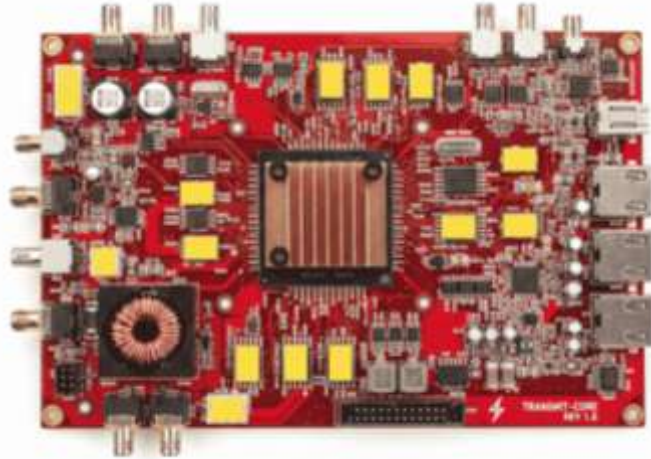


NFP-series 2.0 – 10.0 W/mK



Product Highlights

- Thermal Conductivity 2.0 ~ 10.0 W/mK
- Silicone-free, for silicone sensitive applications
- Soft, good dielectric and thermal performance
- UL94 V-0 flame retardant
- Thickness: 0.5mm ~10.00mm

Applications

- Optical communications
- Aerospace / avionics
- Projection equipment
- Lighting Control equipment
- Disk Drives (HDD / SDD)
- Camera

The NFP series material is a high-performance, compressible, silicone-free thermal pad engineered for applications sensitive to silicone. It is well-suited for environments where silicone contamination is a concern, offering low volatility, no silicone oil migration, and reliable protection against PCB circuit contamination.

The NFP series features a soft texture, high compressibility, and exceptional surface wetting ability, resulting in very low thermal resistance between heat-generating components and heat sinks or housings. These properties make it an ideal solution for applications where conventional silicone-

The material possesses natural tackiness on both sides, removing the need for extra adhesive layers. This inherent stickiness keeps the pad firmly in place during assembly and operation, simplifying handling and streamlining the processing and installation of heat-sensitive components.

NFP-series 2.0 – 10.0 W/mK

Specifications Table

Parameters	Unit of Measure	NFP2060	NFP3060	NFP4055	NFP6075	NFP8075	NFPX040
Colour	–	White	Light Blue	Blue Violet	Grey	Grey	Grey
Thickness	mm	0.25~10	0.3~10	0.3~10	0.5~10	0.5~10	0.5~10
Thermal Conductivity	W/m·K	2	3	4	6	8	10
Thermal Resistance @1mm, 20psi	°C·in ² /W	0.7	0.42	0.42	0.26	0.26	0.24
	°C·cm ² /W	4.52	2.71	2.71	1.68	1.68	1.55
Hardness	Shore OO	60	60	55	70	75	40
Flammability Rating		V0	V0	V0	V0	V0	V0
Breakdown Voltage	kV@1mm	>9.0	>9	>9	>9	>9	>8
Volume Resistivity	Ω·cm	≥1.0×10 ¹⁴	≥1.0×10 ¹³	≥1.0×10 ¹³	≥1.0×10 ¹³	≥1.0×10 ¹³	≥1.0×10 ¹³
Density	g/cm ³	2.4	2.8	1.6	3.32	3.35	3.55
Tensile Strength	psi	36	30	32	32	32	30
Elongation	%	55	60	50	50	50	40
Compression Ratio (% at given pressure)	10psi	8	12	12	9	9	13
	50psi	20	42	35	28	28	35
	100psi	35	56	62	45	45	52
Dielectric Constant	@1MHz	6.5	5.5	3.5	6.5	6.5	6
Operating Temperature	°C	-40~+110	-40~+110	-40~+110	-40~+120	-40~+120	-40~+120
RoHS	–	YES	YES	YES	YES	YES	YES