THERMAL INTERFACE MATERIALS

***KOOL-PADS® KA150-2AC**. Provides an efficient method of mounting heatsinks on to devices such as CPUs, DIL/SMT packages and other similar devices requiring effective transfer of generated heat. Highly conductive aluminium foil with adhesive applied to both sides negates the need for clips or any other form of mechanical fixing in applications where electrical isolation is **not** required. Supplied in 300 x 300mm sheets.*

Specification
Thermal Resistance - 0.49°C/W
Thickness - 0.16mm
Colour - Grey

300 x 300mm Sheet

Manf. Part No.	Anglia Order Code
KA150-2AC-30X30	471953

***KOOL-PADS® K177**. Silicone rubber compound coated on to a layer of woven glass fibre, providing a strong and flexible insulator which will not crack, age or become contaminated. Flame retardant to UL94V-0. Supplied in sheets or pre-cut specifically for the packages shown below.*

Specification
Thermal Resistance - 0.45°C/W
Thermal Conductivity - 0.79W/m-K
Voltage Breakdown - 3500Vrms
Thickness - 0.177mm
Colour - Grey

300 x 300mm Sheet

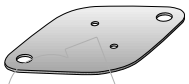
	Manf. Part No.	Anglia Order Code
Non-adhesive	K177-NA-30X30	471938

TO220

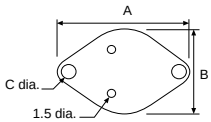
	Manf. Part No.	Anglia Order Code
Non-adhesive	K177-NA-353	471935
Adhesive coating	K177-AC-353	471939
Non-adhesive, clip mount (no hole)	K177-NA-819	471949

TO3P/TO247

	Manf. Part No.	Anglia Order Code
Non-adhesive	K177-NA-403	471936
Adhesive coating	K177-AC-403	471940
Non-adhesive, clip mount (no hole)	K177-NA-706	471950



TO3



	Size (mm) A	B	C	Manf. Part No.	Anglia Order Code
Non-adhesive	40.5	28	3.9	K177-NA-032	471937A
Non-adhesive	42	29	3.8	K177-NA-065	471937
Adhesive coating	42	29	3.8	K177-AC-065	471941

***KOOL-PADS® K200**. Cost-effective, low thermal resistance insulating material. Coated glass fibre loaded with silicone compound. Flame retardant to UL94V-0. Supplied in sheets or pre-cut specifically for the packages shown below.*

Specification
Thermal Resistance - 0.28°C/W
Thermal Conductivity - 1.3W/m-K
Voltage Breakdown - 1000Vrms
Thickness - 0.2mm
Colour - Light green

300 x 300mm Sheet

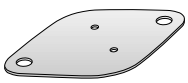
	Manf. Part No.	Anglia Order Code
Non-adhesive	K200-NA-30X30	471945

TO220

	Manf. Part No.	Anglia Order Code
Non-adhesive	K200-NA-353	471942
Adhesive coating	K200-AC-353	471946
Non-adhesive, clip mount (no hole)	K200-NA-819	471952

TO3P/TO247

	Manf. Part No.	Anglia Order Code
Non-adhesive	K200-NA-403	471943
Adhesive coating	K200-AC-403	471947
Non-adhesive, clip mount (no hole)	K200-NA-706	471951



TO3

	Manf. Part No.	Anglia Order Code
Non-adhesive	K200-NA-065	471944
Adhesive coating	K200-AC-065	471948

FOR SUITABLE HEATSINKS SEE PAGES 412-423

THERMAL INTERFACE MATERIALS *continued*

***KOOL-PADS® CM20**. 98% graphite offering a dry alternative to thermal compounds. Designed for high power applications where electrical isolation is **not** required. Supplied in sheets or pre-cut specifically for the packages shown below.*

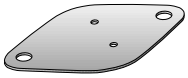
Specification
Thermal Resistance - 0.07°C/W
Thermal Conductivity - 3.85W/m-K
Thickness - 0.2mm
Colour - Dark metallic

300 x 300mm Sheet

	Manf. Part No.	Anglia Order Code
Non-adhesive	CM20-NA-30X30	***471957***

TO220

	Manf. Part No.	Anglia Order Code
Non-adhesive, clip mount (no hole)	CM20-NA-819	***471961***



TO3

	Manf. Part No.	Anglia Order Code
Non-adhesive	CM20-NA-213	***471956***
Adhesive coating	CM20-AC-213	***471960***

TO3P/TO247

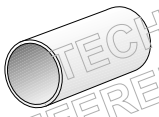
	Manf. Part No.	Anglia Order Code
Non-adhesive	CM20-NA-403	***471955***
Adhesive coating	CM20-AC-403	***471959***
Non-adhesive, clip mount (no hole)	CM20-NA-706	***471962***

TO202

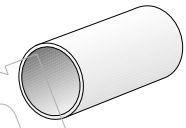
	Manf. Part No.	Anglia Order Code
Non-adhesive	CM20-NA-314	***471954***
Adhesive coating	CM20-AC-314	***471958***

***THERMAFLEX®** tube is designed to be slipped over the device before clip application. Gives good thermal performance and high levels of electrical isolation. Supplied specifically for the packages shown below.*

Specification
Thermal Resistance - 0.92°C/W
Thermal Conductivity - 1.6W/m-K
Voltage Breakdown - 7000Vrms
Colour - Grey

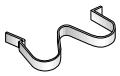


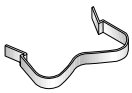
TO220 — Manf. Part No. THER-T-SMALL — Anglia Order Code ***471969***



TO3P/TO247 — Manf. Part No. THER-T-LARGE — Anglia Order Code ***471970***

CLIPS





	Suitability	Manf. Part No.	Anglia Order Code
Suitable for use with panels up to 1.2mm and pads up to 0.2mm thickness. Max. force = 5.5kg. Zinc plated with clear passivated finish.	TO220	TSC802	***471963***
Nylon coated gull wing clip for mounting **two** devices onto any panel or pad thickness. Max. force = 7.5kg/device. Gives up to 3500V isolation from transistor tab.	TO220	TSC607-NY	***471965***
Gull wing clip designed for use with KOOL-PAD® K177/200-NA-819 on any panel. Max. force = 12kg. Zinc plated with clear passivated finish. Max. isolation 1000V from transistor tab.	TO220	TSC209-ZP	***471967***
Industry standard clip for retaining TO220 or similar devices to custom heatsinks.	TO220	CLP-101	***CLP-101***
Suitable for use with panels up to 2mm and pads up to 0.2mm thickness. Max. force = 10kg. Zinc plated with clear passivated finish.	TO3P/TO247	TSC903	***471964***
Nylon coated gull wing clip for mounting **two** devices onto any panel or pad thickness. Max. force = 11kg/device. Gives up to 3500V isolation from transistor tab.	TO3P/TO247	TSC506-NY	***471966***
Gull wing clip designed for use with KOOL-PAD® K177/200-NA-706 on any panel. Max. force = 15kg. Zinc plated with clear passivated finish. Max. isolation 1000V from transistor tab.	TO3P/TO247	TSC405-ZP	***471968***

AAVID THERMALLOY

INSULATOR KITS

Comprise of a silicone insulating washer and bush(es).

Suitability	Manf. Part No.	Anglia Order Code
TO220 (fixing hole)†	K177-353BQ2840	***471930***
TO3P only	K177-235BQ35	***471933***
TO3P/TO247	K177-872BQ35	***471934***
TO3†	K177-065BQ35	***471931***
TO126	K177-679BQ57	***471932***

† CEL version also available (see page 425).
Please specify preferred supplier when ordering.

FOR SUITABLE HEATSINKS SEE PAGES 412-423

Bergquist Thermal Interface Materials *shown overleaf > > > >*

THERMAL INTERFACE MATERIALS

HI-FLOW™ 105. *"Phase change" polymer coated aluminium designed to replace grease as a thermal interface. For use in applications where electrical isolation is* ***not*** *required. At 65°C, Hi-Flow changes from solid and flows, ensuring total surface contact. Supplied with adhesive coating, in sheets or pre-cut specifically for the packages shown below.*

Specification
Thermal Resistance - 0.05°C/W
Thermal Conductivity - 0.9W/m-K
Colour - Black

100 x 100mm Sheet

Manf. Part No.	Anglia Order Code
105AC-100X100	471900

TO220

Manf. Part No.	Anglia Order Code
105AC-54	471901

TO3P/TO247

Manf. Part No.	Anglia Order Code
105AC-104	471902

HI-FLOW™ 625. *Film reinforced "phase change" material. At 65°C, the thermally conductive compound changes from solid and flows, ensuring total surface contact. For use in applications where good electrical isolation is required. Supplied with adhesive coating, in sheets or pre-cut specifically for the packages shown below.*

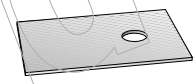
Specification
Thermal Resistance - 0.25°C/W
Thermal Conductivity - 0.8W/m-K
Voltage Breakdown - 4000Vrms
Colour - Light green

100 x 100mm Sheet

Manf. Part No.	Anglia Order Code
625AC-100X100	471903

TO220

Manf. Part No.	Anglia Order Code
625AC-54	471904



TO3P/TO247

Manf. Part No.	Anglia Order Code
625AC-104	471905

Sil-Pad 900-S®. *A material with high thermal conductivity, high breakdown voltage, low mounting pressure and reduced capacitive coupling. Supplied pre-cut specifically for the packages shown below.*

Specification
Thermal Resistance - 0.2°C/W
Thermal Conductivity - 1.6W/m-K
Voltage Breakdown - 5500Vrms
Thickness - 0.23mm
Colour - Salmon

TO220

	Manf. Part No.	Anglia Order Code
Fixing hole (illus.)	SP900S-54	471907
Clip mount (no hole)	SP900S-43	471906

FOR SUITABLE HEATSINKS SEE PAGES 412-423

THERMAL INTERFACE MATERIALS *continued*

***Sil-Pad K-6®**. Silicone elastomer coated, thermally conductive medium performance insulator. Puncture resistant with a high breakdown voltage. Supplied in sheets or pre-cut specifically for the packages shown below.*

Specification
Thermal Resistance - 0.3°C/W
Thermal Conductivity - 1.1W/m-K
Voltage Breakdown - 6000Vrms
Thickness - 0.15mm
Colour - Blue/green

300 x 300mm Sheet

Manf. Part No.	Anglia Order Code
K6-300X300	471971

TO220

Manf. Part No.	Anglia Order Code
K6-54	471972

TO3P/TO247

Manf. Part No.	Anglia Order Code
K6-104	471973

***Sil-Pad K-10®**. High performance insulator. Special film with filled silicone rubber construction giving excellent thermal characteristics and a high breakdown voltage. Supplied in sheets or pre-cut specifically for the packages shown below.*

Specification
Thermal Resistance - 0.2°C/W
Thermal Conductivity - 1.3W/m-K
Voltage Breakdown - 6000Vrms
Thickness - 0.15mm
Colour - Beige

300 x 300mm Sheet

Manf. Part No.	Anglia Order Code
K10-300X300	471974

TO220

Manf. Part No.	Anglia Order Code
K10-54	471975

TO3P/TO247

Manf. Part No.	Anglia Order Code
K10-104	471976

***Sil-Pad 2000®**. High performance/high reliability insulator designed for demanding applications such as military, aerospace and high integrity commercial requirements. Specially filled silicone elastomer maximises thermal and dielectric performance and is capable of meeting or exceeding the requirements of high reliability packaging applications. Conforms to applicable military standards. Supplied in sheets or pre-cut specifically for the packages shown below.*

Specification
Thermal Resistance - 0.2°C/W
Thermal Conductivity - 3.5W/m-K
Voltage Breakdown - 4000Vrms
Thickness - 0.38mm
Colour - White

150 x 150mm Sheet

Manf. Part No.	Anglia Order Code
SP2000-150x150	471977

TO220

Manf. Part No.	Anglia Order Code
2015-54	471978

TO3P/TO247

Manf. Part No.	Anglia Order Code
2015-104	471979

FOR SUITABLE HEATSINKS SEE PAGES 412-423

Bergquist Thermal Interface Materials
continued overleaf > > > >

THERMAL INTERFACE MATERIALS *continued*

***Q-Pad 3®**. Elastomer coated, glass fibre reinforced interface designed to conform to the clamping surface textures, creating an air free environment. The material offers good thermal characteristics in applications where electrical isolation is **not** required. Supplied with adhesive coating, in sheets or pre-cut specifically for the packages shown below.*

Specification
Thermal Resistance - 0.1°C/W
Thermal Conductivity - 1.6W/m-K
Thickness - 0.15mm
Colour - Black

300 x 300mm Sheet

Manf. Part No.	Anglia Order Code
Q3AC-300X300	***471980***

TO220

	Manf. Part No.	Anglia Order Code
Size 18 x 12.7mm	Q3AC-35	***471982***
Size 22 x 18.8mm	Q3AC-90	***471981***

TO3

Manf. Part No.	Anglia Order Code
Q3AC-05	***471983***

***Gap Pad V0™**. Highly conformable interface manufactured from polymer on a glass fibre carrier. Available in a choice of thicknesses, the interface may be used in a wide variety of applications where surface textures vary, resulting in uneven spaces between mating areas. Supplied in sheets.*

Specification
Thermal Conductivity - 0.8W/m-K
Voltage Breakdown - 6000Vrms
Colour - Yellow/pink

100 x 100mm Sheet

Thickness	Thermal Resistance	Manf. Part No.	Anglia Order Code
1.5mm	3.0°C/W	GPD-1.5-100X100	***471984***
2.0mm	4.0°C/W	GPD-2.0-100X100	***471985***
3.2mm	6.2°C/W	GPD-3.2-100X100	***471986***

***Gap Pad V0 Soft™**. Recommended for low stress applications such as as an interface where one side is in contact with a leaded device. Manufactured from polymer on a glass fibre carrier, the material is highly conformable in situations where uneven spaces between mating areas exist. Supplied in sheets and available in a choice of thicknesses.*

Specification
Thermal Conductivity - 0.8W/m-K
Voltage Breakdown - 6000Vrms
Colour - Mauve/pink

100 x 100mm Sheet

Thickness	Thermal Resistance	Manf. Part No.	Anglia Order Code
1.5mm	3.0°C/W	GPS-1.5-100X100	***471987***
3.2mm	6.2°C/W	GPS-3.2-100X100	***471988***
4.0mm	8.0°C/W	GPS-4.0-100X100	***471994***

***Gap Pad™ 1500**. High performance conformable polymer on a glass fibre carrier. Available in a choice of thicknesses, the interface finish gives good compliance to adjacent surfaces and may be used in a wide variety of applications where mating areas are uneven.*

Specification
Thermal Conductivity - 1.5W/m-K
Voltage Breakdown - 6000Vrms
Colour - Pink

100 x 100mm Sheet

Thickness	Thermal Resistance	Manf. Part No.	Anglia Order Code
1.5mm	1.6°C/W	GP1K5-1.5-100X100	***471989***
3.2mm	3.3°C/W	GP1K5-3.2-100X100	***471990***
4.0mm	4.2°C/W	GP1K5-4.0-100X100	***471991***

***Gap Pad™ 2000**. High performance, highly conductive conformable polymer on a glass fibre carrier with excellent compliance to adjacent surfaces. Choice of thicknesses make it suitable in a wide range of applications where mating areas are uneven.*

Specification
Thermal Conductivity - 2.0W/m-K
Voltage Breakdown - 5000Vrms
Colour - Grey

100 x 100mm Sheet

Thickness	Thermal Resistance	Manf. Part No.	Anglia Order Code
1.5mm	1.1°C/W	GP2K0-1.5-100X100	***471992***
3.2mm	2.5°C/W	GP2K0-3.2-100X100	***471993***

FOR SUITABLE HEATSINKS SEE PAGES 412-423