

# Ceramic Infra - Red Heating Elements



THERMAL ELECTRIC ELEMENTS  
AUSTRALIA

## Thermal Infra-Red Elements A production tool for Manufacturers

Thermal Electric ceramic elements are manufactured in the U.K.

to the very highest standards, are well proven and offer many benefits to the user.

Many manufacturing processes require heat at some stage in the production of finished goods. Thermal specialise in providing cost effective solutions to manufacturers' heating problems.

Thermal ceramic infra-red elements offer the manufacturer a valuable tool for use in the production process

## Infra - Red Heating - The Modern Method

By the efficient utilisation of energy, Infra - Red plays a vital role in helping manufacturers to :

- Increase production rates
- Improve product quality
- Improve efficiency
- Reduce energy consumption
- Reduce manufacturing costs

## Why Infra - Red ?

The three principal methods of heat transfer are:

CONVECTION CONDUCTION RADIATION

Infra - Red radiation is part of the electro magnetic spectrum which also includes visible light, ultra - violet waves and radio waves.

Infra - Red radiation, unlike convection or conduction, does not rely on any intervening medium to transfer heat from the Infra - Red source to the object being heated.

It is:

- EFFECTIVE** Very high rates of heat transfer can be achieved.
- EFFICIENT** Precise targeting and control is possible with minimal peripheral heat loss
- RAPID** Energy is transmitted at the speed of light from the element to the product
- CLEAN** No products of combustion. No forced air currents to convey contaminants to the product.

Thermal ceramic Infra - Red elements provide a reliable, economical and highly effective source of Infra - Red heat.

Because of their versatility, they can be easily adapted to solve many manufacturing problems.

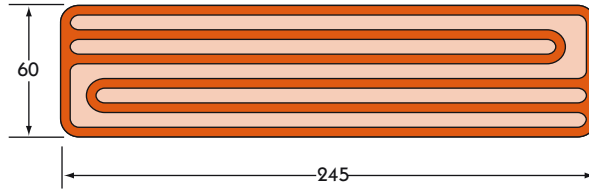
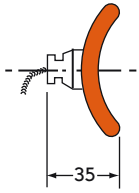
Thermal Electrics Infra - Red elements are:

**RELIABLE - ECONOMICAL - EFFECTIVE - CLEAN**

# Infra-Red Radiation Heating Elements

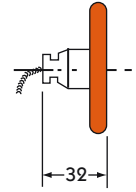
Voltage 230V other voltages available

## FSC (curved version)

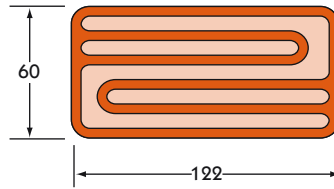
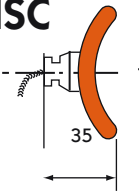


Ratings (watts)	150	250	300	350	400	500	650	750	1000
Mean surface temperature C	235	340	370	400	420	450	520	555	600
Peak wavelength m	5.7	4.7	4.5	4.3	4.1	4	3.6	3.5	3.3

## FSE (flat version)

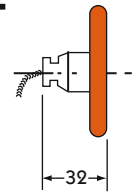


## HSC

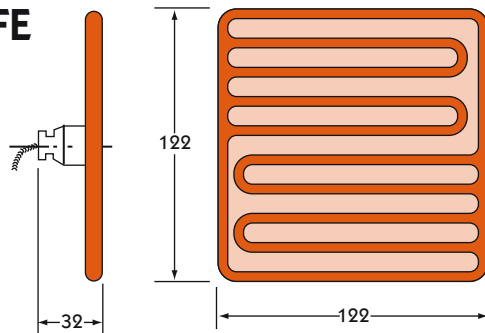


Ratings (watts)	125	150	200	250	325	375	400	500
Mean surface temperature C	340	370	420	450	520	540	570	600
Peak wavelength m	4.7	4.5	4.1	4	3.6	3.5	3.4	3.3

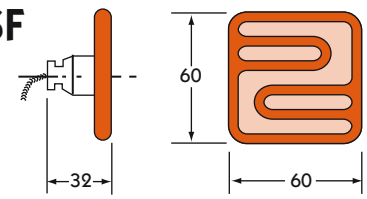
## HSF



## SFE



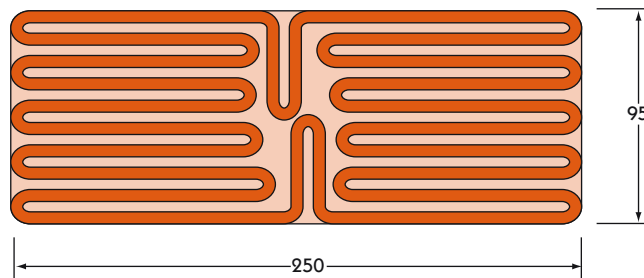
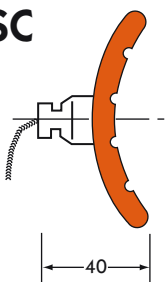
## QSF



Ratings (watts)	50	150	250
Mean surface temperature C	175	450	590
Peak wavelength m	6.4	4	3.3

Ratings (watts)	150	200	250	300	450	400	500	650	750	1000
Mean surface temperature C	235	300	340	370	400	420	450	520	555	600
Peak wavelength m	5.7	5	4.7	4.5	4.3	4.1	4	3.6	3.5	3.3

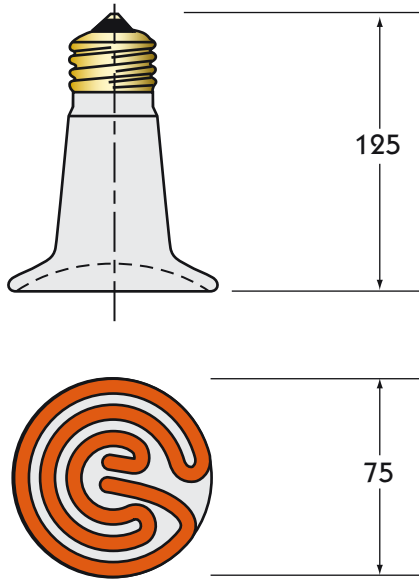
## LSC



Ratings (watts)	1500
Mean surface temperature C	600
Peak wavelength m	3.3

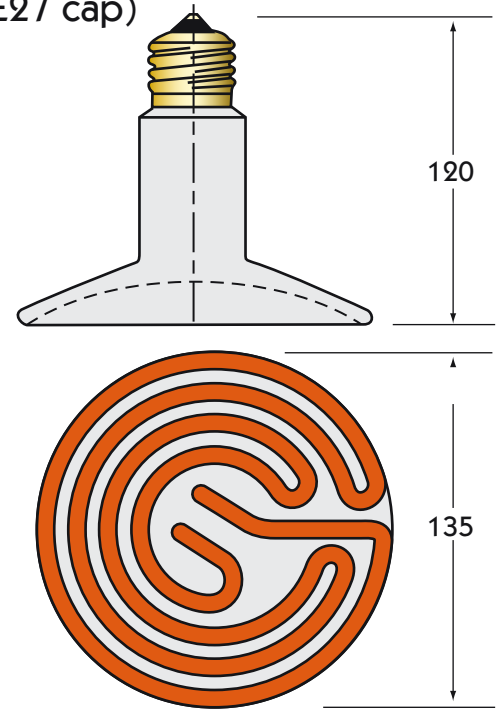
\*All dimensions in millimetres

## SFL 2 (E27 cap)



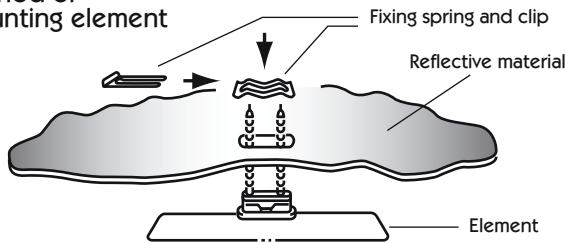
Ratings (watts)	60	75	100
Mean surface temperature	200	235	275
Peak wavelength m	6.1	5.7	5.3

## SFL 1 (E27 cap)

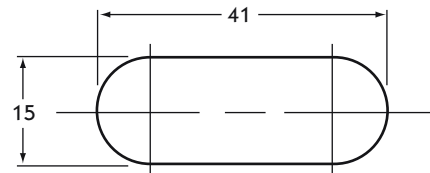


Ratings (watts)	150	250	500
Mean surface temperature C	230	300	480
Peak wavelength m	5.7	5	3.9

### Method of mounting element



\*All dimensions in millimetres



Cut out for mounting lug

Thermal ceramic elements are used throughout the world for many processes by a variety of industries. We have experience in providing the correct technical solution for many heating problems.

Some of the many areas where Thermal elements are used:

- HEATING**      Plastics Forming, Metal prior to painting, Printed circuit boards, Food, People, Animals, Glass
- DRYING**        Print, Inks, Adhesives, Varnishes, Paints, Textiles, Sand, Pharmaceuticals, Powders
- CURING**        resins, Rubber, Chemicals, Powder Coatings

For detailed technical advice please contact us:

#### HEAD OFFICE

7 Buckman Close  
Toormina 2452  
Coffs Harbour NSW Australia  
Ph 0061 2 6658 1422  
Fax 0061 2 6653 3839  
www.thermalelectric.com.au  
Email: info@thermalelectric.com.au

#### SYDNEY

Unit 34/93 Newton Road  
Wetherill Park NSW 2164  
Ph 02 9756 3788  
Fax 02 9756 6749  
Mobile 0438 581 357  
www.thermalelectric.com.au  
Email: thermals@bigpond.net.au

#### MELBOURNE

Unit 4/257 Governor Road  
Braeside VIC 3195  
Ph 03 9580 6222  
Fax 03 9580 6333  
Mobile 0409 304 969  
www.thermalelectric.com.au  
Email: thermalm@bigpond.net.au

#### BRISBANE

Unit 1/8 Hopper Ave  
Yatala QLD 4207  
Ph 07 5540 7093  
Fax 07 5540 7194  
Mobile 0407 419 447  
www.thermalelectric.com.au  
Email: thermalb@bigpond.net.au

**Free Phone 1800 025 287    Free Fax 1800 631 235**

ABN 59 001 255 492