

Data Sheet

PowerFilm - All the power you need is inside this thin non-metallic heating film!

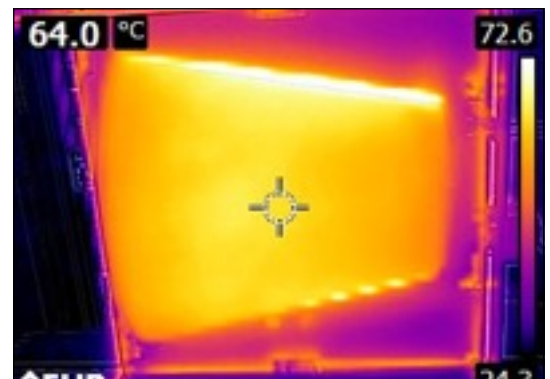
- Fastest heat-up rate in the industry (0 - 30 °C or 32 - 86 °F per minute)
- Entire surface heats up at the same time.
- Typically less than 200 micron or 0.008" thick
- Compatible with thermoset and thermoplastic resins systems
- Can generate up to 8 kW/m² or 5 Watt/inch²
- Embedded in a variety of matrices like TPU, PETG, EVA, ...
- Flexible and rigid matrices
- Specific design on demand



LaminaHeat **PowerFilm** has a very homogeneous surface heating profile and is as thin as a hair. It comes in various standard widths and is continuously made to reduce the waste to a minimum for your discerning applications. The PowerFilm can be applied using various voltages (1V to 400V), being able to generate a maximum power of up to 8 kW/m² or 5 Watt/inch². It operates on DC and AC currents.

LH **PowerFilm** is so versatile that it meets a large range of applications. Challenge us with your needs. Our technical team is ready to develop with you the right solution at the correct economical cost.

LH **PowerFilm** provides a convenient plug-and-Play solution for many heating applications in



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This information is offered solely as a guide in material selection. We believe this information to be reliable, but do not guarantee its applicability to the users process or assume any liability arising out of its use or performance. The user, by accepting the product described herein, agrees to be responsible for thoroughly testing any application to determine its suitability before committing to production. It is important for the user to determine the properties of its own commercial compounds when using this or any other mat material. LaminaHeat makes no warranty of any kind, express or implied, including those of merchantability and fitness for a specific purpose. Statements of this data sheet shall not be construed as representations or warranties or as inducements to infringe any patent or violate any law, safety code or insurance regulation.

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March 2015

Encapsulating matrix (Standard)

	physical properties		Temperature max.
EVA	flexible	perforated	70°C - 158°F
TPU	flexible	perforated	120°C - 248°F
PETG	rigid	perforated	150°C - 302°F

Dimensional properties for PETG & TPU matrixes

Total width	<i>mm</i>	1,100	734	550	366	150
	<i>inch</i>	43.3	29.9	21.7	14.4	5.9
Heating width	<i>mm</i>	1,050	684	500	316	100
	<i>inch</i>	41.3	26.9	19.7	12.4	3.9
Length	<i>m</i>	10	10	10	10	10
	<i>inch</i>	393.7	393.7	393.7	393.7	393.7
Thickness	<i>µm</i>	200	200	200	200	200

Dimensional properties for EVA matrix

Total width	<i>mm</i>	1,000	667	500	333	150
	<i>inch</i>	39.4	26.3	19.7	13.1	5.9
Heating width	<i>mm</i>	950	617	450	283	100
	<i>inch</i>	37.4	24.3	17.7	11.1	3.9
Length	<i>m</i>	10	10	10	10	10
	<i>inch</i>	393.7	393.7	393.7	393.7	393.7
Thickness	<i>µm</i>	200	200	200	200	200

Electrical and physical properties

Resistance	<i>Ω/m²</i>	25 and 50
Range of use	<i>Volt</i>	0-120 vDC & 0-400 vAC
Power	<i>kW/m²</i>	up to 7.7
Heat-up rate		0 - 30 °C or 32 - 86 °F
Weight		205 to 280 g/m ² or 6.5 to 10.5 oz/yd ²

For more information: email: info@laminaheat.com - website: www.laminaheat.com