

# Transtherm™ Silicone Thermal Pads

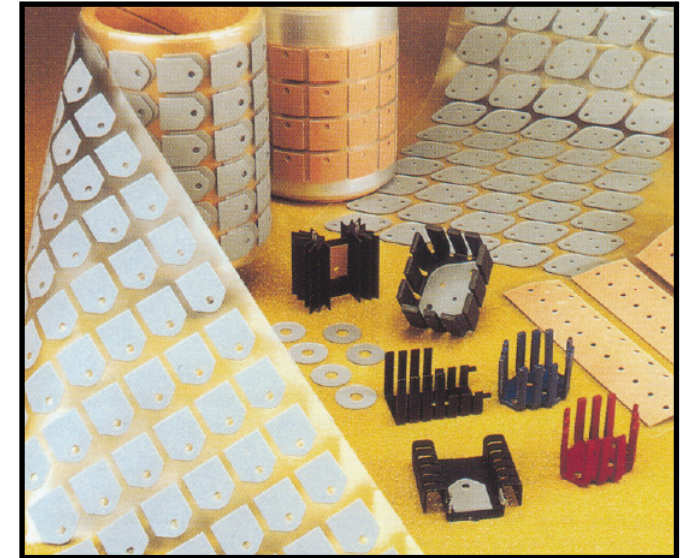
**Transtherm™ Silicone Thermal Pads** offer an economical solution to reduce operating temperature in electronic devices. Transtherm™ Silicone Pads are available in various thicknesses from high to low thermal resistance value. Products can be coated with pressure sensitive adhesive on one or both sides for specific application.

## Features

- High cut through resistance
- Supported with fiberglass or aluminium
- Low outgassing
- UL 94 V-O flammability rating (UL File E316839)
- Consists of non-toxic components in the material

## Applications

- Power conversion
- Automotive electronics
- Consumable electronics



### Transtherm Silicone Thermal Pad

Physical Properties	T 400-7	T 600-9	T1000-9	T1200-9	T 1500-6	T 1500-10	Test Method
Color	gray	dark green	pink	green	salmon	light green	Visual
Thermal Impedance (°C.In <sup>2</sup> /Watt)	0,45	0,35	0,3	0,35	0,17	0,23	ASTM D5470 (modified)
Dielectric Constant, 60 Hz	2,19	2,46	2,25	2,85	2,56	2,56	ASTM D257
Dielectric Constant, 1kHz	2,15	2,5	2,2	2,75	2,47	2,47	ASTM D 257
Min. Continuous Use Temperature °C	-60	-60	-60	-60	-60	-60	MIL-I-49456A
Max. Continuous Use Temperature °C	180	180	180	180	180	180	ASTM D 5470 (modified)
Thermal Conductivity W/mk	0,9	1	1,2	1,3	1,6	2	ASTM D 5470 (modified)
Thickness mm	0,18	0,23	0,23	0,23	0,15	0,25	ASTM D374
Thickness Tolerance mm	+/- 0,03	+/- 0,03	+/- 0,03	+/- 0,03	+/- 0,02	+/- 0,03	
Volume Resistivity (Ohm * cm)	2E+15	4E+15	6E+15	1E+15	1E+15	1E+15	ASTM D257
Dielectric Strength (Volts minimum)	4000	4500	4500	3500	2000	4000	ASTM D 149
Weight Loss (%) 24 hrs.@ 200 °C	<1%	<1%	<1%	<1%	<1%	<1%	IMTM 1567
Hardness (Shore A )	85	85	84	80	80	80	ASTM D 257
Specific Gravity ( g/cm <sup>3</sup> )	2,1	1,5	1,5	1,6	1,4	1,5	ASTM D 792
Tensile Strength (MPa)	97	76	76	45	76	45	ASTM D 828
Breaking Strength (KN/m)	18	18	18	11,4	11	11	ASTM D 828
Elongation ( %)	2 to 4	2 to 4	2 to 4	2 to 4	2 to 4	2 to 4	ASTM D 828
Cut through Resistance (KN)	0,8	0,8	0,73	0,53	0,53	0,53	IMTM 1566
Dissipation Factor 60 Hz	0,0011	0,0012	0,0015	0,001	0,0007	0,0007	ASTM D 257
Dissipation Factor 1 Hz	0,0011	0,0011	0,0012	0,0009	0,0006	0,0006	ASTM D257
Flame Resistance ( UL file E316839)	UL 94 VO		UL 94 VO	UL 94 VO	UL 94 VO	UL 94 VO	UL 94
Construction / Material	Silicone/ Fiberglass	Silicone/ Fiberglass	Silicone/ Fiberglass	Silicone/ Fiberglass	Silicone/ Fiberglass	Silicone/ Fiberglass	

**Attention:**

All data and values of this technical information have been ascertained with care. Taking into consideration the multiplicity of both usage conditions and the process and application technologies, the data and information supplied represent lead values of a non-binding nature so that no warranty claims can be derived there from. Above all, in addition to our general sales conditions, only written agreements are regarded as being binding.

# Transtherm™ Polyester Thermal Pads

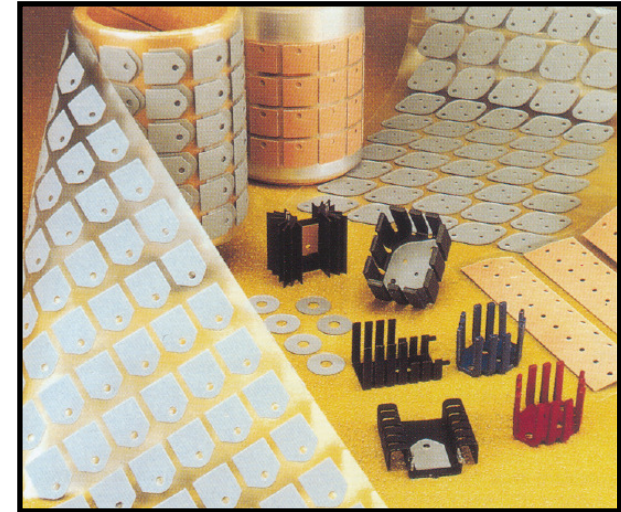
**Transtherm™ Polyester Pads (Silicone Free)** offer reduced operating temperature applications where silicone migration is a concern. The key property of the TF polyester based material is high insulation strength with no silicone migration. Transtherm™ Polyester Pads are available in various thicknesses, and with pressure sensitive adhesive on one or both sides.

## Features

- High dielectric strength (> 5K volts)
- UL 94 V-O flammability rating (UL File E316839)
- High cut through resistance
- Supported with Fiberglass
- No silicone migration issue
- High abrasive resistance
- Consists of non-toxic components in the material

## Applications

- Power conversion
- Automotive electronics
- Consumable electronics



### Transtherm Polyester Thermal Pad

Physical Properties	TP 1500-7	T 3	Test Method
Color	purple	black	Visual
Thermal Impedance ( °C. In <sup>2</sup> /Watt)	0,23	0,11	ASTM D5470 (modified)
Dielectric Constant, 60 Hz	3,1	n/a	ASTM D257
Dielectric Constant , 1k Hz	3,1	n/a	ASTM D257
Minimum Continuous Use Temperature ( °C)	-20	-60	MIL-I-49456A
Maximum Continuous Use Temperature ( °C)	150	180	
Thermal Conductivity (W/mK)	2	1,9	ASTM D5470 (modified)
Thickness ( mm)	0,18	0,13	ASTM D74
Thickness Tolerance (mm)	+/- 0,03	+/- 0,02	
Volume Resistivity (Ohm.cm)	2E+15	n/a	ASTM D257
Dielectric Strength (Volts, minimum)	6000	n/a	ASTM D149
Weight Loss ( % )	<1%		IMTM 1567
Hardness ( Shore A )	90	84	ASTM D247
Weight Loss ( % ) 24 hrs@200°C	1,6		ASTM D792
Tensile Strength (MPa)	76	42	ASTM D828
Breaking Strength (KN/m)	18	8,5	ASTM D828
Elongation (%)	2 to 4	3 to 4	ASTM D828
Cut through Resistance (KN)	1,6	n/a	IMTM 1566
Dissipation Factor, 60 Hz	0,02	n/a	ASTM D257
Dissipation Factor, 1 kHz	0,02	n/a	ASTM D257
Flame Resistance (UL File E316839)	UL 94 VO		UL94
Construction / Material	Polyester/ Fiberglass	Polyester/ Fiberglass	

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