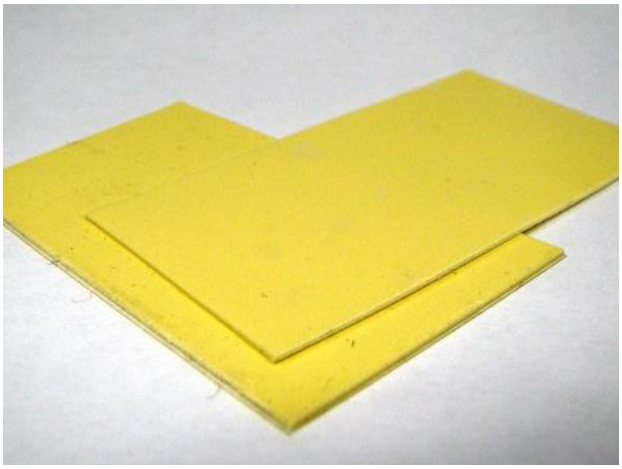
PHASE CHANGE MATERIAL
TCPC-SERIES 1,6 W/m*K

Phase change material is a wax-based thermal interface material. It has a softening temperature of 50 to 60°C.

The liquid phase of the material can fill interface irregularities with much higher efficiency than traditional gap fillers. Thus an optimal heat transfer resistance is ensured.

On the other hand phase change material is solid at room temperature and can be handled easily during assembly.

- **Available in thicknesses from 0,2 to 0,5 mm**
- **Thermal conductivity: 1,6 W/m*K**
- **Available with or without PSA**
- **Low thermal resistance**
- **Good electrical isolation**
- **Easy to assemble**
- **Cost effective**



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PRODUCT SPECIFICATIONS

PROPERTY		VALUE / TOLERANCE	TEST METHOD
Thermal conductivity		1,6 W/m*K	ASTM E1530
Reinforcement		Polyimide	-
Thickness		0,2 – 0,5 mm ± 10%	-
Standard size	Width roll type	500 mm	-
	Width x length sheet type	200 x 300 mm 200 x 400 mm	
Hardness		90 Shore A	-
Volume resistivity		10^{12} Ω-cm	ASTM D257
Specific gravity		1,8	ASTM D792
Dielectric breakdown voltage		5 kV/mm	ASTM D149
Tensile strength		14 N/mm²	ASTM D882A
Elongation		30%	ASTM D882A
Continous use temperature		150 °C	-
Phase change point		60°C	-
Colour		Yellow	-

Please note: Picture only shows an example of a phase change material.

PHASE CHANGE MATERIAL
TCPC-SERIES 1,6 W/m*K

BUILDING AN ITEM NUMBER

TCPC-PI-1,6-LxWxT-XXX

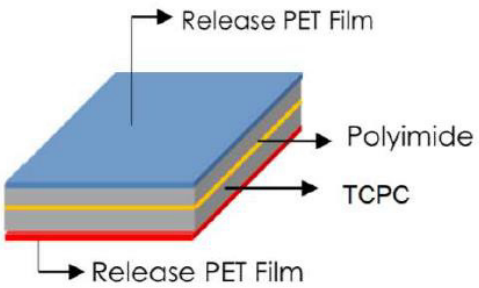
TCPC	Thermally Conductive Phase Change Material
PI	Polyimide film
1,6	Thermal conductivity
L	Length (mm)
W	Width (mm)
T	Thickness (mm)
DST	Die-cut parts
R	Roll type

Standard options

EXAMPLE

TCPC-PI-1,6-25x20x0,5-DST
Thermally conductive phase change material; with polyimide film; thermal conductivity: 1,6 W/m*K; size: 25x20 mm; thickness: 0,5 mm; die-cut parts

STRUCTURE



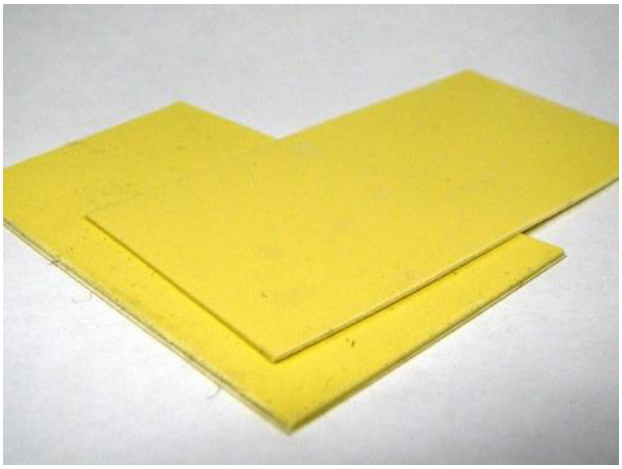
PHASE CHANGE MATERIAL
TCPC-SERIES 3,0 W/m*K

Phase change material is a wax-based thermal interface material. It has a softening temperature of 50 to 60°C.

The liquid phase of the material can fill interface irregularities with much higher efficiency than traditional gap fillers. Thus an optimal heat transfer resistance is ensured.

On the other hand phase change material is solid at room temperature and can be handled easily during assembly.

- **Thermal conductivity: 3,0 W/m*K**
- **Available in 400x300 mm standard sheet size, other dimensions and die-cut parts on request**
- **Available in thicknesses from 0,1 to 0,5 mm**
- **Low thermal impedance**
- **Naturally tacky**
- **Easy to assemble**
- **Good electrical isolation**
- **Very soft with high compressibility**



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PRODUCT SPECIFICATIONS

PROPERTY	VALUE / TOLERANCE	TEST METHOD
Basic material	EPDM	-
Thermal conductivity	3,0 W/m*K	ASTM D5470
Volume resistivity	10^{14} Ω*cm	ASTM D257
Phase change temperature	50 – 60 °C	-
Temperature range	-40 – +130 °C	-
Thickness range (T)	0,1 – 0,5 mm	ASTM 2240
Standard sheet size (LxW)	400x300 mm	-
Breakdown voltage	>5.000 V/mm	ASTM D149
Density	2,7 g/cm³	ASTM D792
Colour	Multi-colour	Visual
Shelf life°	12 months	-

°From date of receipt by the customer when stored at 23°C / 60%rH

Please note: Picture only shows an example of a phase change material.

PHASE CHANGE MATERIAL
TCPC-SERIES 3,0 W/m*K

BUILDING AN ITEM NUMBER

TCPC-XX-3,0-LxWxT-YYY

Thermally Conductive Phase Change Material	

FG*	Fiberglass
PI*	Polyimide film
AL*	Aluminium foil

*Omit if no special carrier is required

Thermal conductivity	
L	Length (mm)
W	Width (mm)
T	Thickness (mm)

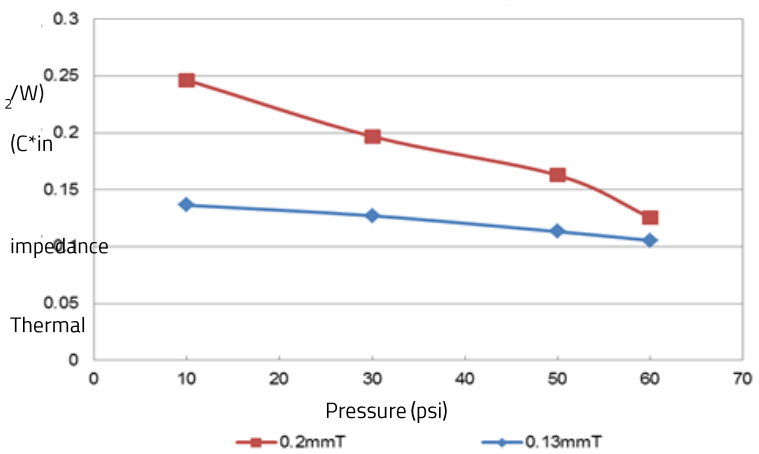
DST	Die-cut parts
KCT	Kiss-cut parts

Standard options

EXAMPLE

TCPC-3,0-25x20x0,5-DST
Thermally conductive phase change material; thermal conductivity: 3 W/m*K; size: 25x20 mm; thickness: 0,5 mm; die-cut parts

THERMAL IMPEDANCE VS. PRESSURE



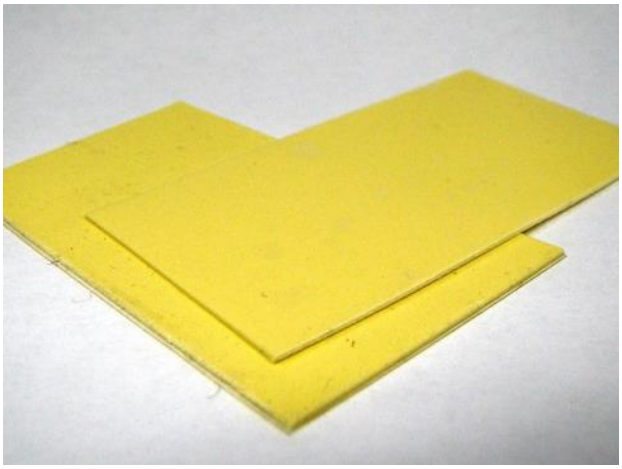
PHASE CHANGE MATERIAL
TCPC-SERIES 5,0 W/m*K

Phase change material is a wax-based thermal interface material. It has a softening temperature of 50 to 60°C.

The liquid phase of the material can fill interface irregularities with much higher efficiency than traditional gap fillers. Thus an optimal heat transfer resistance is ensured.

On the other hand phase change material is solid at room temperature and can be handled easily during assembly.

- **Thermal conductivity: 5,0 W/m*K**
- **Available in 400x300 mm standard sheet size, other dimensions and die-cut parts on request**
- **Available in thicknesses from 0,1 to 0,5 mm**
- **Low thermal impedance**
- **Naturally tacky**
- **Easy to assemble**
- **Good electrical isolation**
- **Very soft with high compressibility**



RoHS ✓ REACH ✓

PRODUCT SPECIFICATIONS

PROPERTY		VALUE / TOLERANCE	TEST METHOD
Basic material		EPDM	-
Thermal conductivity		5,0 W/m*K	ASTM D5470
Volume resistivity		10^7 Ω*cm	ASTM D257
Phase change temperature		50 – 60 °C	-
Temperature range		-40 – +130 °C	-
Thickness range (T)		0,1 – 0,5 mm	ASTM 2240
Standard sheet size (LxW)		400x300 mm	-
Breakdown voltage	With polyimide film	>600 V/mm 3.000 V/mm	ASTM D149
Density		2,3 g/cm³	ASTM D792
Colour		Black	Visual
Shelf life°		12 months	-

°From date of receipt by the customer when stored at 23°C / 60%rH

Please note: Picture only shows an example of a phase change material.

PHASE CHANGE MATERIAL
TCPC-SERIES 5,0 W/m*K

BUILDING AN ITEM NUMBER

TCPC-XX-5,0-LxWxT-YYY

Thermally Conductive Phase Change Material	

FG*	Fiberglass
PI*	Polyimide film
AL*	Aluminium foil

*Omit if no special carrier is required

Thermal conductivity	
L	Length (mm)
W	Width (mm)
T	Thickness (mm)

DST	Die-cut parts
KCT	Kiss-cut parts

Standard options

EXAMPLE

TCPC-5,0-25x20x0,5-DST
Thermally conductive phase change material; thermal conductivity: 5 W/m*K; size: 25x20 mm; thickness: 0,5 mm; die-cut parts

THERMAL IMPEDANCE VS. PRESSURE