

## HFE - Half Flat Element

### Properties

The standard range of ceramic infrared elements in stock are used in a wide range of industrial and engineering applications such as thermoforming, packaging, paint curing, printing, drying, gluing, sterilisation, roasting etc. They are also very effectively used in infrared outdoor heaters and saunas.

Most plastics and many other materials absorb infrared best in the wavelength range of 2-10  $\mu\text{m}$ , which makes the ceramic heater the most popular radiant emitter on the market.

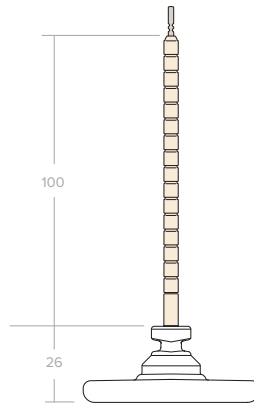
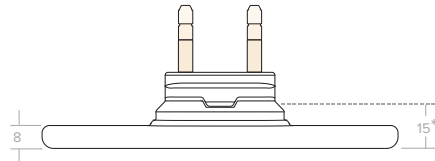
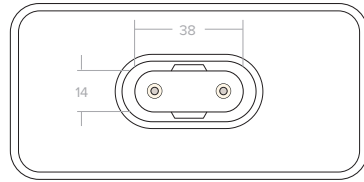
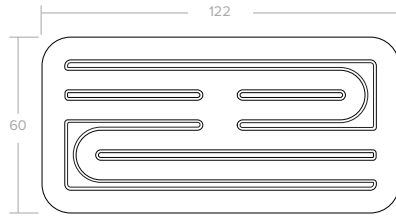
### Technical specification

|                          |   |
|--------------------------|---|
| Material                 | Ceramic solid body in white glaze colour with an embedded resistance heating coil   |
| Heater Voltage           | 230 V (standard)  |
| Operating Temperature    | Max permissible 750°C   |
| Useful wave-length range | 2 - 10 $\mu\text{m}$ (microns) long wavelength  |
| Dimensions               | 122 x 60 x 26 mm  |
| Average weight           | 128g  |
| Electric connection      | 100 mm ceramic beaded power leads   |
| Assembly                 | Recommended radiation distance from heater is 100mm to 200mm. Mounting slot size oval 15x42 mm<br>Steel wave spring and clip set included |
| Recommended Spacing      | 5mm minimum spacing between elements  |
| Average operating life   | Up to 20 000 hrs depending on conditions  |
| Standards                | CE, UL-499  |
| Packaging w x h x d      | 126 x 62 x 44 mm  |



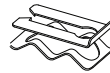
### Standard assortment

| Model<br>HFE | Power<br>W | Mean Surface<br>Temperature °C | Max Power<br>Density kW/m <sup>2</sup> |
|--------------|------------|--------------------------------|--|
| HFE 125      | 125        | 351                            | 15                                     |
| HFE 150      | 150        | 405                            | 18                                     |
| HFE 250      | 250        | 515                            | 30                                     |
| HFE 325      | 325        | 596                            | 39                                     |
| HFE 400      | 400        | 640                            | 48                                     |
| HFE 500      | 500        | 726                            | 60                                     |

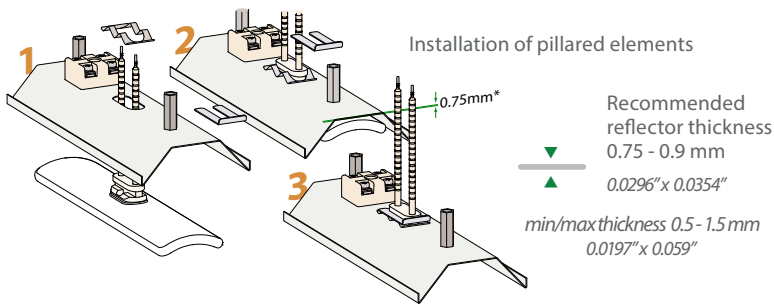


**HFE HALF FLAT ELEMENT**  
24.0719

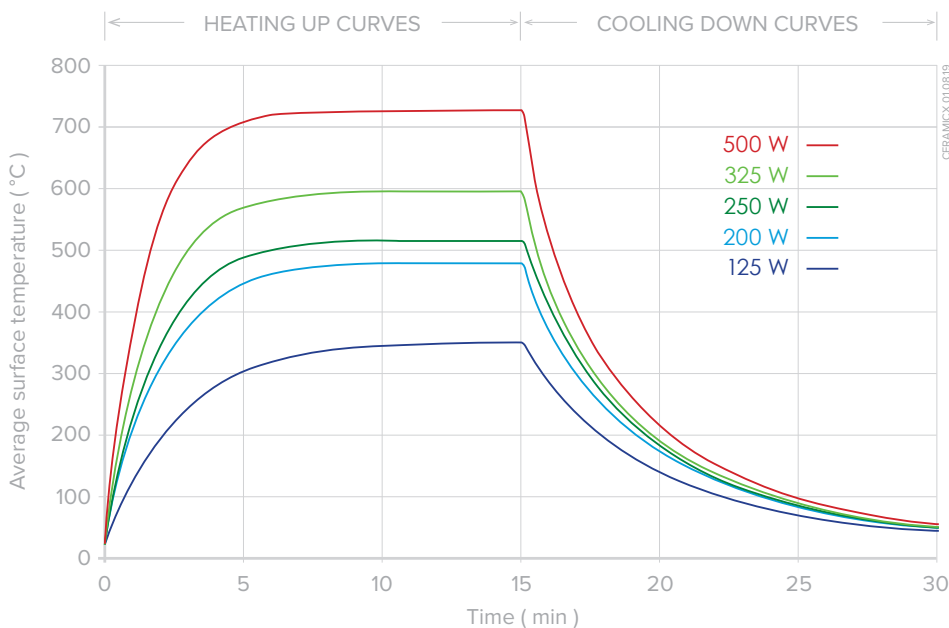
Tolerances apply, all dimensions mm.  
\* Face of reflector - face of element  
using 0.75mm reflector, mounting  
slot size 15 x 42 mm



Comes with Wave Spring and Clip



**Recommended Slot hole size 42 x 15 mm**  
1.6535" x 0.5905"



**HFE Half Flat Element**

Heating up and cooling down curves showing average surface temperature taken with an infrared thermometer set at an emissivity of 0.95 (Element mounted in an aluminised steel reflector RAS)