

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

**FEATURES**

- TO-220 package
- round or slot hole option
- low profile



**MODEL**

|               | mounting hole |              | thermal resistance <sup>1</sup> |                        |                       |                       | power dissipation <sup>1</sup> |
|---------------|---------------|--------------|---------------------------------|------------------------|-----------------------|-----------------------|--------------------------------|
|               | type          | size<br>[mm] | @ 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] | @ 75°C ΔT, nat conv [W]        |
| HSE-B2111-038 | round         | Ø3.8         | 19.74                           | 20.99                  | 6.12                  | 5.18                  | 3.80                           |
| HSE-B1711-032 | round         | Ø3.2         | 20.27                           | 22.39                  | 6.84                  | 5.05                  | 3.70                           |
| HSE-B1711-057 | slot          | 3.2 x 5.7    | 24.19                           | 24.30                  | 7.07                  | 5.79                  | 3.10                           |

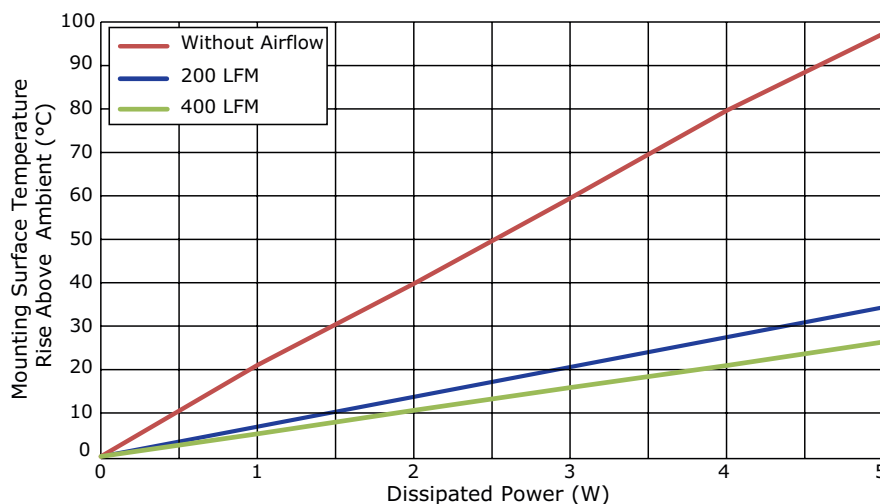
Note: 1. See performance curves for full thermal resistance details.

**PERFORMANCE CURVES**

**HSE-B2111-038**

| Power [W] | Heatsink Temperature Rise Above Ambient [ΔT = T <sub>hs</sub> - T <sub>a</sub> ] [°C] |         |         |
|-----------|---|---------|---------|
|           | Natural Conv.   | 200 LFM | 400 LFM |
| 0         | 0   | 0       | 0       |
| 1         | 20.99   | 6.12    | 5.18    |
| 2         | 39.76   | 13.23   | 10.62   |
| 3         | 59.46   | 19.90   | 15.87   |
| 4         | 79.61   | 26.92   | 20.94   |
| 5         | 97.29   | 34.35   | 26.37   |

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

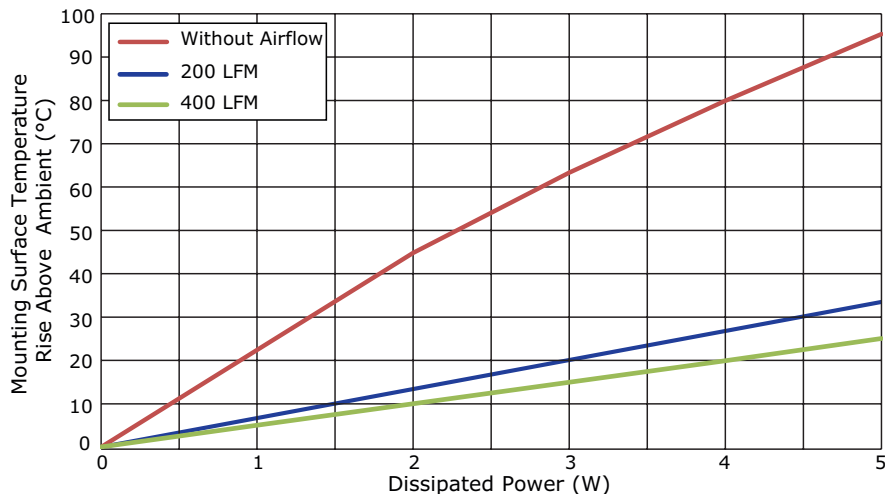


## PERFORMANCE CURVES (CONTINUED)

### HSE-B1711-032

| 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         | 22.39  | 6.84    | 5.05    |
| 2         | 44.78  | 13.44   | 9.99    |
| 3         | 63.30  | 20.16   | 14.97   |
| 4         | 79.94  | 26.86   | 19.95   |
| 5         | 95.30  | 33.50   | 25.04   |

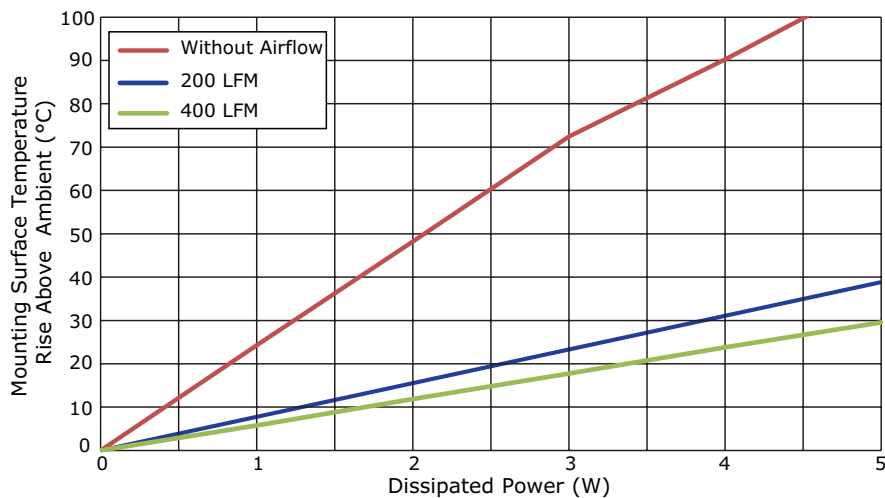
T<sub>hs</sub>: "hot spot" temperature measured on the heatsink  
 T<sub>a</sub>: ambient temperature



### HSE-B1711-057

| 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         | 24.30  | 7.07    | 5.79    |
| 2         | 48.19  | 15.28   | 11.89   |
| 3         | 72.44  | 22.86   | 17.72   |
| 4         | 90.24  | 30.47   | 23.81   |
| 5         | 109.19   | 38.84   | 29.57   |

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

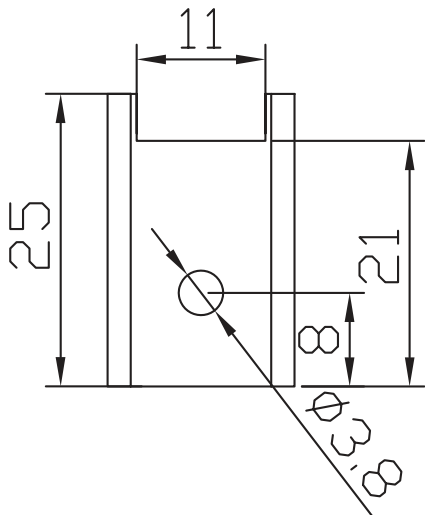


## MECHANICAL DRAWING

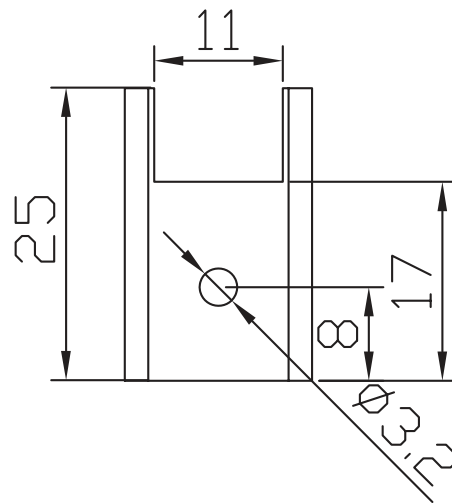
units: mm  
tolerance: ±0.5 mm

|          |                |
|----------|----------------|
| MATERIAL | AL 6063-T5     |
| FINISH   | black anodized |
| WEIGHT   | 4.4 g          |

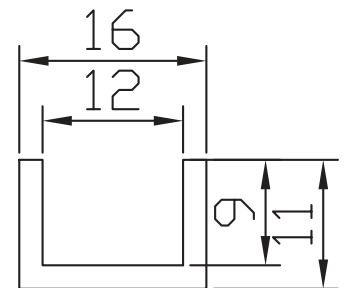
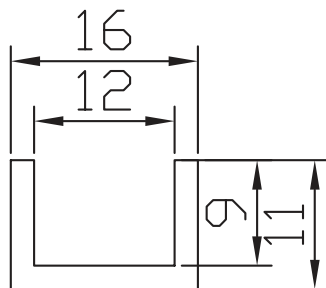
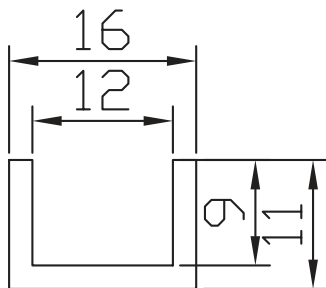
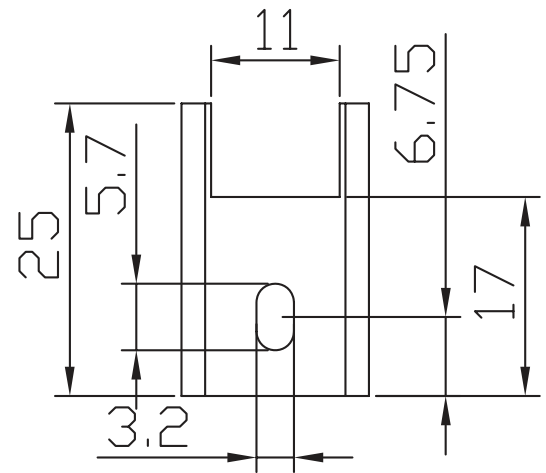
HSE-B2111-038



HSE-B1711-032



HSE-B1711-057



## REVISION HISTORY

| rev. | description                  | date       |
|------|------------------------------|------------|
| 1.0  | initial release              | 05/09/2017 |
| 1.01 | brand update                 | 02/10/2020 |
| 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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