



**SERIES:** HSE-18X | **DESCRIPTION:** HEAT SINK

**FEATURES**

- TO-218 package
- placement pins for secure PCB attachment
- round hole for component attachment
- multiple available cut lengths



**MODEL**

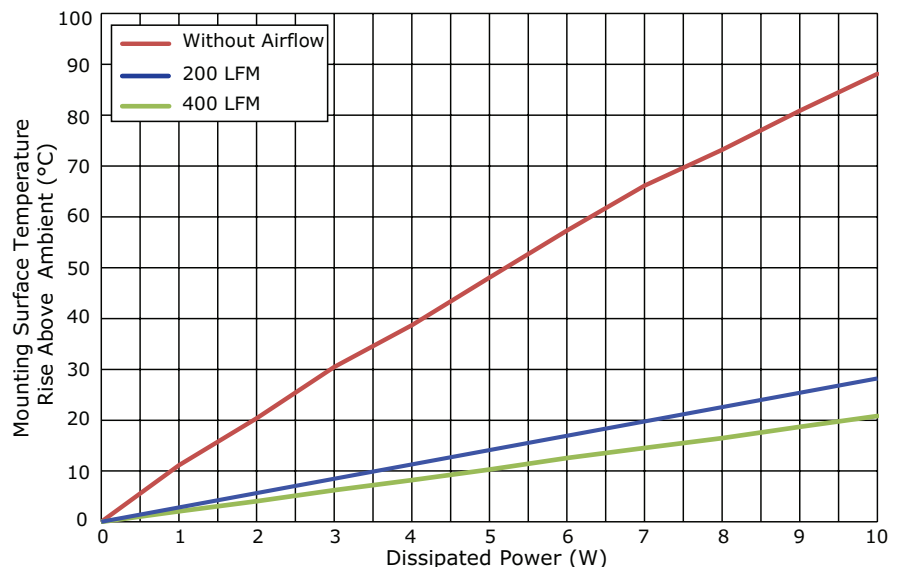
|                  | length<br>(mm) | thermal resistance <sup>1</sup>  |                              |                             |                             | power<br>dissipation <sup>1</sup><br>@ 75°C ΔT,<br>nat conv<br>(W) |
|------------------|----------------|----------------------------------|------------------------------|-----------------------------|-----------------------------|--|
|                  |                | @ 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-B18254-0396H | 25.4           | 9.15                             | 11.15                        | 2.29                        | 2.07                        | 8.20   |
| HSE-B18318-0396H | 31.8           | 8.24                             | 9.93                         | 2.57                        | 1.80                        | 9.10   |
| HSE-B18381-0396H | 38.1           | 6.94                             | 8.71                         | 2.29                        | 1.80                        | 10.80  |
| HSE-B18508-0396H | 50.8           | 5.86                             | 7.62                         | 2.45                        | 1.79                        | 12.80  |
| HSE-B18635-0396H | 63.5           | 5.47                             | 7.36                         | 2.78                        | 1.55                        | 13.70  |

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-B18254-0396H**

| Power<br>(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            | 11.15   | 2.29    | 2.07    |
| 2            | 20.39   | 4.95    | 4.07    |
| 3            | 30.47   | 7.76    | 6.21    |
| 4            | 38.70   | 11.00   | 8.23    |
| 5            | 48.05   | 13.96   | 10.29   |
| 6            | 57.30   | 16.92   | 12.55   |
| 7            | 66.12   | 19.68   | 14.54   |
| 8            | 73.21   | 22.63   | 16.48   |
| 9            | 80.86   | 25.48   | 18.68   |
| 10           | 88.12   | 28.22   | 20.84   |



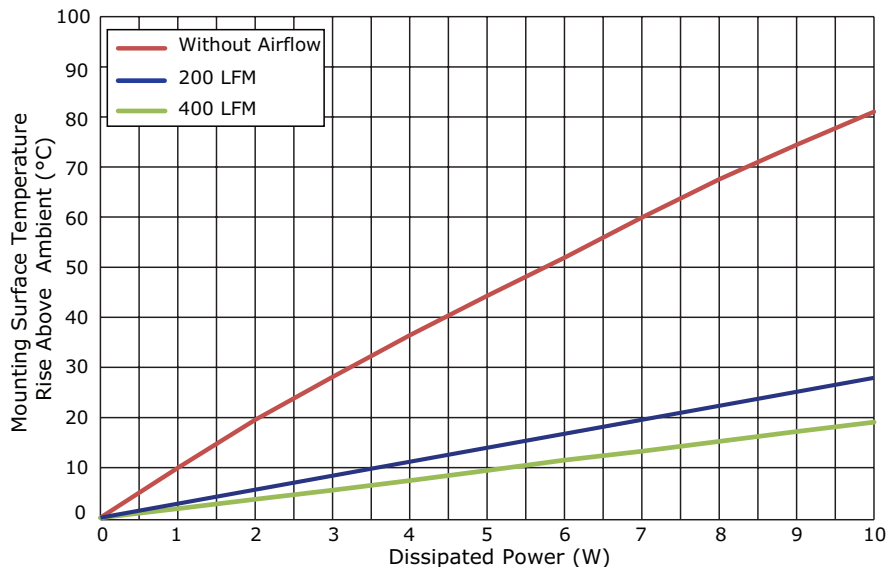
T<sub>hs</sub>: "hot spot" temperature measured on the heatsink  
T<sub>a</sub>: ambient temperature

## PERFORMANCE CURVES (CONTINUED)

### HSE-B18318-0396H

| 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         | 9.93   | 2.57    | 1.80    |
| 2         | 19.55  | 5.41    | 3.67    |
| 3         | 28.10  | 8.10    | 5.47    |
| 4         | 36.39  | 10.89   | 7.40    |
| 5         | 44.29  | 13.77   | 9.45    |
| 6         | 51.91  | 16.50   | 11.49   |
| 7         | 59.92  | 19.29   | 13.27   |
| 8         | 67.55  | 22.14   | 15.22   |
| 9         | 74.45  | 24.97   | 17.22   |
| 10        | 81.01  | 27.92   | 19.08   |

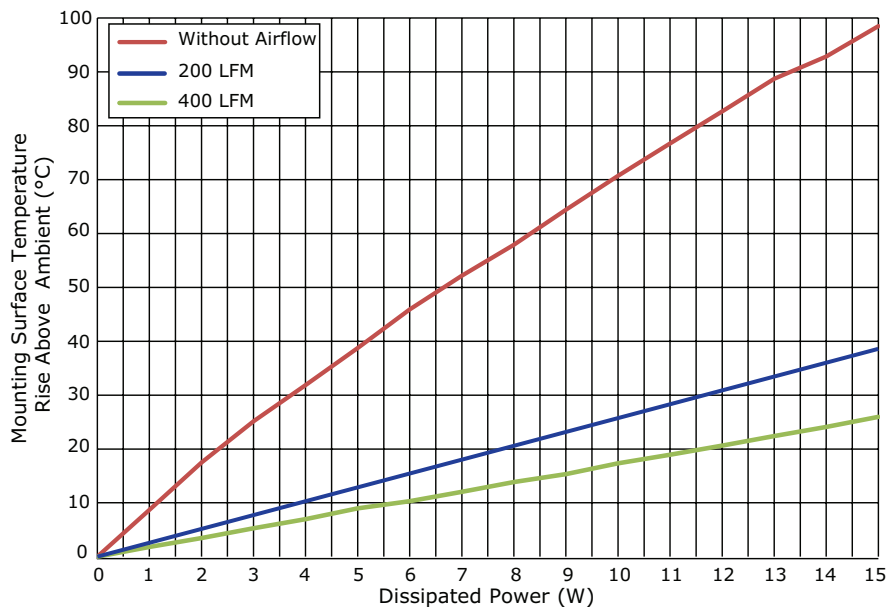
$T_{hs}$ : "hot spot" temperature measured on the heatsink  
 $T_a$ : ambient temperature



### HSE-B18381-0396H

| 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         | 8.71   | 2.29    | 1.80    |
| 2         | 17.51  | 4.67    | 3.45    |
| 3         | 25.16  | 6.92    | 5.27    |
| 4         | 31.88  | 9.51    | 6.96    |
| 5         | 38.73  | 11.93   | 9.00    |
| 6         | 45.88  | 14.31   | 10.31   |
| 7         | 52.16  | 16.91   | 12.03   |
| 8         | 57.90  | 19.57   | 13.87   |
| 9         | 64.39  | 22.26   | 15.35   |
| 10        | 70.70  | 24.56   | 17.34   |
| 11        | 76.71  | 27.23   | 18.94   |
| 12        | 82.68  | 30.24   | 20.62   |
| 13        | 88.72  | 32.89   | 22.43   |
| 14        | 92.86  | 35.95   | 24.08   |
| 15        | 98.52  | 38.57   | 25.96   |

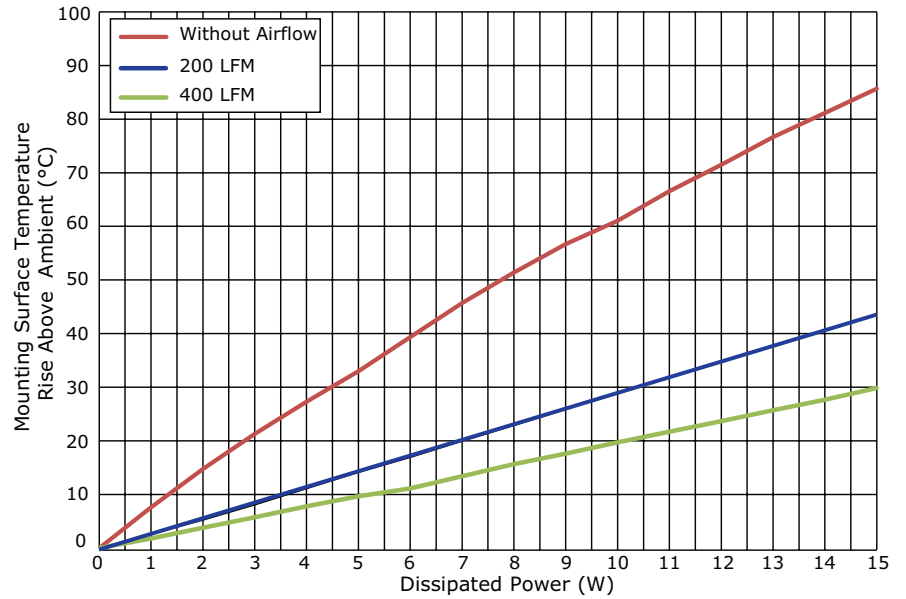
$T_{hs}$ : "hot spot" temperature measured on the heatsink  
 $T_a$ : ambient temperature



## PERFORMANCE CURVES (CONTINUED)

### HSE-B18508-0396H

| 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         | 7.62   | 2.45    | 1.79    |
| 2         | 14.75  | 5.07    | 3.78    |
| 3         | 21.30  | 7.93    | 5.77    |
| 4         | 27.29  | 10.95   | 7.77    |
| 5         | 33.00  | 13.97   | 9.65    |
| 6         | 39.34  | 16.78   | 11.13   |
| 7         | 45.69  | 19.80   | 13.41   |
| 8         | 51.39  | 22.76   | 15.66   |
| 9         | 56.70  | 25.71   | 17.63   |
| 10        | 61.04  | 28.78   | 19.70   |
| 11        | 66.55  | 31.89   | 21.71   |
| 12        | 71.51  | 34.70   | 23.68   |
| 13        | 76.66  | 37.87   | 25.70   |
| 14        | 81.16  | 40.44   | 27.66   |
| 15        | 85.69  | 43.56   | 29.84   |

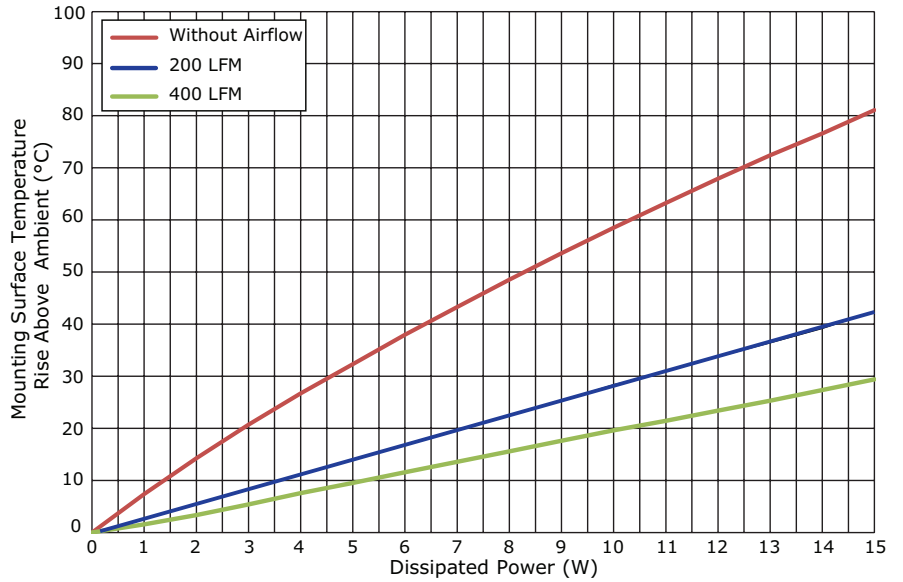


T<sub>hs</sub>: "hot spot" temperature measured on the heatsink  
 T<sub>a</sub>: ambient temperature

## PERFORMANCE CURVES (CONTINUED)

### HSE-B18635-0396H

| 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         | 7.36   | 2.78    | 1.55    |
| 2         | 14.26  | 5.51    | 3.34    |
| 3         | 20.72  | 8.49    | 5.38    |
| 4         | 26.71  | 11.30   | 7.58    |
| 5         | 32.32  | 13.90   | 9.50    |
| 6         | 37.95  | 17.05   | 11.58   |
| 7         | 43.27  | 19.88   | 13.58   |
| 8         | 48.53  | 22.56   | 15.55   |
| 9         | 53.62  | 25.41   | 17.59   |
| 10        | 58.48  | 28.50   | 19.59   |
| 11        | 63.26  | 30.79   | 21.43   |
| 12        | 67.93  | 33.63   | 23.37   |
| 13        | 72.42  | 36.30   | 25.31   |
| 14        | 76.58  | 39.06   | 27.34   |
| 15        | 81.06  | 42.34   | 29.38   |

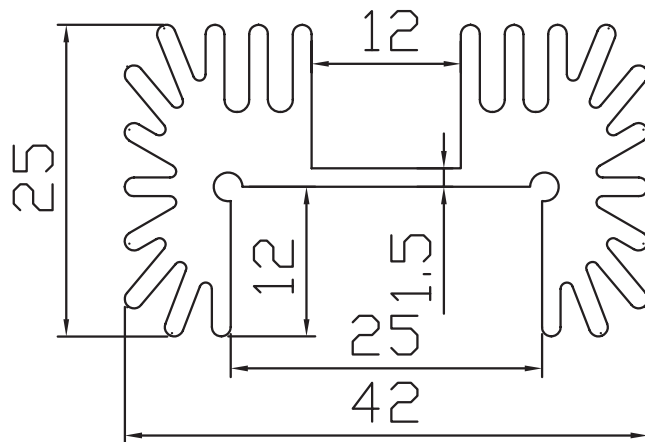
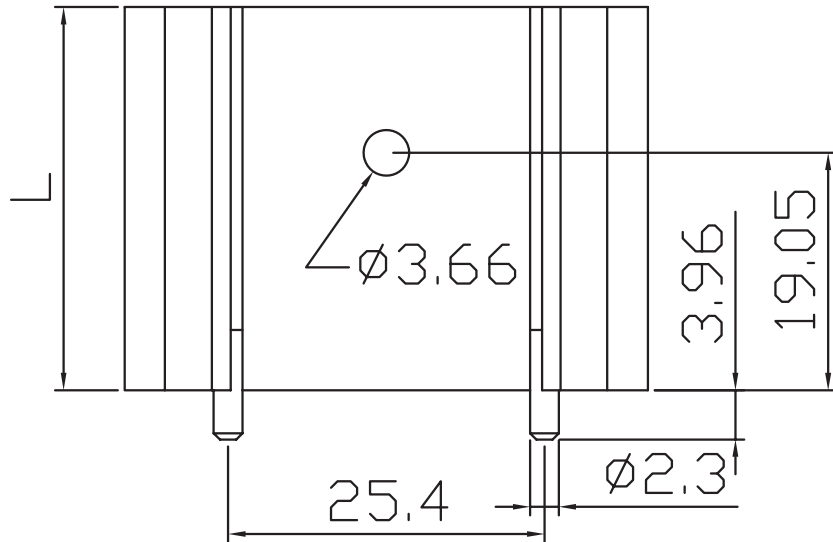


T<sub>hs</sub>: "hot spot" temperature measured on the heatsink  
 T<sub>a</sub>: ambient temperature

## MECHANICAL DRAWING

units: mm  
tolerance: ±0.5 mm

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



| MODEL NO.        | LENGTH, L (mm) | WEIGHT (g) |
|------------------|----------------|------------|
| HSE-B18254-0396H | 25.4           | 30         |
| HSE-B18318-0396H | 31.8           | 43         |
| HSE-B18381-0396H | 38.1           | 44         |
| HSE-B18508-0396H | 50.8           | 57         |
| HSE-B18635-0396H | 63.5           | 69         |

## REVISION HISTORY

---

| rev. | description     | date       |
|------|-----------------|------------|
| 1.0  | initial release | 05/11/2017 |

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.

CUI reserves the right to make changes to the product at any time without notice. Information provided by CUI is believed to be accurate and reliable. However, no responsibility is assumed by CUI for its use, nor for any infringements of patents or other rights of third parties which may result from its use.

CUI products are not authorized or warranted for use as critical components in equipment that requires an extremely high level of reliability. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкуренспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



Тел: +7 (812) 336 43 04 (многоканальный)

Email: [org@lifeelectronics.ru](mailto:org@lifeelectronics.ru)