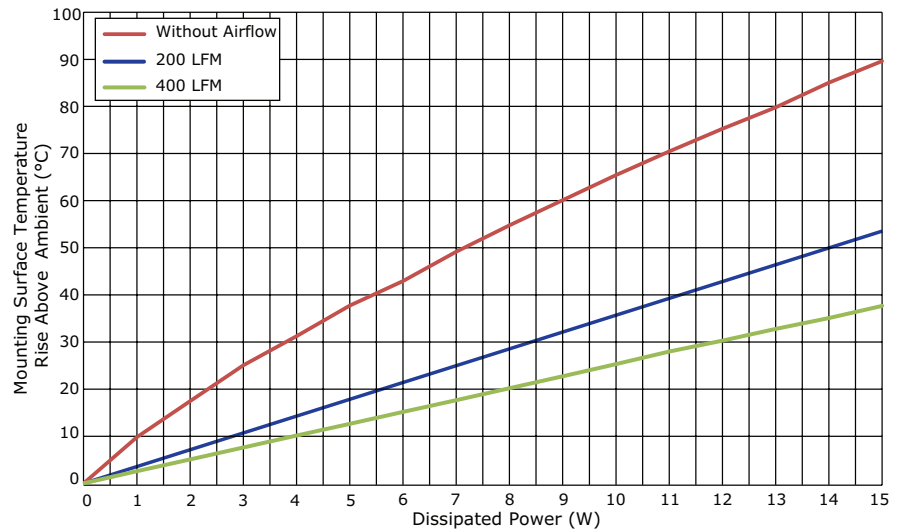


T_{hs}: "hot spot" temperature measured on the heatsink
 T_a: ambient temperature

PERFORMANCE CURVES (CONTINUED)

HSE-B18381-035H-02

| 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 | 9.81 | 3.79 | 2.60 |
| 2 | 17.47 | 7.41 | 5.09 |
| 3 | 25.07 | 11.15 | 7.61 |
| 4 | 31.22 | 14.91 | 10.12 |
| 5 | 37.72 | 18.35 | 12.61 |
| 6 | 42.95 | 21.94 | 15.16 |
| 7 | 49.17 | 25.41 | 17.64 |
| 8 | 54.78 | 28.73 | 20.17 |
| 9 | 60.08 | 32.32 | 22.72 |
| 10 | 65.42 | 35.58 | 25.29 |
| 11 | 70.48 | 39.62 | 27.97 |
| 12 | 75.24 | 43.44 | 30.30 |
| 13 | 79.80 | 46.88 | 32.78 |
| 14 | 85.06 | 50.16 | 35.09 |
| 15 | 89.64 | 53.54 | 37.66 |

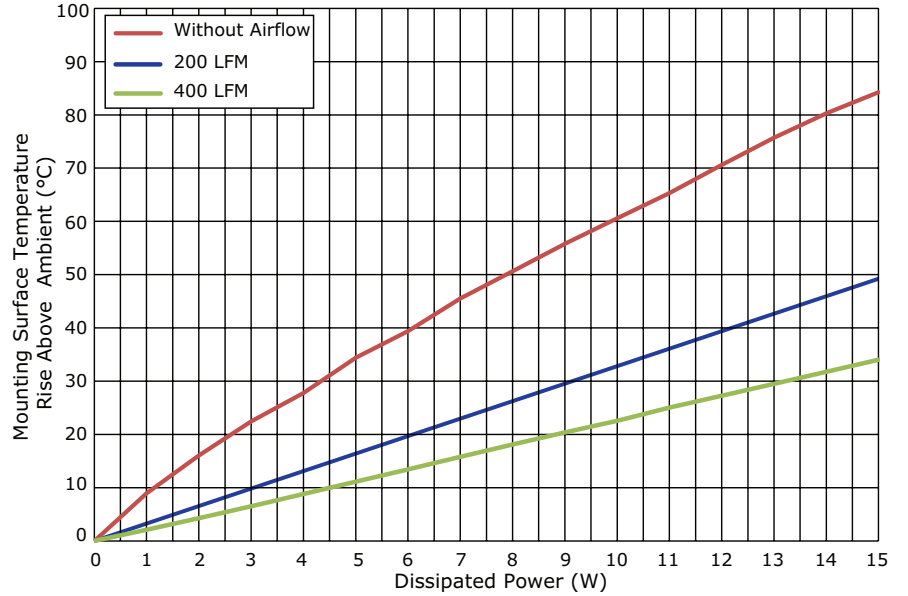


T_{hs}: "hot spot" temperature measured on the heatsink
 T_a: ambient temperature

PERFORMANCE CURVES (CONTINUED)

HSE-B18508-035H-03

| 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 | 8.94 | 3.44 | 2.09 |
| 2 | 16.03 | 6.78 | 4.27 |
| 3 | 22.45 | 10.09 | 6.51 |
| 4 | 27.78 | 13.89 | 8.83 |
| 5 | 34.40 | 17.53 | 11.11 |
| 6 | 39.38 | 20.70 | 13.45 |
| 7 | 45.53 | 23.64 | 15.79 |
| 8 | 50.65 | 27.50 | 18.11 |
| 9 | 55.79 | 30.96 | 20.36 |
| 10 | 60.58 | 34.44 | 22.57 |
| 11 | 65.31 | 37.84 | 25.05 |
| 12 | 70.60 | 40.46 | 27.26 |
| 13 | 75.69 | 43.35 | 29.49 |
| 14 | 80.29 | 46.18 | 31.74 |
| 15 | 84.24 | 49.24 | 34.05 |

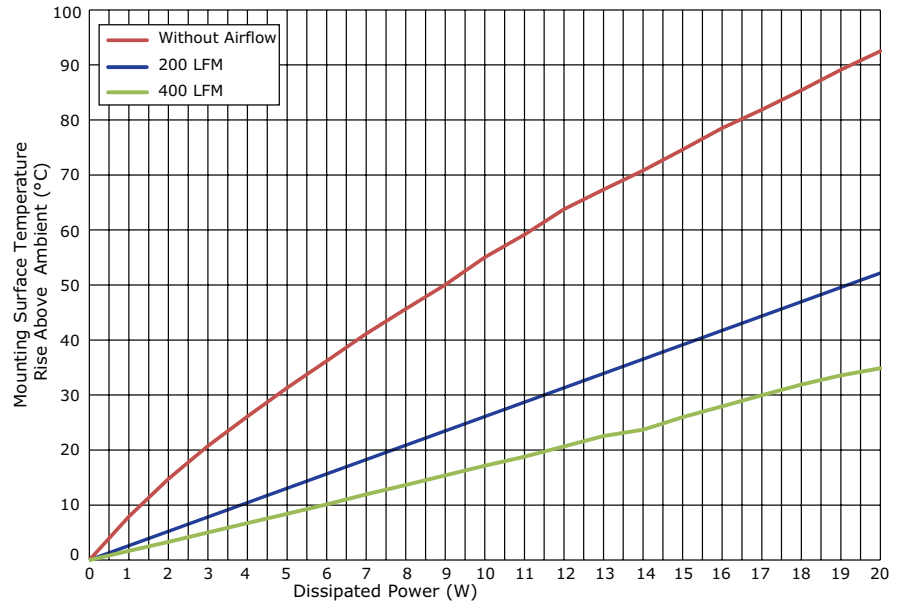


T_{hs}: "hot spot" temperature measured on the heatsink
 T_a: ambient temperature

PERFORMANCE CURVES (CONTINUED)

HSE-B18635-035H-04

| 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 | 7.90 | 2.38 | 1.66 |
| 2 | 14.77 | 5.01 | 3.29 |
| 3 | 20.74 | 7.86 | 5.00 |
| 4 | 26.09 | 10.53 | 6.72 |
| 5 | 31.33 | 12.95 | 8.40 |
| 6 | 36.21 | 15.76 | 10.10 |
| 7 | 41.13 | 18.39 | 11.96 |
| 8 | 45.64 | 21.04 | 13.63 |
| 9 | 50.06 | 23.72 | 15.39 |
| 10 | 55.04 | 26.59 | 17.14 |
| 11 | 59.16 | 29.04 | 18.78 |
| 12 | 63.79 | 31.69 | 20.63 |
| 13 | 67.33 | 34.48 | 22.54 |
| 14 | 70.81 | 37.15 | 23.69 |
| 15 | 74.62 | 39.59 | 25.98 |
| 16 | 78.52 | 41.91 | 27.94 |
| 17 | 81.87 | 44.42 | 29.96 |
| 18 | 85.40 | 46.92 | 31.91 |
| 19 | 89.13 | 49.57 | 33.56 |
| 20 | 92.50 | 52.19 | 34.89 |

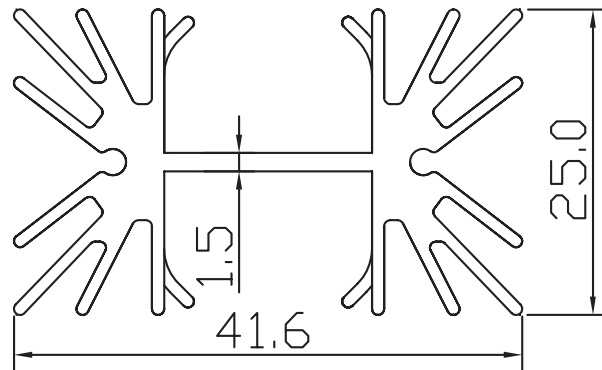
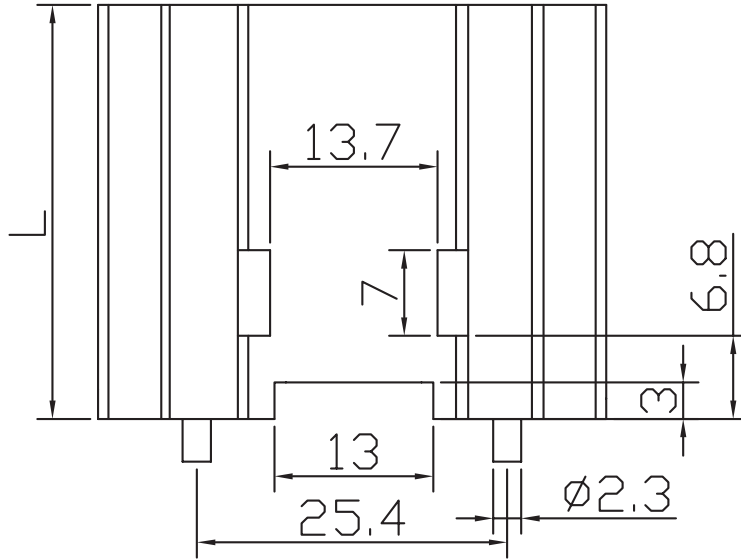


T_{hs}: "hot spot" temperature measured on the heatsink
 T_a: ambient temperature

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 (mm) | WEIGHT (g) |
|--------------------|----------------|------------|
| HSE-B18254-035H-00 | 25.4 | 20 |
| HSE-B18317-035H-01 | 31.75 | 23 |
| HSE-B18381-035H-02 | 38.1 | 28.34 |
| HSE-B18508-035H-03 | 50.8 | 37.8 |
| HSE-B18635-035H-04 | 63.5 | 50 |

REVISION HISTORY

| rev. | description | date |
|-------------|--------------------|-------------|
| 1.0 | initial release | 05/12/2017 |

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



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