

Quarter Quartz Element with type K Thermocouple

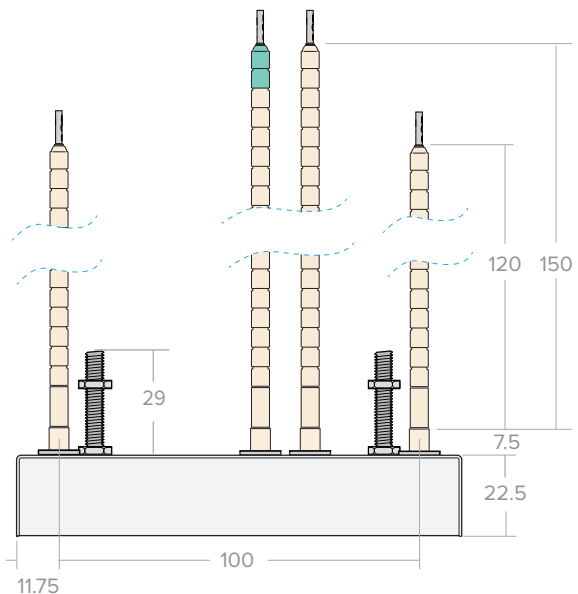
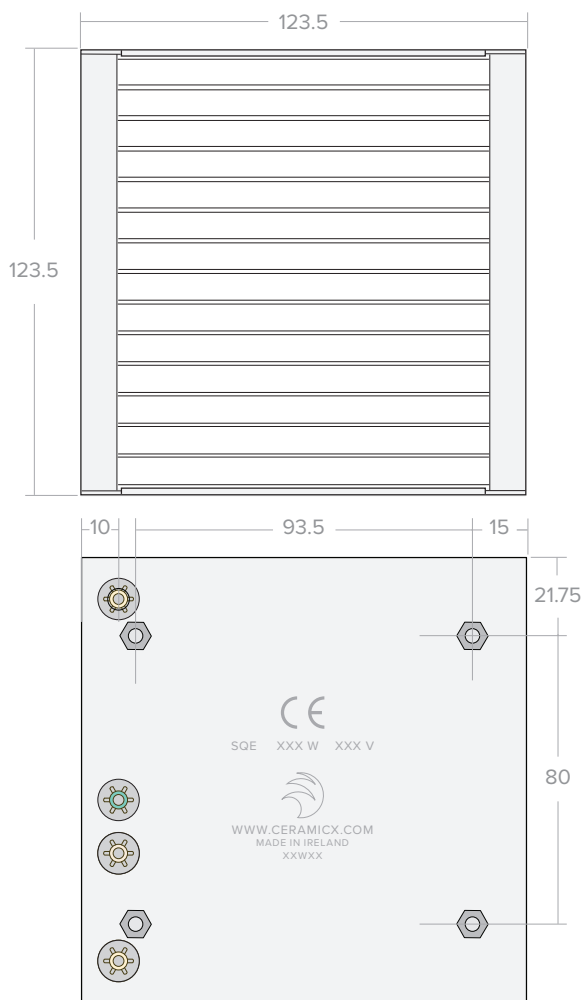
Quartz infrared heating elements provide medium wave infrared radiation. They are favoured in industrial applications where a more rapid heater response is necessary, including systems with long heater off cycles. The standard quartz heating elements range consists of cassette style elements constructed 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	Polished aluminium clad steel body with an ironchrome aluminium resistance wire
Heater Voltage	230 V (<i>standard</i>)
Useful wave-length range	1.5 - 8 μm (<i>microns</i>) - Long wave
Dimensions	123.5 x 123.5 x 22.5 mm
Average weight	400 g
Electric connection	120 mm ceramic beaded power leads 150 mm ceramic beaded thermocouple leads
Assembly	Recommended radiation distance from heater is 100 - 200mm
Mounting	2 x M5 x 30 mm fixing
Element spacing	Minimum spacing between elements 5 mm
Average operating life	Up to 10,000 hrs depending on conditions
Standards	CE
Operating temperature	Ensure temperature of aluminium clad steel body does not exceed 500 °C
Note	Element should always be mounted so the quartz glass tubes are horizontal.

Standard SQE TcK range

	Mean Surface Temperature °C	Max Power Density kW/m ²
250 W	477	15.1
400 W	542	24.2
500 W	593	30.3
650 W	664	38.3
750 W	690	45.4
1000 W	772	58.7

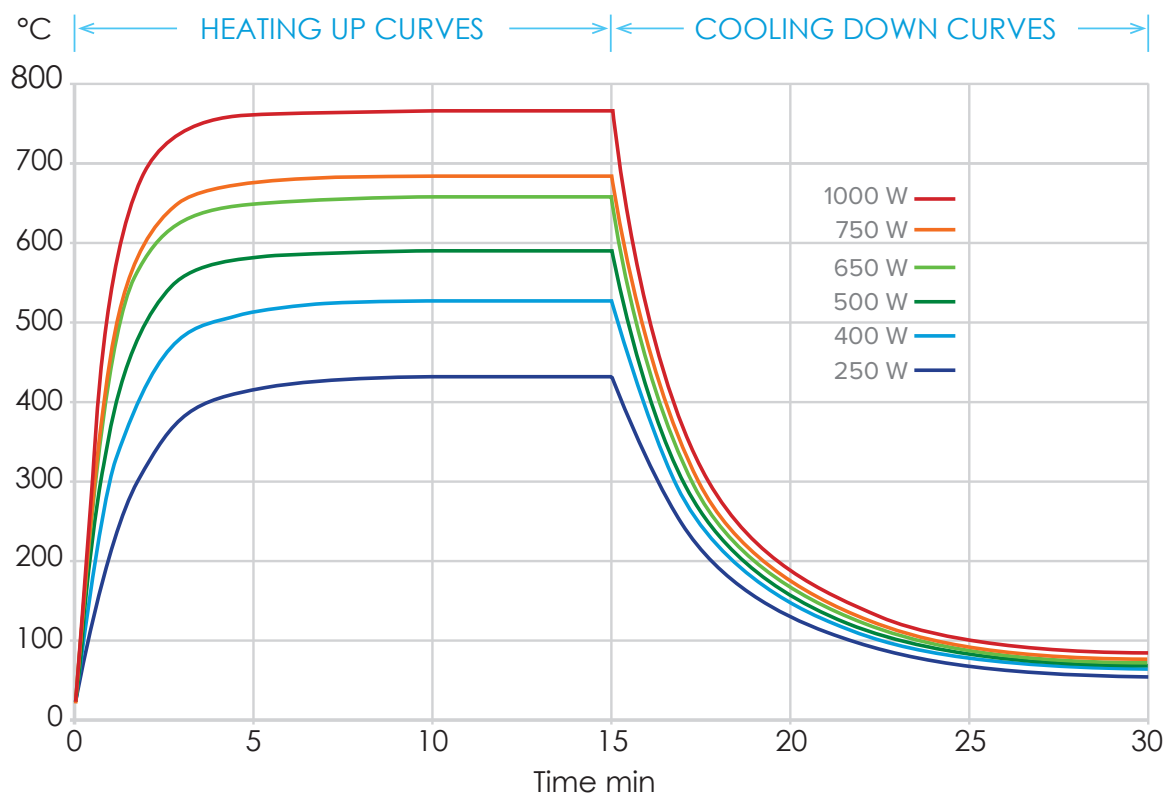


SQE TcK
SQUARE QUARTZ ELEMENT
WITH TYPE K THERMOCOUPLE

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



25W49



SQE TcK Heat up and cool down curves showing average surface temperature measured with a thermal imaging camera set to an emissivity of 0.7