

High Temperature Mica Strip Heater

Omega's high temperature mica heaters consist of an etched foil element placed between lays of mica. These are normally installed by clamping to heat sinks via bolt holes in the heater, using its accompanying backing plate. This high temperature provides the ultimate temperature and wattage capability for fast heating. The HTMSH series heaters have a broad temperature range, achieving up to 600°C; this results in faster processing and cycle times for greater production output.

Features

- High watt density capability to 100 W/in² for very fast processing times
- Custom profiled heat density and mechanical clamping for heat uniformity to improve processing yields
- Suitability for vacuum use after warmup
- Rugged materials of construction prevent costly damage during installation and handling
- Highest temperature capability (up to 600°C) for the most demanding applications

Typical Applications

- High-temperature laminating processes
- Mold and die temperature heating/monitoring
- Semiconductor processing
- Packaging, strapping and sealing equipment
- DNA thermocycling
- Food service applications
- Machinery and heavy parts heating
- Plastics and rubber molding

Specifications

Temperature range	-150 to 600°C (-238 to 1112°F)		
Resistance tolerance	±10% or ±0.5 Ω, whichever is greater		
Dielectric strength	1000 VRMS or 2000 VRMS (dependent on model)		
Mounting	Clamping using heat sink, holes in heater and backing plate		
Lead wire material	Mica/glass insulated, stranded nickel-clad copper, potted over termination with high temperature cement		
Maximum heater thickness	Mica insulation	Over heater elements	Over lead termination
	0.010" (0.3mm)	0.030" (0.8mm)	0.200" (5.1mm)
	0.020" (0.5mm)	0.050" (1.3mm)	0.220" (5.6mm)
Current capacity (based on 100°C ambient temperature)	AWG 22 – 8.0A AWG 20 – 9.0A AWG 18 – 11.0A		

