

TFP-series | 1.0 – 15.0 W/mK



Product Highlights

- Thermal Conductivity 1 ~ 15 W/mK
- Tacky – self adhesion
- Thickness from 0.07mm to 10.00mm
- UL94 V-0 flame retardant

Applications

- Desktop computer, server
- LED lighting equipment
- Automotive electronics
- LCD and PDP flat displays
- Battery and Power devices

TFP is a cost-effective series of thermal interface materials engineered for high performance and easy application. Its specially optimized formulation delivers low density without compromising thermal conductivity. The material's inherent tackiness provides strong adhesion, reducing interfacial thermal resistance and enhancing heat transfer efficiency.

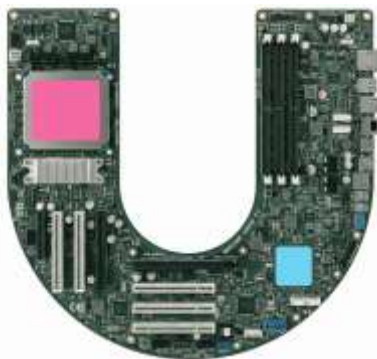
This gap-filling thermal pad offers outstanding thermal conductivity, making it an excellent solution for applications that demand both high performance and cost efficiency. Its low density also supports the ongoing trend in electronics toward slimmer, more compact device designs.

To improve usability and rework flexibility, one side of the thermal pad is processed to create a non-sticky “dry surface.” This allows for easy removal from chips and PCBs without causing damage. The naturally tacky side is typically applied to heat sinks, cold plates, or housings, ensuring firm adhesion and effective heat dissipation.

TFP-series | 1.0 – 1.5 W/mK

Specifications Table

Parameters	Unit of Measure	TFP1025	TFP1005EB	TFP1025EB	TFP1055	TFP1255	TFP1545	TFP1525LV	FP1525PI	TFP1505EB
Colour	–	White	White / Pink	White / Pink	Grey	Grey	Light Green	Light Green	Light Green	White / Brown
Thickness	mm	0.5~10	0.5~10	0.5~10	0.07~10	0.07~10	0.07~10	0.07~10	0.15~10	0.5~10
Thermal Conductivity	W/m-K	1	1	1	1	1.2	1.5	1.5	1.5	1.5
Thermal Resistance @1mm, 20psi	°C·in²/W	1.16	1.01	1.16	1.25	1.15	0.98	0.9	0.96	0.95
	°C·cm²/W	7.47	6.52	7.47	8.06	7.42	6.32	5.81	6.19	6.13
Hardness	Shore00	25	5	25	55	55	45	25	25	5
Flammability Rating	–	V0	V0	V0	V0	V0	V0	V0	V0	V0
Breakdown Voltage	kV(@1mm)	>10.0	>12.0	>12.0	>12.0	>10.0	>10.0	>10.0	>12.0	>12.0
Volume Resistivity	Ω ·cm	≥1.0×10 ¹²	≥1.0×10 ¹²	≥1.0×10 ¹²	≥1.0×10 ¹³	≥4.0×10 ¹³	≥5.0×10 ¹³	≥5.0×10 ¹³	≥5.0×10 ¹³	≥5.0×10 ¹³
Density	g/cm	1.6	1.6	1.6	1.3	1.75	1.85	1.85	1.85	1.85
Tensile Strength	psi	10	10	20	48	48	30	30	≥200	≥300
Elongation	%	35	40	50	55	60	55	55	15	15
Compression Ratio (% at given pressure)	10psi	22	25	15	12	10	8	18	18	32
	50psi	54	60	40	40	42	38	46	46	58
	100psi	75	86	58	58	58	55	62	62	82
Dielectric Constant	@1MHz	5.5	5.5	5.5	4.5	5.5	6.2	6.2	6.2	6.2
Low Volatile Content (D4~D20)	ppm	–	–	–	–	–	–	–	–	–
TML(CVCM)	%	≤0.35(0.12)	≤0.35(0.12)	≤0.35(0.12)	≤0.55(0.25)	≤0.35(0.10)	≤0.55(0.10)	≤0.55(0.10)	≤0.55(0.10)	≤0.55(0.10)
Operating Temperature	°C	-60~+200	-60~+200	-60~+200	-60~+200	-60~+200	-60~+200	-60~+200	-60~+200	-60~+200
RoHS		YES	YES	YES	YES	YES	YES	YES	YES	YES



TFP-series | 2.2 – 3.0 W/mK

Specifications Table

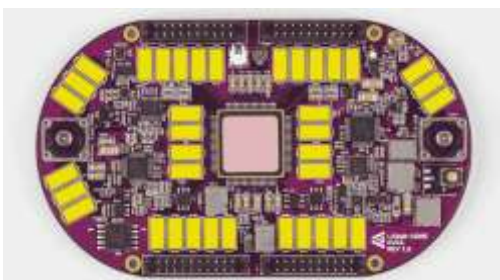
Parameters	Unit of Measure	TFP2250	TFP2225	TFP2240LV	TFP2850	TFP2830HT	TFP3050	TFP3035LV	TFP3045LD	TFP3025LB
Colour	–	Black	Grey	Grey	Light Blue	Light Blue	Grey	Light Blue	Violet	Light Blue
Thickness	mm	0.15~10	0.15~10	0.15~10	0.2~10	0.2~10	0.2~10	0.2~10	0.3~10	0.2~10
Thermal Conductivity	W/m·K	2.2	2.2	2.2	2.8	2.8	3	3	3	3
Thermal Resistance @1mm, 20psi	°C·in²/W	0.75	0.65	0.7	0.46	0.42	0.42	0.42	0.35	0.42
	°C·cm²/W	4.85	4.19	4.52	2.97	2.7	2.71	2.71	2.26	2.71
Hardness	Shore00	50	25	40	50	30	50	35	45	25
Flammability Rating		V0	V0	V0	V0	V0	V0	V0	V0	V0
Breakdown Voltage	kV(@1mm)	>9.0	>9.0	≥10.0	>9.0	>9.0	>9	>9.0	>10	>9.0
Volume Resistivity	Ω ·cm	≥3.0×10 ¹³	≥3.0×10 ¹³	≥3.0×10 ¹³	≥1.0×10 ¹³	≥1.0×10 ¹³	≥1.0×10 ¹³	≥1.0×10 ¹³	≥2.0×10 ¹³	≥1.0×10 ¹³
Density	g/cm³	2.6	2.6	2.6	3	3	3	3	1.6	3
Tensile Strength	psi	36	32	/	60	50	52	35	40	50
Elongation	%	55	58	/	55	58	57	58	65	58
Compression Ratio (% at given pressure)	10psi	12	28	15	12	25	12	20	25	23
	50psi	42	55	47	35	52	42	48	52	50
	100psi	58	86	69	48	84	56	75	85	83
Dielectric Constant	@1MHz	7.5	7.5	7.5	5.5	5.5	5.5	5.5	3	5.5
Low Volatile Content (D4 - D20)	ppm	–	–	–	–	–	–	–	<80	–
TML(CVCM)	%	≤0.32(0.08)	≤0.32(0.08)	≤0.32(0.08)	≤0.20(0.05)	≤0.20(0.05)	≤0.18(0.05)	≤0.20(0.05)	≤0.15(0.05)	≤0.20(0.05)
Operating Temperature	°C	-60~+200	60~+200	-60~+200	-60~+200	-60~+200	-60~+200	-60~+200	-60~+200	-60~+200
RoHS		YES	YES	YES	YES	YES	YES	YES	YES	YES



TFP-series | 3.5 – 5.1 W/mK

Specifications Table

Parameter	Unit of Measure	TFP3550	TFP3525	TFP3525PM	TFP4025	TFP5045	TFP5155	TFP5150LV	TFP5125
Colour	–	Pink	Pink	Pink	Yellow	Light Green	Grey	Grey	Grey
Thickness	mm	0.25~10	0.25~10	0.25~10	0.25~10	0.25~10	0.25~10	0.25~10	0.25~10
Thermal Conductivity	W/m-K	3.5	3.5	3.5	4	5	5.1	5.1	5.1
Thermal Resistance @1mm, 20psi	°C·in ² /W	0.39	0.35	0.45	0.37	0.27	0.27	0.27	0.24
	°C·cm ² /W	2.51	2.26	2.9	2.39	1.74	1.74	1.74	1.55
Hardness	Shore00	50	25	25	25	45	55	50	25
Flammability Rating		V0	V0	V0	V0	V0	V0	V0	V0
Breakdown Voltage	kV(@1mm)	>10	>10	>15	>10.0	>9	>9	>9	>9
Volume Resistivity	Ω·cm	≥1.0×10 ¹³	≥1.0×10 ¹³	≥1.0×10 ¹³	≥1.0×10 ¹³	≥1.0×10 ¹³	≥1.0×10 ¹³	≥1.0×10 ¹³	≥1.0×10 ¹³
Density	g/cm ³	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
Tensile Strength	psi	35	26	30	42	45	52	52	52
Elongation	%	42	45	45	48	50	50	50	50
Compression Ratio(% , at given pressure)	10psi	13	16	14	15	13	12	12	15
	50psi	36	48	45	42	35	32	32	38
	100psi	52	62	58	56	55	50	50	60
Dielectric Constant	@1MHz	5.5	5.5	5.5	6.5	6	6.5	6	6.5
Low Volatile Content (D4~D20)	ppm	–	–	–	–	–	–	–	–
TML(CVCM)	%	≤0.20(0.05)	≤0.20(0.05)	≤0.20(0.05)	≤0.20(0.05)	≤0.15(0.04)	≤0.15(0.04)	≤0.15(0.04)	≤0.15(0.04)
Operating Temperature	°C	-60~+200	60~+200	-60~+200	-60~+200	-60~+200	-60~+200	-60~+200	-60~+200
RoHS		YES	YES	YES	YES	YES	YES	YES	YES



Specifications Table

Parameters	Unit of Measure	TFP6055	TFP6025RB	TFP8050	TFP8050UV	TFP8005	TFP8025	TFPX055	TFPX255	TFPX560
Colour	–	Grey	Burgundy	Grey	Light Grey	Light Grey	Light Grey	Grey	Grey	Grey
Thickness	mm	0.3~10	0.3~10	0.3~10	0.3~10	0.5~10	0.3~10	0.3~10	0.3~10	0.5~10
Thermal Conductivity	W/m-K	6	6	8	8	8	8	10	12	15
Thermal Resistance @1mm, 20psi	°C·in ² /W	0.26	0.24	0.25	0.25	0.2	0.22	0.21	0.19	0.17
	°C·cm ² /W	1.68	1.55	1.61	1.61	1.29	1.03	1.48	1.41	1.29
Hardness	Shore00	55	25	50	50	5	25	55	55	60
Flammability Rating		V0	V0	V0	V0	V0	V0	V0	V0	V0
Breakdown Voltage	kV(@1mm)	>9.0	>9.0	>8.0	>8.0	>6	>8	>6	>6	>6
Volume Resistivity	Ω·cm	≥1.0×10 ¹²	≥1.0×10 ¹²	≥1.0×10 ¹¹	≥1.0×10 ¹¹	≥1.0×10 ¹¹	≥1.0×10 ¹¹	≥1.0×10 ⁹	≥1.0×10 ⁹	≥1.0×10 ⁹
Density	g/cm ³	3.1	3.15	3.07	3.3	3.3	3.3	3.35	3.17	3.27
Tensile Strength	psi	52	52	40	40	20	25	30	30	30
Elongation	%	50	50	45	45	40	40	25	25	25
Compression Ratio (% at given pressure)	10psi	11	15	8	8	20	15	12	8	8
	50psi	30	38	26	26	45	35	25	23	22
	100psi	48	60	42	42	80	65	42	39	36
Dielectric Constant	@1MHz	6.5	6.5	13.5	8.5	6.5	6.5	8.5	8.5	8.5
Low Volatile Content (D4~D20)	ppm	–	–	<20	<20	<20	<20	–	<20	<20
TML(CVCM)	%	≤0.15(0.04)	≤0.15(0.04)	≤0.15(0.05)	≤0.15(0.05)	≤0.25(0.08)	≤0.25(0.08)	≤0.15(0.08)	≤0.12(0.05)	≤0.12(0.05)
Operating Temperature	°C	-60~+150	-60~+150	-60~+150	-60~+150	-60~+150	-60~+150	-60~+150	-60~+150	-60~+150
RoHS		YES	YES	YES	YES	YES	YES	YES	YES	YES

