

## SQE - Square Quartz Element TC/K



### Properties

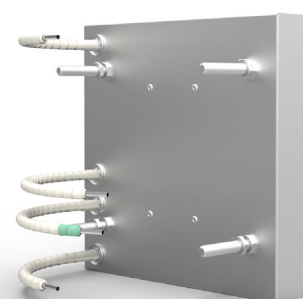
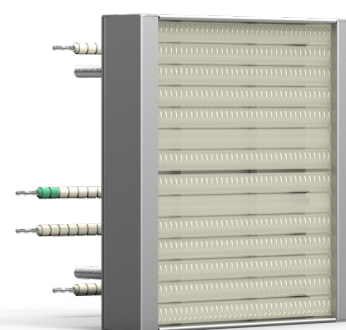
Quartz infrared heating elements provide medium wave infrared radiation. They are favoured in industrial applications where a more rapid heater response is necessary, including systems with long heater off cycles.

The standard quartz heating elements range consists of cassette style elements constructed with aluminised steel as standard, stainless steel is also an option. These emitters have peak emissions in the medium to long wavelength range.

Type K thermocouple is the standard we use. This gives an indication of the operating temperature of the emitter itself at a point close to the resistance heating coil.

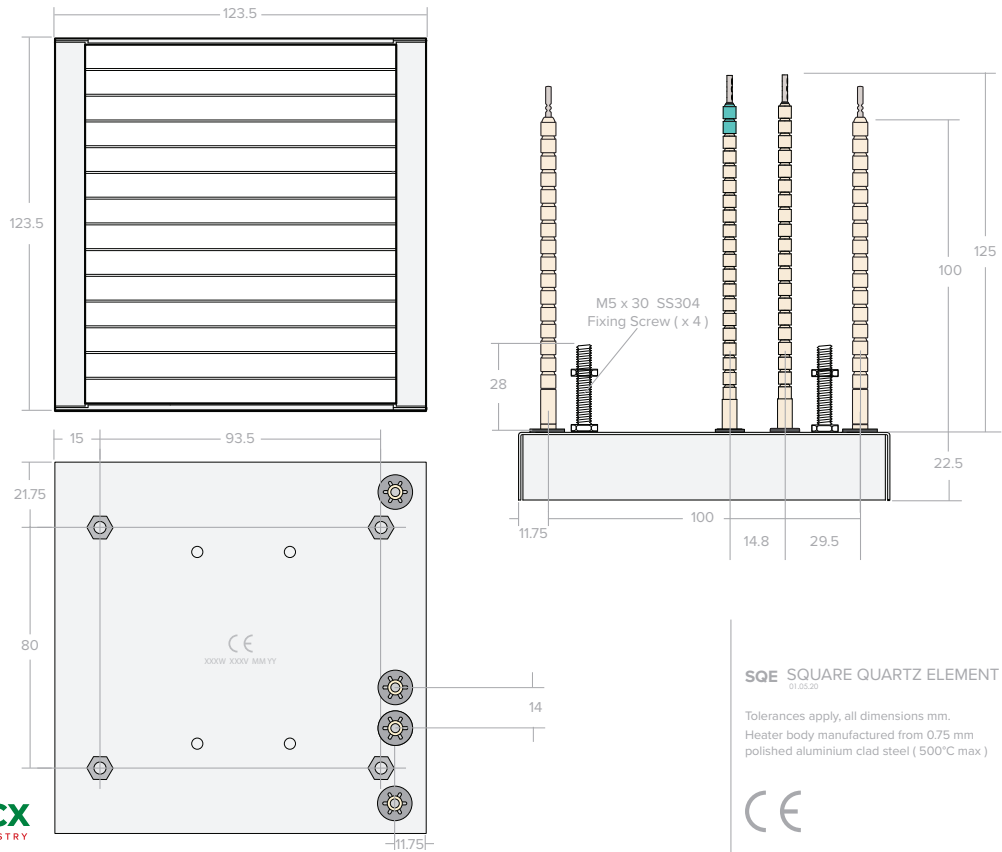
### Technical specification

Material	Aluminium clad steel body with an embedded iron-chrome aluminium resistance wire
Heater Voltage	230 V (standard)
Operating Temperature	Max permissible 500°C
Useful wave-length range	1.5 - 8 $\mu\text{m}$ (microns) long wavelength
Dimensions	123.5 x 123.5 x 22.5 mm
Average weight	400 g
Electric connection	100 mm ceramic beaded power leads 125 mm ceramic beaded thermocouple leads
Assembly	Recommended radiation distance from heater is 100mm to 200mm. Heater is mounted using 4 M5 x 30mm fixings screws attached to the rear of the element.
Recommended Spacing	5mm minimum spacing between elements
Average operating life	Up to 5 000 hrs depending on conditions
Standards	CE
Packaging w x h x d	126 x 126 x 50 mm



### Standard assortment

Model SQE	Power W	Mean Surface Temperature °C	Max Power Density kW/m <sup>2</sup>
SQE 150	150	343	9
SQE 250	250	438	15
SQE 300	300	477	18
SQE 400	400	542	24
SQE 500	500	593	30
SQE 650	650	644	39
SQE 750	750	690	45
SQE 1000	1000	772	60



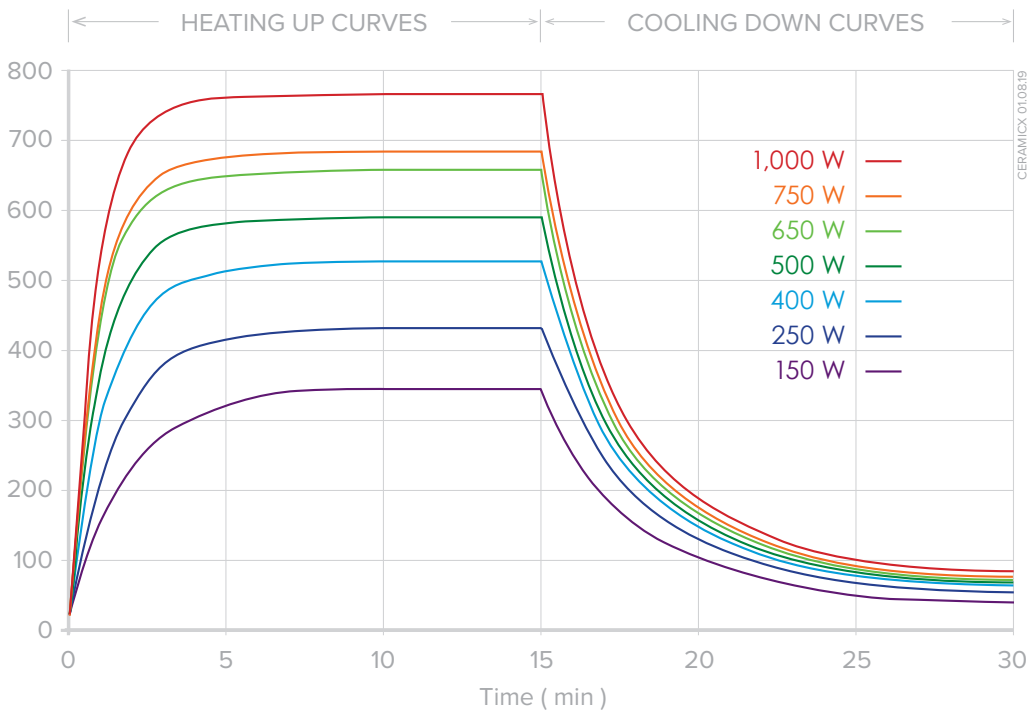
**SQE SQUARE QUARTZ ELEMENT**  
01.05.20

Tolerances apply, all dimensions mm.  
Heater body manufactured from 0.75 mm  
polished aluminium clad steel (500°C max)



Recommended reflector thickness  
0.75 - 0.9 mm  
0.0296" x 0.0354"

For fitting instructions see  
[www.ceramicx.com/ir-heaters-installation-instructions/](http://www.ceramicx.com/ir-heaters-installation-instructions/)



**SQE Square Quartz Element**

Heating up and cooling down curves showing average surface temperature taken with an infrared thermometer set at an emissivity of 0.7