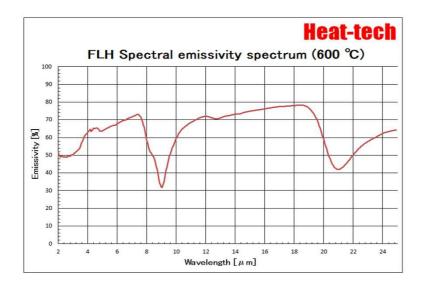
# **Fast heating**Far-infrared Line Heater

# FLH-35 Series

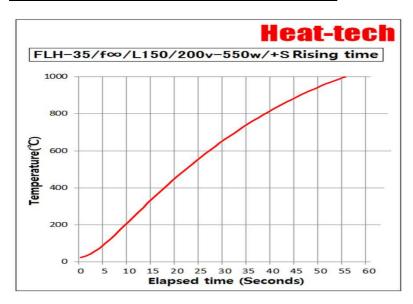


- Rising is early, so heating time can be reduced.
- Highly precise temperature control can be done.
- Frequency management of heating element can be done.
- ♦ This is a far-infrared radiation, so this is good at heating of glass.
- Ultra-compact.
- Clean.
- When this is lined up, plane heating can be done.

**Heat-tech** 

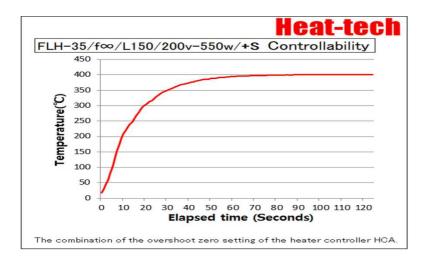


#### Rising is early, so heating time can be reduced.



#### Highly precise temperature control can be done.

Since thermocouple built-in, user can adjust freely the temperature of the heating element.



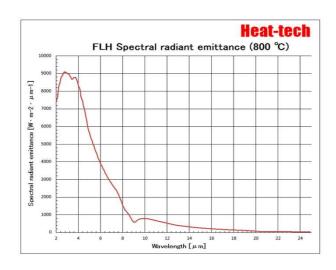
# Frequency management of heating element can be done.

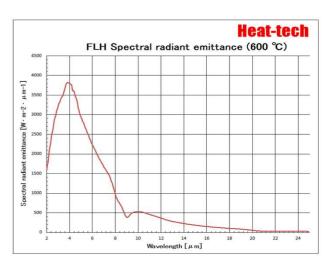
By adjusting the temperature of the heating element, it is possible to manage the far-infrared rays

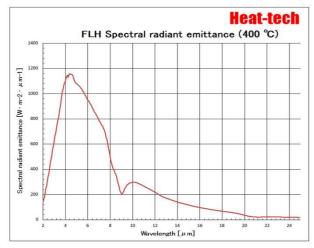
Black body radiation energy

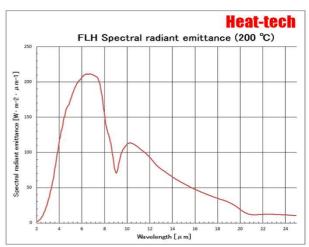
Temp.	Peak wavelength
800°C	2.70 μ m
700°C	2.98 μ m
600°C	3.32 μ m
500°C	3.75 μ m
400°C	4.31 μm
300°C	5.06 μm
200°C	6.13 µ m
100°C	7.77 μm

💥 It also reduces the transfer (radiation) energy and lower the temperature.

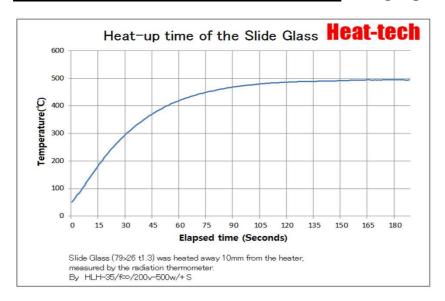








# ♦ This is a far-infrared radiation, so this is good at heating of glass.



## Ultra-compact.

It is a very small. Height 36mm x Width 35mm x Length  $50 \sim 316$ mm. It can be installed in the gap of the machine.

# ♦ Clean.

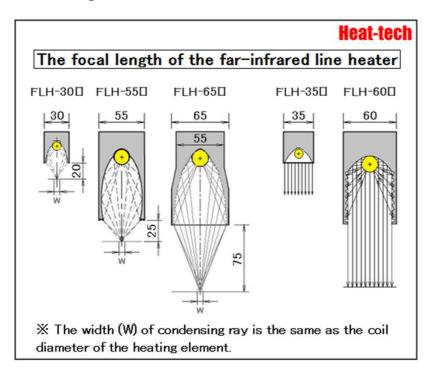
It's medium-less by non-contact heating, so it can be heated very cleanly.

# ♦ When this is lined up, plane heating can be done.



So width 35mm, user can side-by-side use and surface heating. User can achieve uniform far-infrared plane heating.

### [ Focal length ]



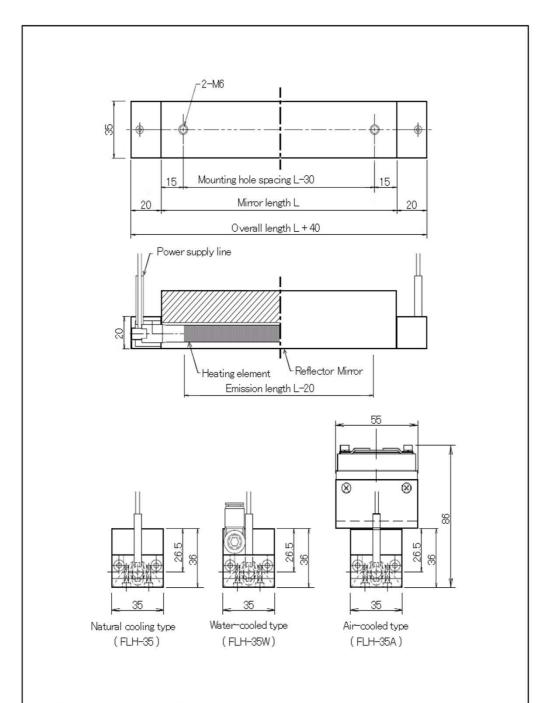
### [ Models Variation ]

Model	Optical axis	Parallel beam width	Focal length	Cooling system	Power	Mirror length
FLH-35				Natural dissipation	150w∼1kw	50~316mm
FLH-35A		35mm		Air cooling	325w∼1.3kw	82~316mm
FLH-35W				Water-cooled	325w~1.3kw	82~316mm

### [ Models constitution ]

(Example) FLH-35A/f $\infty$ /L150/200v-650w/+S/P3m $\cdot$ S3m

Basic Model	Mirror width	Cooling	Focal length	Mirror length	Voltage	Wattage	Built-in T/C	Power wire	T/C wire	Detail description	
FLH-	35		/f∞	/L□	/0v-	□w	/+S	/P□m	K□m	Far-infrared line heater Parallel beam	
		無						Natural heat dissipation			
		Α								Air cooling	
		W								Water-cooled	
				50						Mirror net length 60mm	
				82						Mirror net length 82mm	
				150						Mirror net length 150mm	
				316						Mirror net length 316mm	
				Specified						Mirror net length specified	
					100∨			Heater voltage 110v			
					200v				Heater voltage 220v		
					Specified				Heater voltage Specified		
						Specified	ecified		Heater power Specified		
							Blank		Nothing		
							S		K thermocouple		
							Blank		Nothing		
								Specified		Nothing	
									Blank	Nothing	
									Specified	T/C lead wire specified length	



#### [ Option & Special order ]

K thermocouple built-in

Specified voltage

Specified power.

Specified heat element length

Specified mirror length

Specified power supply line

Specified thermocouple wires

Specified cooling system

7										
Type	Semi-s	tandard	Sandard							
Focus	f∞ (Parallel Beam)									
Cooling	N	Natural heat dissipation A/W ND					A/W			
Mirror length	5	50 82		150		316				
Voltage	110v	220v	110v	220v	220v					
Power	15	0w	300w		550w	650w	1kw	1.3kw		
D/#	FLH-35□/f∞/L□/□v-□w/+(0ption K-T/C)									
Model	Far-infrared line heater									
	•	H	eat-	tec	h Co	n It	ıl			

Date 2015/11/16 Design Y.Shimoda

# [ Natural cooling type ] 2-M6 Mounting hole spacing 120 15 Mirror length 150 Overall length190 Power supply line Reflector Mirror Heating element Emission length 130 Cross-sectional view [ Option & Special order ] Sandard Type f∞ K thermocouple built-in Focus Cooling Specified power supply line Natural heat dissipation Specified thermocouple wires Mirror length 150 220v Voltage Power 550w D/# FLH-35/f∞/L150/220v-550w/+(Option K-T/C)

Model

Y.Shimoda

2015/11/16 Design

Far-infrared line heater

Heat-tech Co.,Ltd.

