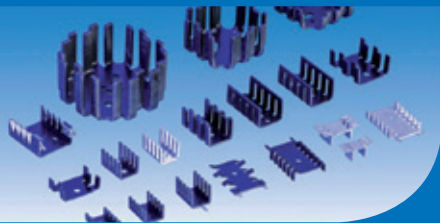


Thermal Management



ASSMANN
WSW components



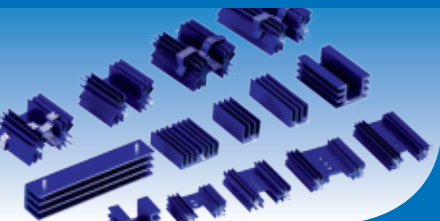
Finger- and U-shaped heatsinks

Heat sinks for package	TO-220/ TO-3/ TO-3x/ SOT-32
Thermal resistance:	7 K/W – 80 K/W
Mounting options:	THT, screw mounted
Mounting direction:	180°, 90°
Surface:	AL degreased, anodized, tinned
Material:	AL1050, AL1100, AL99.5
Packaging:	Polybags, carton, tray and T&R
Special:	Threads, holes, cut outs



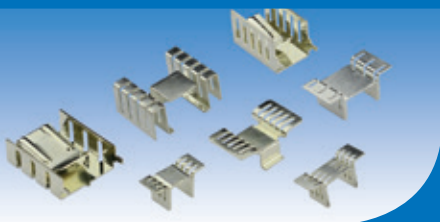
Attachable heatsinks

Heat sink for package	TO-220/ TO-218
Thermal resistance:	13 K/W – 63 K/W
Mounting options:	THT, spring force
Mounting direction:	180°, 90°
Surface:	AL degreased, anodized, tinned
Material:	AL 1050, AL1100, AL99.5, CU1100
Packaging:	Polybags, carton, tray and T&R
Special:	Threads, holes, cut outs



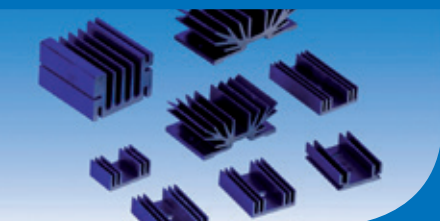
Extruded heatsinks with solder pins

Heat sinks for package	TO-220 / TO-3x / SOT-32
Thermal resistance:	3,5 K/W – 38 K/W
Mounting options:	THT, screw mounted
Mounting direction:	180°, 90°
Surface:	AL degreased, anodized, tinned solder pins
Material:	AL6063
Packaging:	Carton, tray
Special:	Retaining clamps, pressed in solder pins



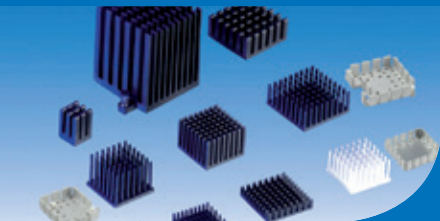
SMD and copper heatsinks

Heat sinks for D-PAK-Series and TO-220 packages	
Thermal resistance:	11 K/W – 24 K/W
Mounting options:	SMD & spring force
Mounting direction:	180°, 90°
Surface:	Tinned
Material:	CU1100
Packaging:	Polybags, carton, tray and T&R
Special:	Complete tinned surface finish



Extruded heatsinks in standard length

Heatsinks for DIL-IC devices/ TO-220/ TOP-3/ TO-5	
Thermal resistance:	1.5 K/W – 40 K/W
Mounting options:	Screw mounted
Mounting direction:	180°, 90°
Surface:	AL degreased, anodized
Material:	AL6063, AL6060
Packaging:	Carton
Special:	Profiles with M3 threats (extruded), standard hole patterns



CPU heatsinks

Heatsinks for processor/ BGA/ PGA

Thermal resistance: 3.7 K/W – 32 K/W

Mounting options: THT, Push Pins, thermal adhesive pads, glue

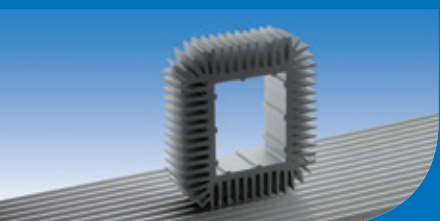
Mounting direction: 180°

Surface: AL degreased, anodized

Material: AL6063, AL1050, AL5052

Packaging: Carton, tray, T&R

Special: Cross Cut-, Pin Fin- or Stamped heat sink version/ with or without mounted thermal pads



Profile extruded heatsinks

Standard profile heatsinks with customer tailored mechanical treatment

Thermal resistance: Pending on material and design of profile

Mounting options: Screw mounted, clip

Mounting direction: 180°, 90°

Surface: AL degreased, anodized

Material: AL6063, AL6060

Packaging: Carton, tray

Special: Milling, drilling, turning, polishing and anodizing according to customer requirement



Retaining springs

Customer specific and product specific fixing solutions

Mounting options: Manual mounting process

Surface: Degreased, zincd

Material: Spring steel SUS301, SK85M

Packaging: Polybag

Special: ASSMANN WSW clip system, high contact press force, cost saving assembly process



Mounting accessories

Single-component-adhesive, thermal compound, thermal conductive ceramic pads, insulating washers, stand-offs, insulating mica wafers

Type of adhesive: Single-component-adhesive in 30g plastic pen with screw top or 3g tube with screw top

Thermal compound: Silicon thermal or non-silicon-thermal compound based on 15g up to 25kg size packaging, temperature range -40 – +150°C

Thermal conductive pads: Material: glass fiber reinforced ceramic silicon pads, material C20, temperature range -60°C – +200°C

Insulating washers: Material: SR25, heat resistant up to 215°C

Insulating mica wafers: Material: Polypropylene, heat resistant up to 110°C

Packaging: Tubes, cans, buckets (adhesive & thermal compound)/ polybags (insulating washers & insulating mica wafers)/ tray (foils & pads)



Distance rolls

Distance rolls and spacers

Mounting options: Screw mounted

Mounting direction: 180°

Surface: Zinc-plated (steel-version), nickel-plated (brass-version)

Material: Brass, steel, polyamide

Packaging: Polybag

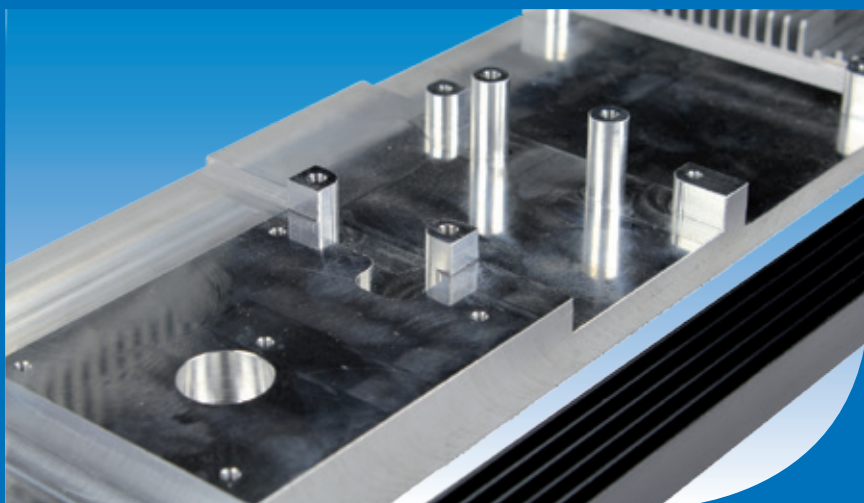
Special: Different lengths and width across flats (5/ 5.5/ 6/ 7/ 8/ 10), various inner threads (M2.5/ M3/ M4/ M5/ M6)



Customer tailored heat sink solutions

Our customized process begins with an analysis of application needs, utilizing a thermal calculation, creating a product that meets your specific needs in fit form and function. The results of the analysis are used to create a sample production and are modified until specifications are met. Then the series production starts for a highly refined customized heat sink. ASSMANN WSW group provides short logistical lead times and cost competitiveness.

We manage the complexities of creating, developing and manufacturing your customized heat sinks. Our customers benefit from our vast range of existing profiles for their application. As added value, ASSMANN WSW components offers a customized treatment tailored to your needs of the final profile which include sawing of the heat sink and CNC machine treatment includes milling, drilling holes and threads, turning or polishing. To give the heat sink its final surface the ASSMANN WSW group offers the anodized for standard and décor. As a standard, AL6060 (European) and AL6063 (Asian) materials are used, however different alloys are available.



Customer tailored heatsinks (based on customized extrusion tools)

Thermal resistance:	Pending on material and design of profile
Mounting options:	Screwing, THT
Mounting direction:	180°
Surface:	Anodized, tinned, untreated
Material:	AL6063, AL6060, AL1050, AL1052, AL5052
Packaging:	Polybag, tray, carton, T&R
Special:	Special decor surfaces available
Manufacturing:	Manufacturing of profile heat sinks in Europe and Asia
Advantages:	Large range of profile extrusion tools available, project management in Germany, competitive manufacturing, long term product experience



Thermal Management

ASSMANN WSW group is the gold standard of thermal management with heat sinks. We have decades of experience in developing, creating and manufacturing heat sinks. Our customers can take advantage of a vast selection of existing customized heat sink profiles.

This increases your profitability by eliminating the need to invest in and maintain new extrusion tools. ASSMANN WSW group has a variety of standard heat sinks based on stamped or extruded base materials readily available, giving your company a wide selection of time

tested products. ASSMANN WSW group is fully invested in the development, creation, and manufacturing of new profiles for close to 50 years. ASSMANN WSW group offers a large spectrum of thermal management products.

Thermal Management
Thermal Management
Thermal Management



always
cool power!

