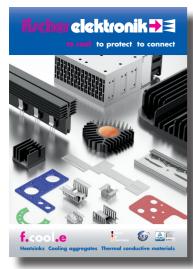
Please send us:



Catalogue **f.cool**Extruded heatsinks
LED heatsinks
Cooling aggregates
Thermally conductive material

company:	_
Attn.:	
Dept.:	
Street:	
Post code/city:	
Phone:	
- ax:	
E-mail:	

Please also send data to following place:

other company:



Catalogue **f.case**Cases
19" technology
Accessories

☐ No, thank you. We do not have any
need for your data. Please remove us from
your mailing list.

We thank you for helping us to avoid waste.

same company to the attention of:



Catalogue f.con

Sockets
Connectors
Brackets



Slip case **f.collect** for collecting Fischer catalogues



to cool to protect to connect

Fischer Elektronik GmbH & Co. KG

Nottebohmstraße 28 58511 Lüdenscheid GERMANY fon +49 2351 435-0 fax +49 2351 45754 info@fischerelektronik.de www.fischerelektronik.de



Desk consoles and shell cases Combination cases/Universal tube cases Miniature aluminium casings **Design cases**



Desk consoles and shell cases

- multi-purpose desk consoles and shell cases made of aluminium; - for the accommodation of non-standard PC boards and components
- with integrated guide grooves with a modular spacing of 1 U
- customized printing of the front panels
- special dimensions, processing and surface finish according to the customers' specification



Miniature aluminium casings

- casing designed as tube or as half shell segments with spring and groove
- with integrated cooling fins
- internal guide groove for accommodating printed circuits or mounting boards
- D-Sub connectors can be mounted without front panel
- cut-outs, special lengths and surfaces finish in accordance with customers specifications



Combination cases and universal tube cases

- suitable for all common Eurocard formats,
- many combinations are possible available as desktop case or for guide rail mounting
- sealed up to protective class IP 54
- design in accordance with EMC by electrically
- conductive surfaces and seals special profiles, special designs and solutions to meet customers' requirements



Design cases

- innovative cases with a striking design with functional properties
- aluminium case suitable for 100 mm Eurocards, non-standardized components or PCBs
- possibility to install front foils,
- membrane keyboards and touch systems individal colour design of the aluminium profiles, front panels and plastic covers



19" system cases 19" subracks 19" plug-in boxes 19" insert modules



19" system cases

- modular design made of aluminium profiles and -sheets for various types of case construction
- outside dimensions identical with subracks, therefore also suitable for an installation in 19" cabinets
- installation of part front or rear panels and BUS backplanes
- all dimensions, dividing possibilities and colours in accordance with customers' specifications



19" plug-in boxes

- for the accommodation of horizontal PCBs or non-standardized components
- from 1 U to 6 U, with or without handle
- side panels made of aluminium sheet or extruded profile
- versatile variants with removable cover and bottom plates
- durable silkscreen print in all common RAL colours
- customer-specific perforation and profile processing



19" subracks

- for standard and EMC applications
- integrated modular rails with positioning aid for accommodating guide rails
- designs with various height units
 large range of accessories and modification possibilities
- rack units with all possibilities of extension individually designed for your specific application



19" insert modules

- integrated T-slots for insulation or threaded rails
- EMC protected design ensured by electrically conductive surfaces and seals
- with internal PCB guidance in modular design 1 U
- outside screw channels to avoid short circuits due to chips from screwing
- customized solutions are possible

firehere lektronik > =

to cool to protect to connect



Extruded heatsinks
LED heatsinks
Finger shaped heatsinks

Cooling aggregates
Cases
19" technology

Sockets
Connectors
Brackets for PC



Processed extruded heatsinks Extruded heatsinks with soldered pins LED heatsinks Fin coolers



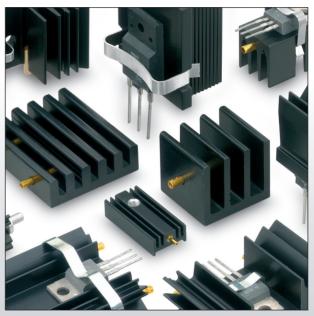
Processed extruded heatsinks

- several hundred profiles always in store
- maximum precision ensured by advanced processing machines
- profile processing up to 1600 mm
 special CNC processing to meet your requirements
- any desired surface finish
- processing of previously anodized heatsinks
- special profiles to meet your specific demands



LED-heatsinks

- innovative product development and capability for dissipating heat from LEDs
- in-house measuring lab for the thermal analysis of customer-specific cooling concepts, prototype construction
- LED installation using screws, thermally conductive washers or adhesives
- advice and construction support including application-related "Thermal Management"



Extruded heatsinks with soldered pins

- pressed-in solder pins for direct solder fastening
- solder pins with insulating ring or as threaded bolt for horizontal or vertical PCB installation
- fast and easy installation of semiconductors using
- special transistor retaining springs high contact force and firm hold on the semiconductors thanks to various types of retaining springs
- customized designs and modifications



Fin coolers

- fin coolers made of aluminium or copper specially designed for forced convection compact design with very low
- heat resistance
- precisely flat milled surface on one or both sides
- additional processes, modifications or special designs to meet customers' requirements



Heatsinks and fan coolers for processors Finger-shaped and small heatsinks Cooling aggregates Thermally conductive material



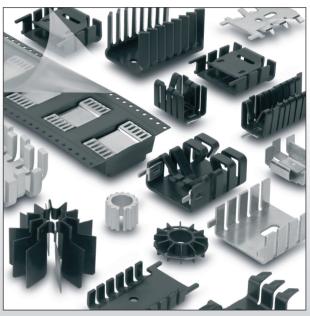
Heatsinks and fan coolers for processors

- very high degree of thermal efficiency due to optimised geometry of the fins for an optimised air flow easy installation with the integrated clip fastening,
- double-sided thermally conductive washer or thermally conductive adhesive
- compact design with high mechanical stabilityhigh-end industrial design
- customised versions and processing



Cooling aggregates

- segment, hollow fin, miniature and high capacity cooling aggregates
- effective design with axial, diagonal and radial fan
- precisely milled flat surfaces of the semiconductor
- optimised geometry of the fins for an optimised air flow
- fixed lengths with optimum adaptation to the fan motor
- additional processing to meet customers' requirements



Finger shaped heatsinks and small heatsinks

- made of spring bronze, aluminium or copper
- effective heat dissipation of small transistors
- semiconductor fastened by a screw or an integrated
- spring clamp can be soldered directly into the PCB thanks to
- solderable surfaces or snap-in pins special packaging such as tape & reel, magazine and tray for fully automatic processing

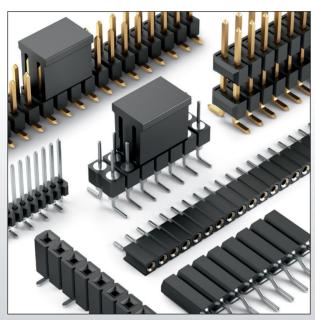


Thermally conductive material

- heat conductive and electrically insulating washers
- thermal transfer compounds with silicon, without silicon, with graphitic materials
- various materials such as silicon elastomer, gel and
- foam foils, polyimides etc. large standard range of cuttings, strips, plates, hoses and caps
- customised manufacture of our thermally conductive materials according to customers' drawing

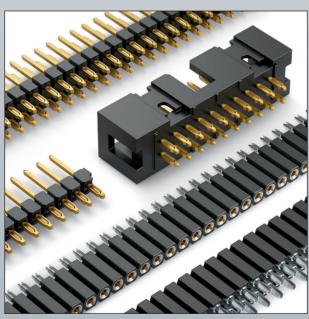


SMD male and female headers ... in SMD
... in soldering technique
... in press-fit mounting
Packaging formats for automatic picking and placing



SMD male and female headers

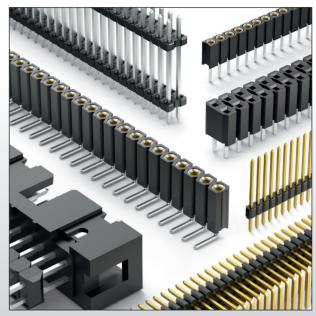
- single and double row contacts
- modular sizes: 2.54 mm, 2.00 mm, 1,27 mm
 high temperature-resistant plastic insulators
- with or without pick-and-place pad
- vertical and horizontal designs
- various contact surfaces
- special packaging formats such as tape and reel or bar magazine



Male and female headers, press-fit mounting

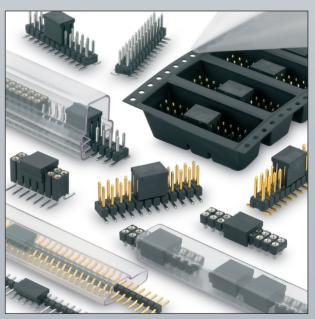
- press-fit mounting without soldering, resilient press-fit area; – easy insertion into PCB
- for PCB layout in accordance to DIN EN 60352-5 PCB thickness ≥1.6 mm

- single or double row design, straight version
 shroud male headers, 10-20 contacts
 contact surfaces tinned or gilded, number of contacts according to customers' specification



Male and female headers in soldering technique

- modular sizes: 2.54 mm, 2.00 mm, 1.27 mm
- male headers in single or double row design, straight or angled version, contact length up to 65 mm
- shroud male headers, 10-50 poles; female header, single or double row design, straight or angled version with stamped contacts or precision contacts stackthrough female headers, single or double row
- design



Packaging formats for automatic picking and placing

- bar magazine made of robust plastic material including special locking systems tape and reel, reel diameter 330 mm
- male and female headers in packaging material both with centrally arranged pick-and-place pad
- customer specific designs, tape widths and reel diameters



Sockets Ribbon cables D-Sub connectors Brackets and PC board holders



Sockets

- for DIL-IC, PLCC, crystals, TO cases and power transistors
- precision sockets and sockets for SMDand soldering technique
- various contact surfaces
- sockets with low profile
- insulators made of material according to per UL 94 V-0



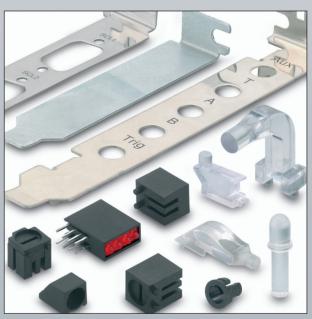
D-Sub connectors

- male and female headers for press-fit mounting, SMD and insulation displacement screw clamp technology
- high-density connectors with clamping spring screening
 multiple D-Sub connectors / multiple layout connectors
- multiple D-Sub connectors / multiple layout connectors with high power and signal contacts
- various designs and numbers of contacts
- large range of D-Sub accessories



Ribbon cables

- female multipoint connector for flat ribbon cables, with or without locking and strain relief
- shrouded male headers suitable for lockable female multipoint connector, two rows: 6-50 contacts in a modular size of 2.54 mm; – printed circuit connectors, single row, double or quadruple rows
- contact surfaces tin plated or gilded
- accessories and processing tools



Brackets and PC board holders

- PC board holder, with or without fixing tab, customer-specific cut-outs and imprints
- low profile PCI holders
- LED holder with or without LED for front panel and PC board installation
- rigid and angular light pipes for SMD components