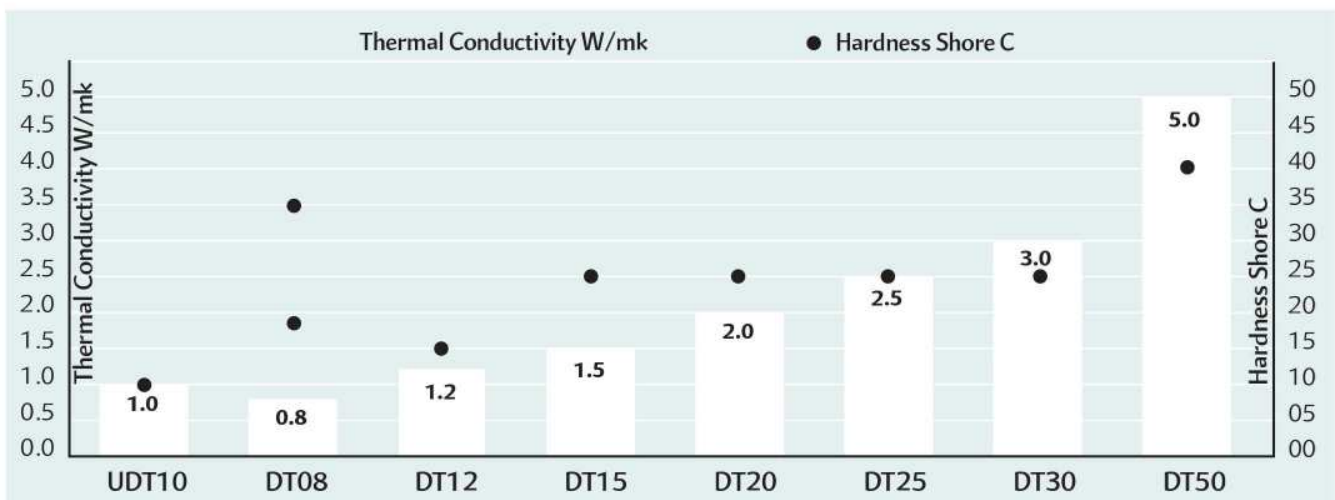


THERMAL PADS

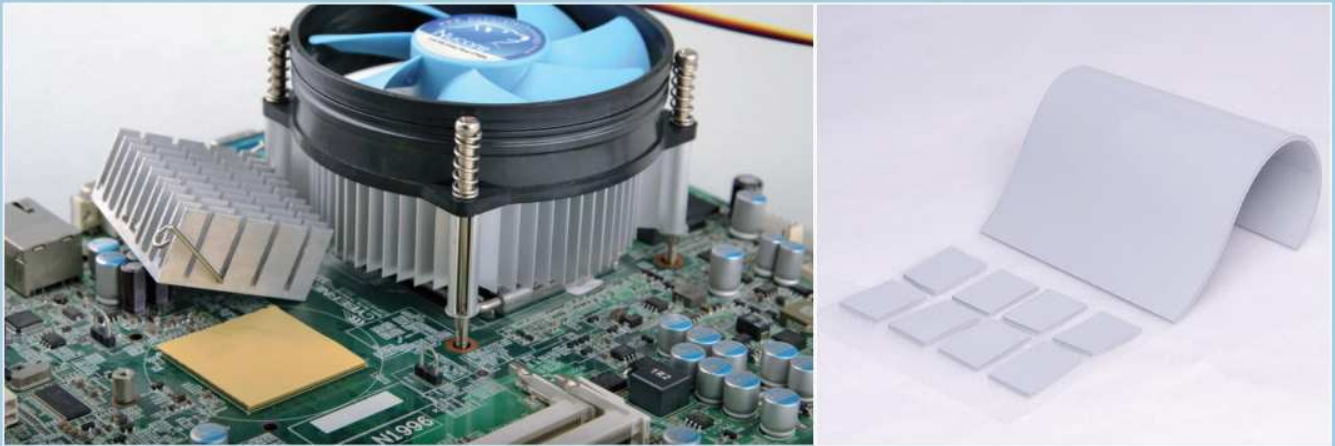
DiaTherm™ pads are constructed from an innovative and advanced silicone rubber with high thermal conductivity and exceptional dielectric strength. They are available in thicknesses from 0.5 to 12 mm, and this universally applicable material can be used in an unlimited number of thermal management configurations. The pads provide great conformability, easy application and can be die-cut to fit most applications. They are available as dry pads, or with an optional pressure sensitive adhesive tape for attachment. The pads are UL94 V-0, RoHS and REACH compliant.

Specifications and benefits

- Thermal conductivity: 0.8 to 5.0 W/mK
- Cost effective solution at competitive price
- Custom die-cut parts: custom configurations available
- Soft and naturally sticky
- Electrically insulating
- No drying out, bleeding oil or hidden air (like thermal paste)
- Long life time
- UL 94-V0 approval up to 150 C°
- Optional 3M tape on one or both sides
- High dielectric breakdown of up to 6.5 kV/mm

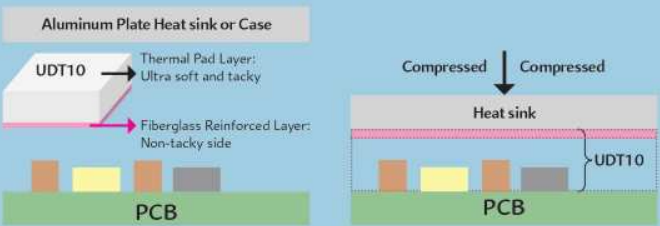


THERMAL PADS



DIATHERM THERMAL PADS

Properties	Unit	UDT10	DT08	DT12	DT15	DT20	DT25	Test Method
Composition		Silikone & fiberglas		Silicone & ceramic filled				
Colour		Pink & white	Grey	Pink	Dark grey	Dark grey	Light yellow	
Thickness range	mm	0.5 - 12.0	0.5 - 12.0	0.5 - 12.0	0.5 - 12.0	0.5 - 6.0	0.5 - 5.0	
Hardness	Shore C	10	18 or 35	15	25	25	25	ASTM D2240
Density	g/ml	2	2	2.3	2.5	2.79	2.93	ASTM D792
Tensile strength	KN/m	2.5	1.3	1	0.5	0.33	0.4	ASTM D412
Elongation	%	60	1.35	70	70	78	72	ASTM D412
Temperature range	°C	-40 to 150						
Breakdown voltage	kV/mm	≥6.0	≥4.0	≥6.5	≥5.0	≥6.0	≥5.0	ASTM D149
Volume impedance	ohm*cm	6.2*10 ¹⁵	1.7*10 ¹⁶	3.5*10 ¹²	8.0*10 ¹⁵	1.1*10 ¹⁶	3.2*10 ¹⁶	ASTM D257
Dielectric constant	@ 1 MHz	5.27	4.51	3.87	5.75	5.75	6.3	ASTM D150
Weight dampify	%	≥1	≥1	≥1	≥0.3	≥0.3	≥0.5	@ 150 °C 240H
Thermal conductivity	W/mK	1	0.8	1.2	1.5	2	2.5	ASTM E1461
Thermal Resistance @ 40 psi	°C-in ² /W	1.267 @ 0.5 mm 1.907 @ 1.0 mm	DT08/H18: 0.968 @ 0.5 mm DT08/H35: 1.483 @ 0.5 mm DT08/H18: 1.713 @ 1.0 mm DT08/H45: 2.324 @ 1.0 mm	1.118 @ 1.0 mm	0.681 @ 0.5 mm 1.099 @ 1.0 mm	0.425 @ 0.5 mm 0.824 @ 1.0 mm	0.355 @ 0.5 mm 0.542 @ 1.0 mm	
Compliances		UL 94 V-0, RoHS, REACH						
Sheet sizes		Standard: 200*400 mm	Standard: 200*400 mm 330*330 mm	Standard: 200*400 mm	Standard: 200*400 mm	Standard: 200*400 mm 330*330 mm	Standard: 200*400 mm 330*330 mm	
Custom configurations		Custom die-cut parts available. Available with acrylic PSA tape for improved application on one or both sides: • 3M Double Coated Tape 9448HK (will make the pad 0.15 mm thicker on both sides) • 3M Transfer Tape 3M467 (will make the pad 0.06 mm thicker on both sides)						



Fiberglass reinforcement on one side. Extremely soft and naturally tacky on unreinforced side that very easily conforms in and around protrusions and depressions on components to make complete, reliable physical contact.

$$W_x = \sum_{jeR} \eta(\chi, i) \pi_j$$

THERMAL PADS



DIATHERM THERMAL PADS

Properties	Unit	DT30	DT50	Test Method
Composition		Silicone & ceramic filled		
Colour		Light blue	Grey red	
Thickness range	mm	0.5 - 5.0	0.5 - 5.0	
Hardness	Shore C	25	40	ASTM D2240
Density	g/ml	2.7	3.5	ASTM D792
Tensile strength	KN/m	0.3	1.0	ASTM D412
Elongation	%	64	80	ASTM D412
Temperature range	°C	-40 to 150		
Breakdown voltage	kV/mm	≥5.0	≥6.0	ASTM D149
Volume impedance	ohm*cm	1.1*10 ¹⁶	1.1*10 ¹⁶	ASTM D257
Dielectric constant @ 1 MHz		7.15	6.4	ASTM D150
Weight dampify	%	≥0.3	≥0.5	@ 150 °C 240H
Thermal conductivity	W/mK	3.0	5.0	ASTM E1461 DT50: ASTM D5470
Thermal Resistance @ 40 psi	C-in ² /W	0.291 @ 0.5 mm 0.417 @ 1.0 mm	-	
Compliances		UL 94 V-0, RoHS, REACH		
Sheet sizes		Standard: 200*400 mm 330*330 mm	Standard: 200*400 mm	

Custom configurations

Custom die-cut parts available. Available with acrylic PSA tape for improved application on one or both sides:

- 3M Double Coated Tape 9448HK (will make the pad 0.15 mm thicker on both sides)
- 3M Transfer Tape 3M467 (will make the pad 0.06 mm thicker on both sides)

