

## Prodotti Standard

Tecnoal dispone di molti dissipatori ed accessori standard utilizzati in ambito elettronico. Tali prodotti sono disponibili a magazzino in confezioni minime.

Fra questi prodotti oltre ai dissipatori per circuiti stampati figurano:

- Distanziali filettati, per circuiti stampati.
- Miche per l'isolamento elettrico dei componenti.
- Isolanti in plastica per viti.
- Molle per il fissaggio del componente elettronico al dissipatore.
- Grasso termoconduttivo, per garantire un accoppiamento ottimale fra componente elettronico e dissipatore.
- Spacer per ventole assiali, che consentono di aumentarne l'efficienza.
- Guide per cassette rack, personalizzabili.

Qualora voleste richiederci una qualsiasi quotazione vi preghiamo di fornirci le seguenti informazioni:

- 1- Articolo (vedi modello sul catalogo).
- 2- Quantitativo richiesto. (molti prodotti sono legati ad una confezione minima).

Il nostro ufficio commerciale e tecnico è a Vostra completa disposizione per qualsiasi chiarimento.

## Standard Items

*Tecnoal has many standard items and accessories used in electronics. These products are available from stock in minimum packages.*

*In addition to heatsinks for printed circuit boards, this product line includes:*

- *Spacers threaded for printed circuit boards.*
- *Micas for the insulation of electrical components.*
- *Insulation for plastic screws.*
- *Clips for assembling electronic components to heatsink.*
- *Thermal conductive grease to ensure an optimal coupling between electronic component and heatsink.*
- *Axial spacer fans for increasing efficiency.*

*Slides for rack drawers customizable. For quotations please provide the following informations:*

- 1- *Items (see model in the catalogue).*
- 2- *Quantity required (many products are linked to a minimum package).*

*Our commercial and technical office is at your disposal for any clarification.*

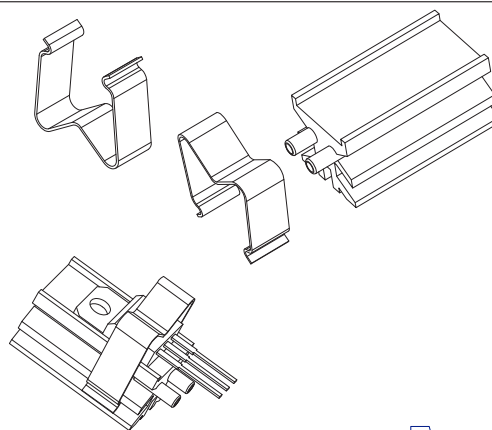
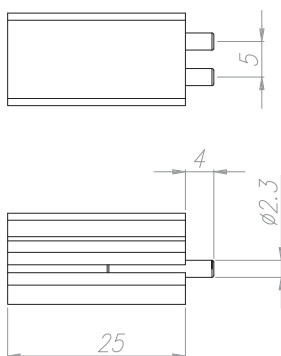
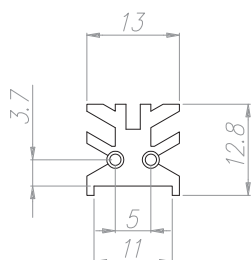


**A**

**ST - T13/25N**

**Rt °C/W 25**

Aluminium, black anodized  
Other dimensions on request



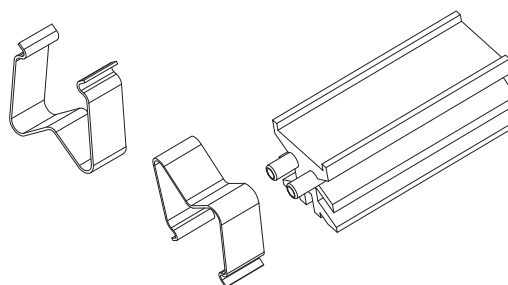
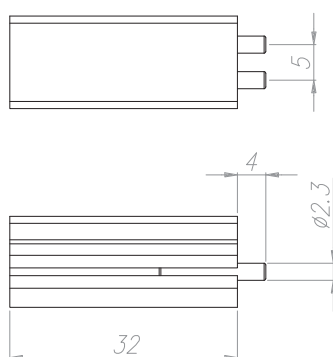
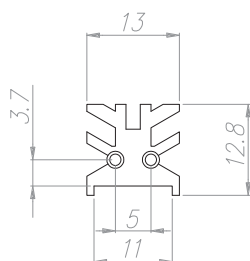
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www.tecnoal.it

**B**

**ST - T13/32N**

**Rt °C/W 21**

Aluminium, black anodized  
Other dimensions on request



ONLY ON  
REQUEST

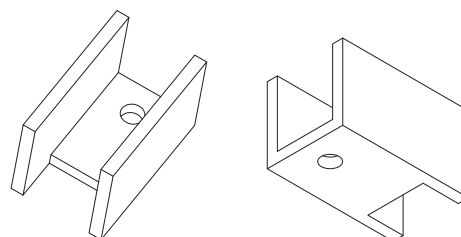
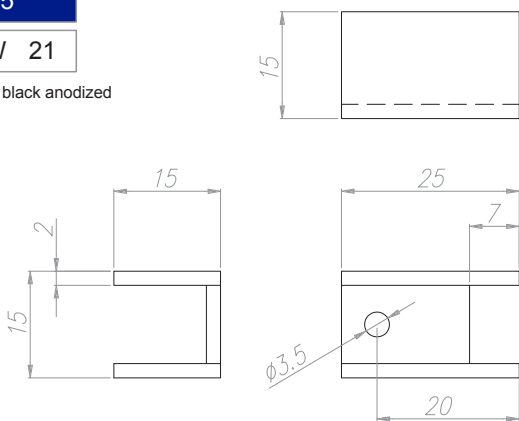
**TECNOAL**  
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**C**

**ST - T15**

**Rt °C/W 21**

Aluminium, black anodized



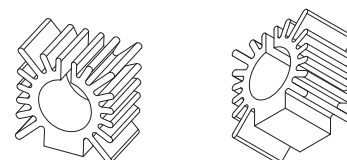
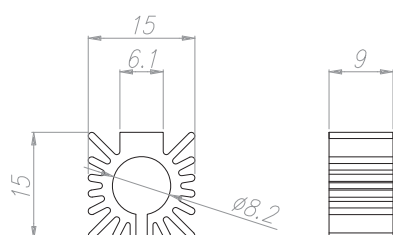
**TECNOAL**  
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**D**

**ST - T19**

**Rt °C/W 55**

Aluminium, black anodized  
Other dimensions on request

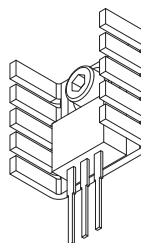
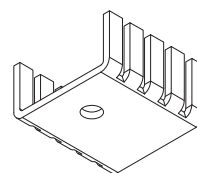
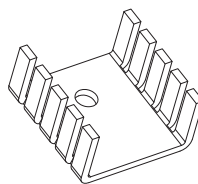
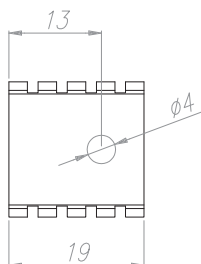
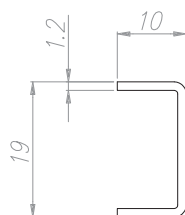


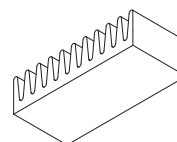
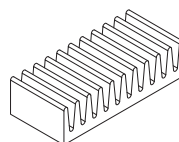
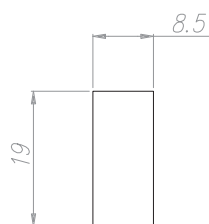
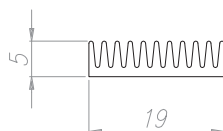
ONLY ON  
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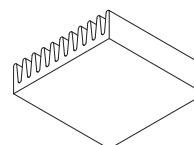
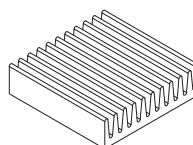
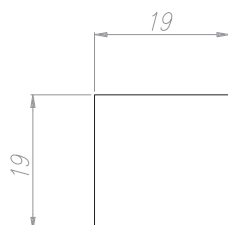
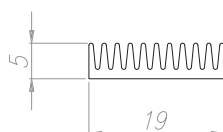
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**ST - TE19****Rt °C/W 55**

Aluminium, black anodized

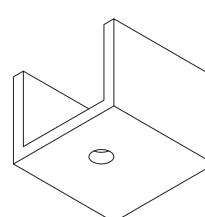
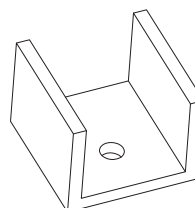
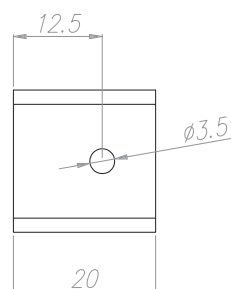
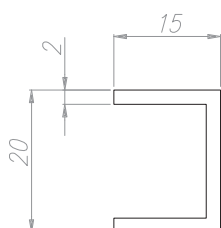


  
[www.tecnal.it](http://www.tecnal.it)
**A****ST - K19/8.5****Rt °C/W 81**Aluminium, black anodized  
Other dimensions on request

  
[www.tecnal.it](http://www.tecnal.it)
**B****ST - K19/19****Rt °C/W 46**Aluminium, black anodized  
Other dimensions on request

  
[www.tecnal.it](http://www.tecnal.it)
**C****ST - T20****Rt °C/W 21**

Aluminium, black anodized



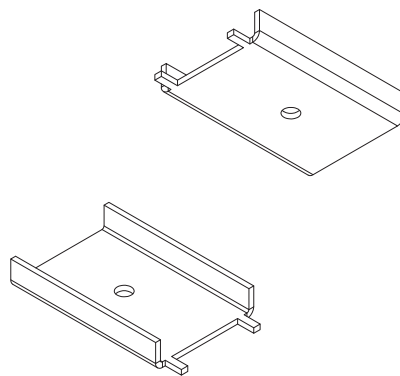
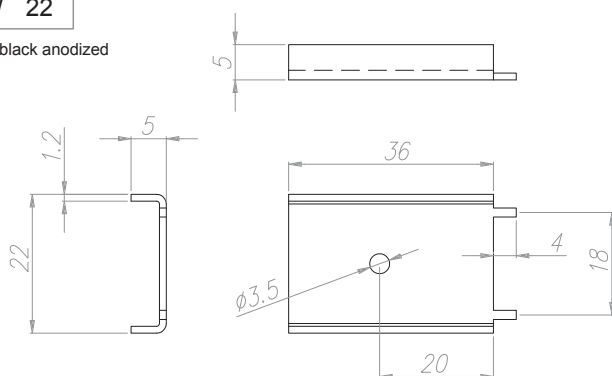
  
[www.tecnal.it](http://www.tecnal.it)
**D**

**A**

**ST - T22**

Rt °C/W 22

Aluminium, black anodized



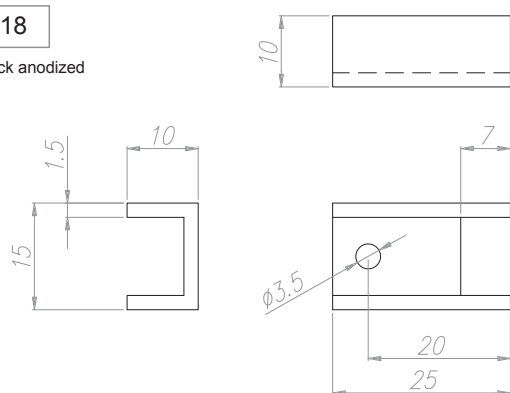
**ATECNDA**  
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**B**

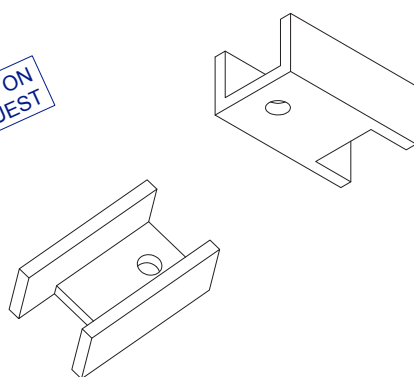
**ST - T24A**

Rt °C/W 18

Aluminium, black anodized



ONLY ON REQUEST



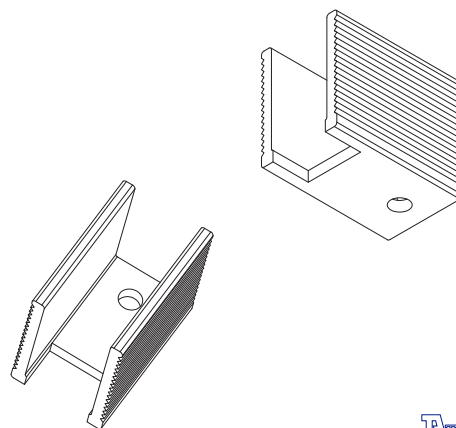
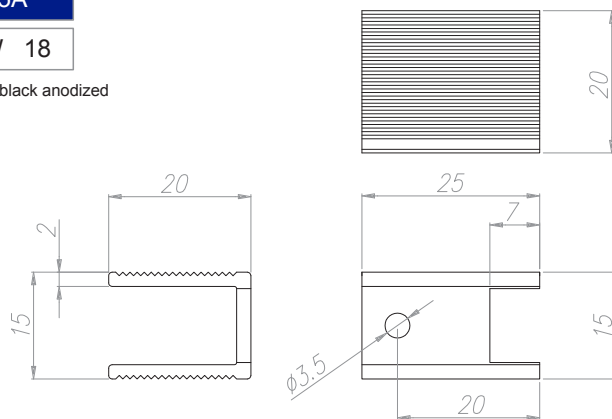
**ATECNDA**  
www.tecnoal.it

**C**

**ST - T25A**

Rt °C/W 18

Aluminium, black anodized



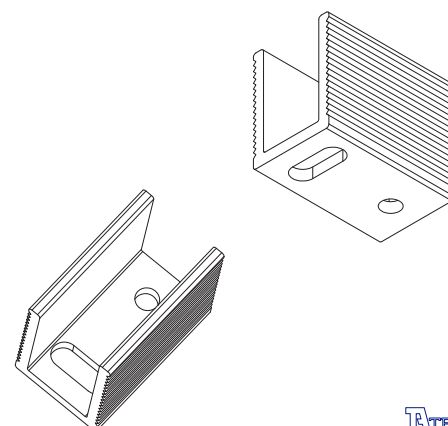
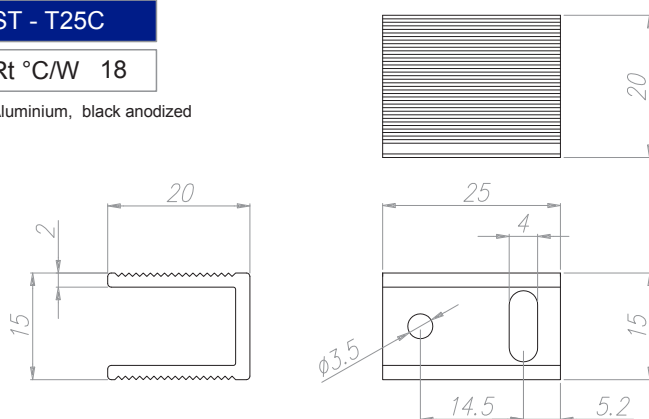
**ATECNDA**  
www.tecnoal.it

**D**

**ST - T25C**

Rt °C/W 18

Aluminium, black anodized

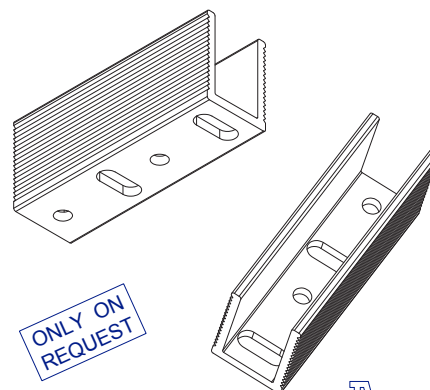
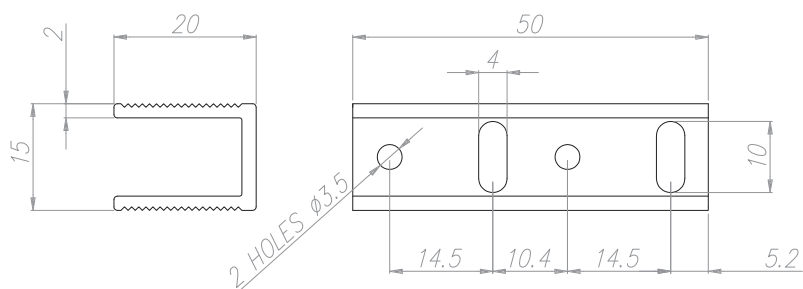


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**ST - T25D****Rt °C/W 9**

Aluminium, black anodized

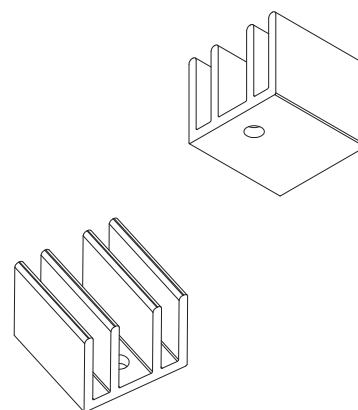
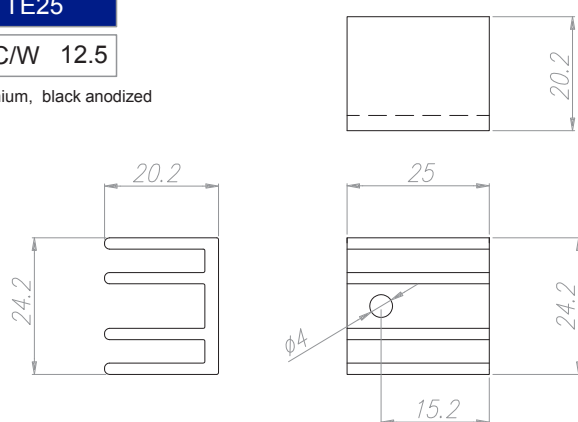


  
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A

**ST - TE25****Rt °C/W 12.5**

Aluminium, black anodized

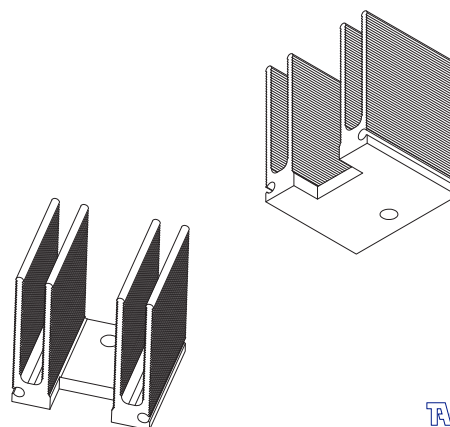
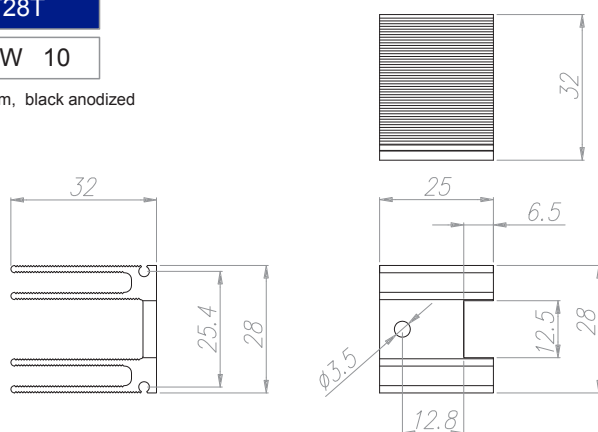


  
www.atecnal.it

B

**ST - T28T****Rt °C/W 10**

Aluminium, black anodized

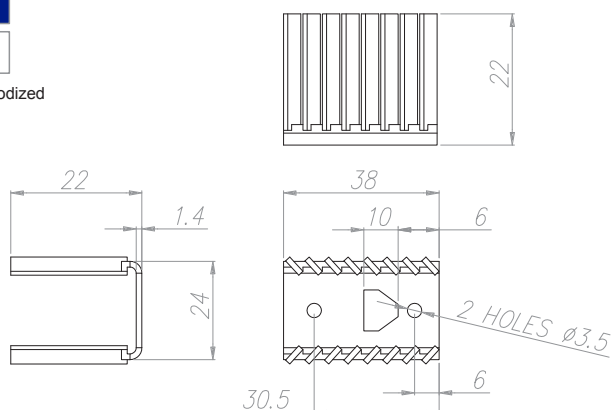


  
www.atecnal.it

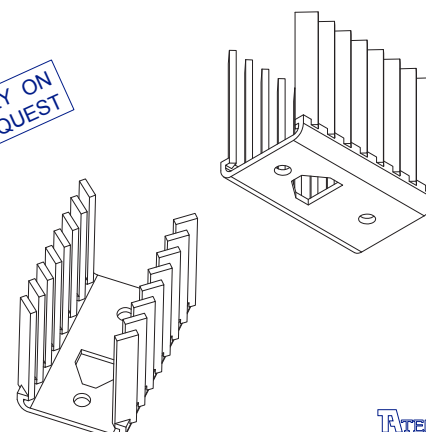
C

**ST - TEA28****Rt °C/W 15**

Aluminium, black anodized



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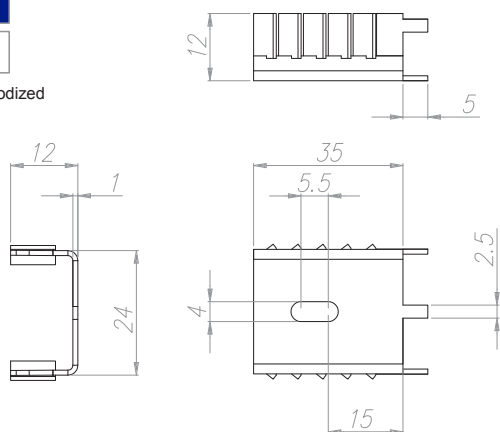
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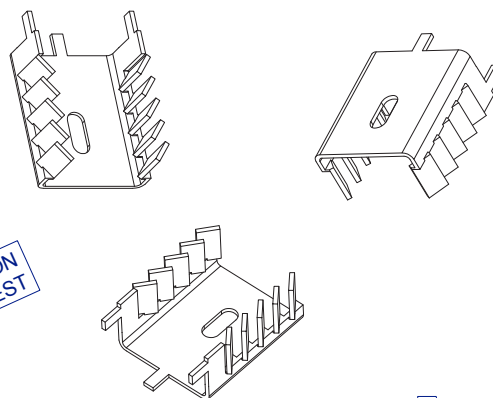
**ST - TE28**

**Rt °C/W 14**

Aluminium, black anodized



ONLY ON REQUEST



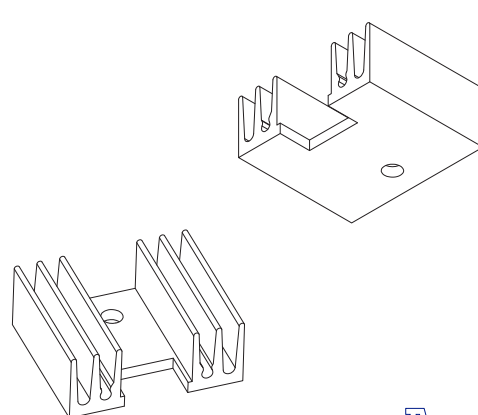
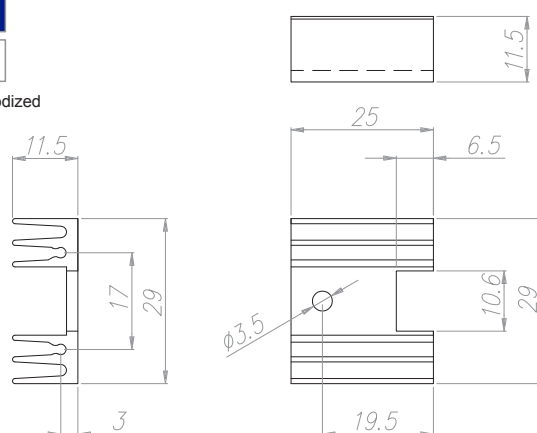
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**B**

**ST - T29**

**Rt °C/W 17**

Aluminium, black anodized



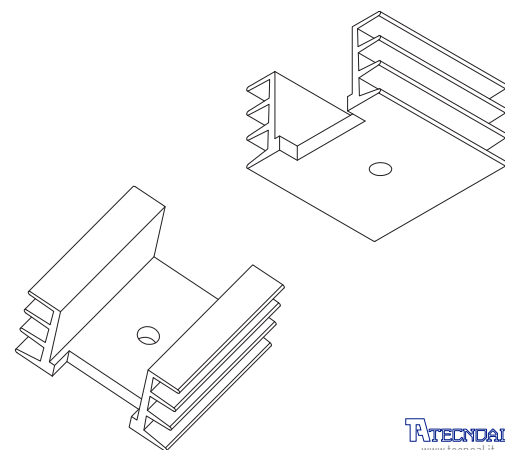
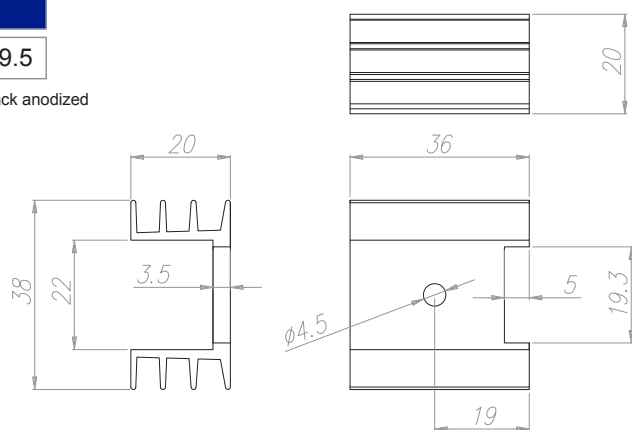
**TECNOAL**  
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**C**

**ST - T38**

**Rt °C/W 9.5**

Aluminium, black anodized



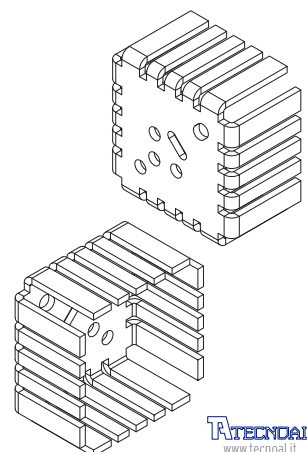
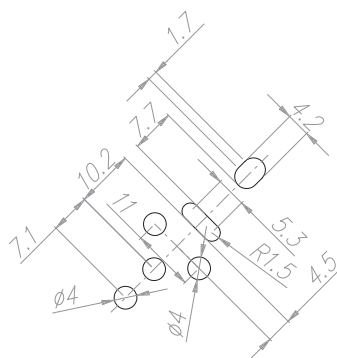
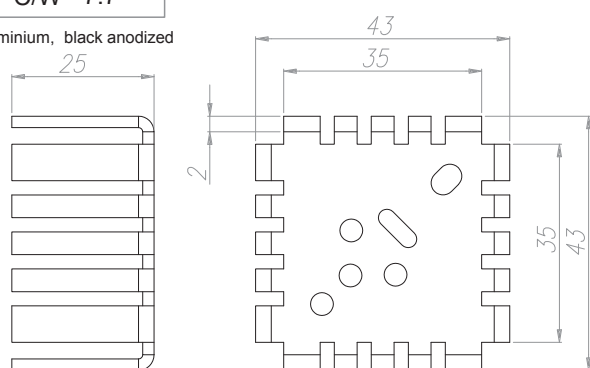
**TECNOAL**  
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**D**

**ST - 45FM-NEW**

**Rt °C/W 7.7**

Aluminium, black anodized

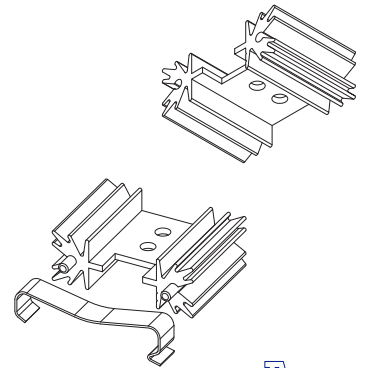
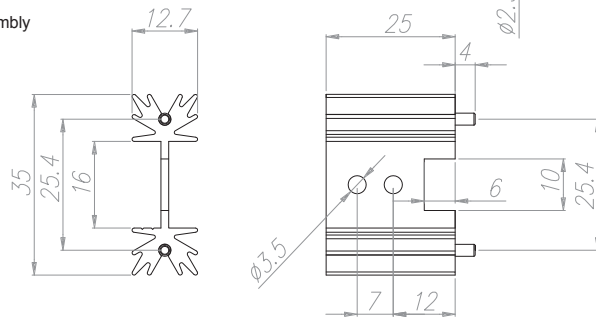


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### ST - TEA35/25

Rt °C/W 14

Aluminium, black anodized  
Available with pins for PCB assembly



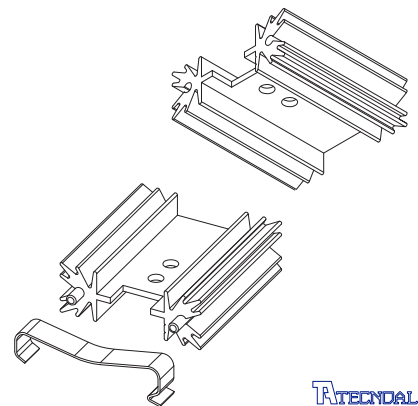
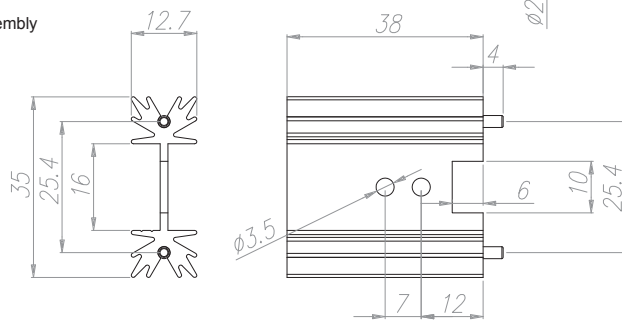
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www.tecnodal.it

A

### ST - TEA35/38

Rt °C/W 11.5

Aluminium, black anodized  
Available with pins for PCB assembly



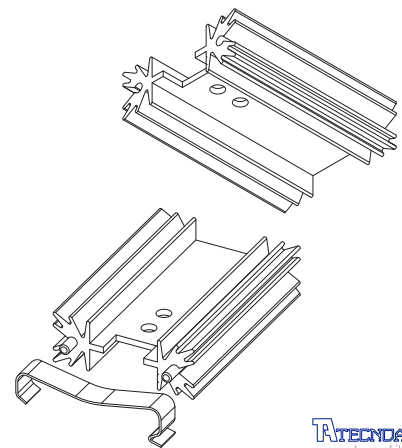
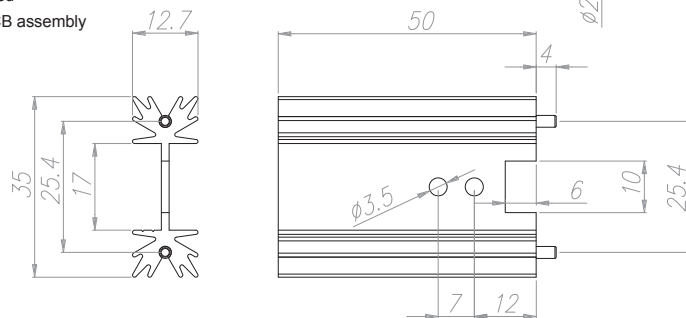
**TECNODAL**  
www.tecnodal.it

B

### ST - TEA35/50

Rt °C/W 8.5

Aluminium, black anodized  
Available with pins for PCB assembly



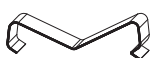
**TECNODAL**  
www.tecnodal.it

C

### MOLLE DI FISSAGGIO

### SPRING CLIPS

MOLLA TEA35

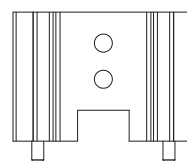


Materiale acciaio  
inox

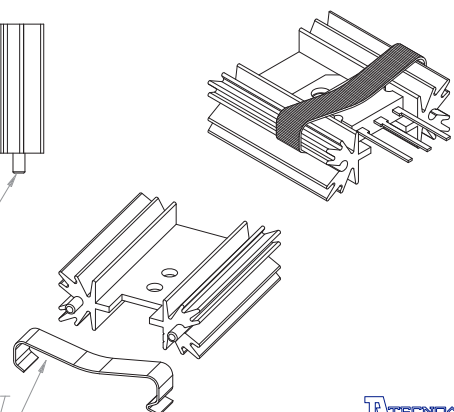
MOLLA TEA35A



Materiale acciaio  
armonico nichelato



PIN ON REQUEST



SPRING ON REQUEST

**TECNODAL**  
www.tecnodal.it

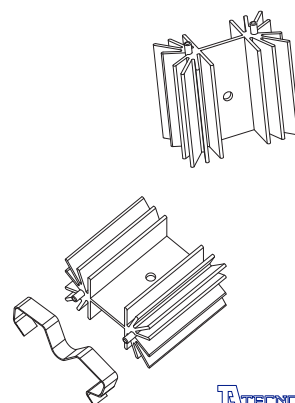
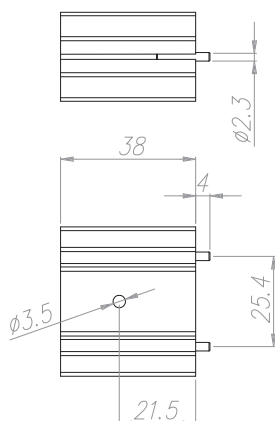
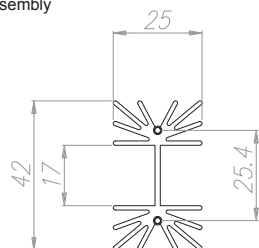
D

**A**

**ST - TEA40/38**

Rt °C/W 8

Aluminium, black anodized  
Available with pins for PCB assembly



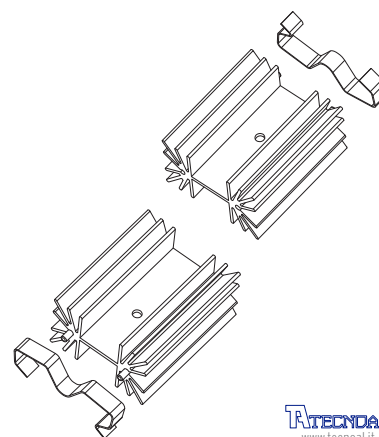
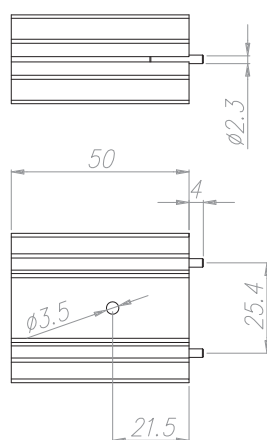
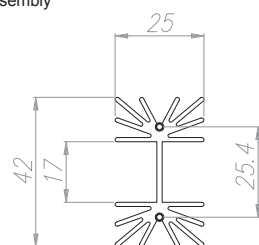
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www.tecnodal.it

**B**

**ST - TEA40/50**

Rt °C/W 6

Aluminium, black anodized  
Available with pins for PCB assembly



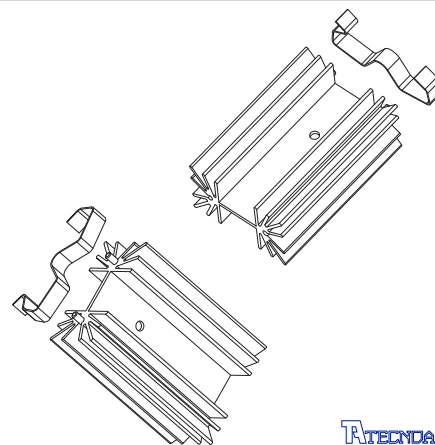
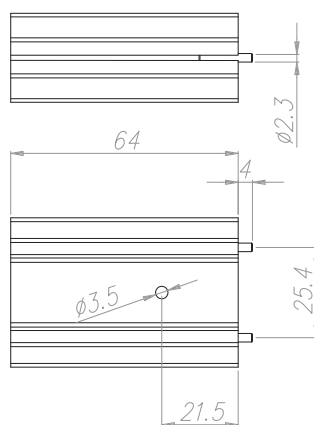
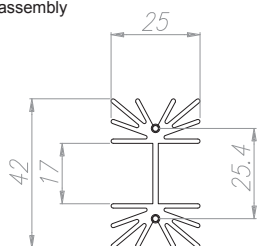
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www.tecnodal.it

**C**

**ST - TEA40/64**

Rt °C/W 5

Aluminium, black anodized  
Available with pins for PCB assembly



**TECNODAL**  
www.tecnodal.it

**D**

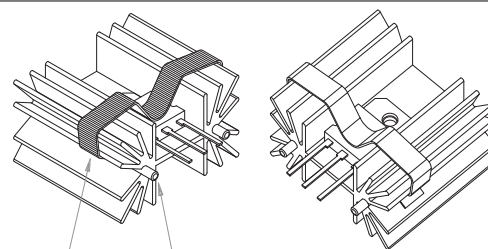
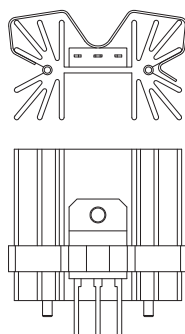
**MOLLE DI FISSAGGIO**

**SPRING CLIPS**

**MOLLA TEA40**



Materiale acciaio  
armonico nichelato



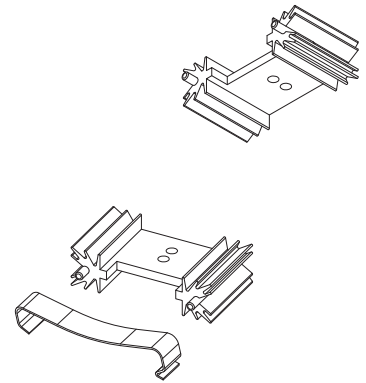
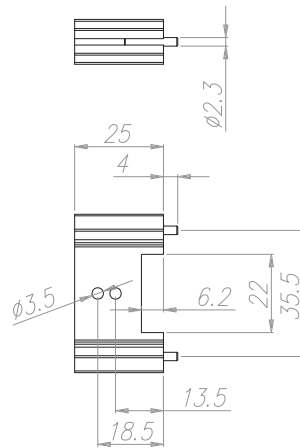
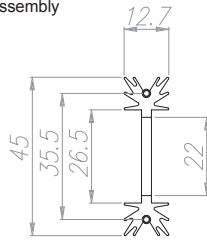
*SPRING ON REQUEST*

*PIN ON REQUEST*

**TECNODAL**  
www.tecnodal.it

**ST - TEA45/25****Rt °C/W 8.2**

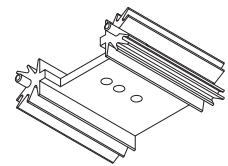
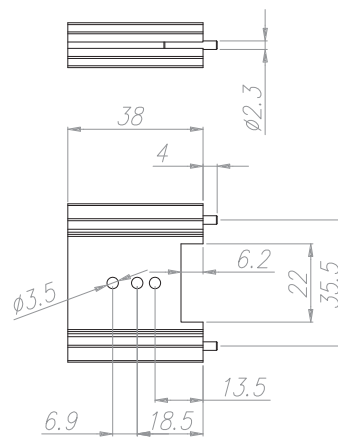
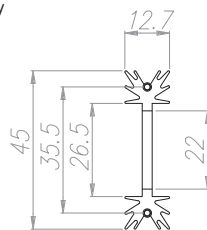
Aluminium, black anodized  
Available with pins for PCB assembly



ATECNAL  
www.tecnal.it

**A****ST - TEA45/38****Rt °C/W 7**

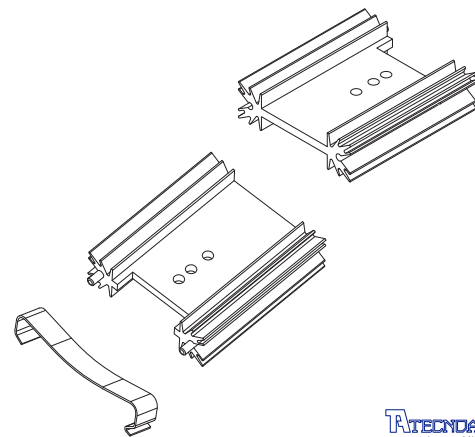
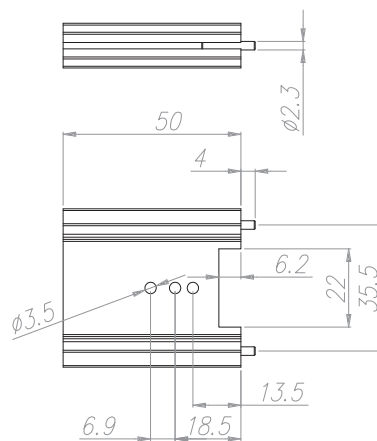
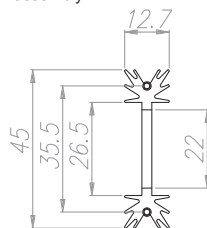
Aluminium, black anodized  
Available with pins for PCB assembly



ATECNAL  
www.tecnal.it

**B****ST - TEA45/50****Rt °C/W 6.2**

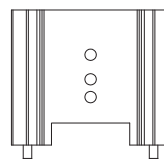
Aluminium, black anodized  
Available with pins for PCB assembly



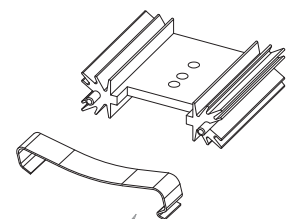
ATECNAL  
www.tecnal.it

**C****MOLLE DI FISSAGGIO****SPRING CLIPS****MOLLA TEA45**

Materiale acciaio  
inox



PIN ON REQUEST



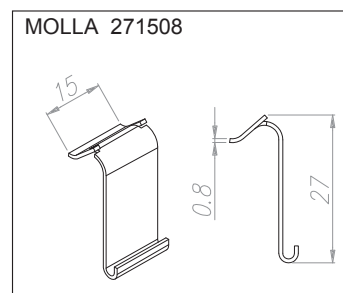
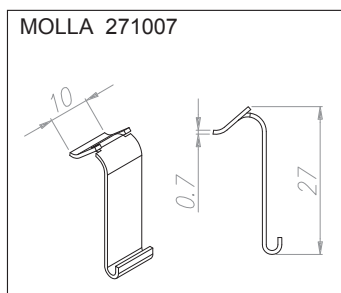
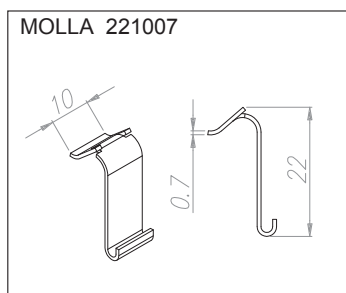
SPRING ON REQUEST

ATECNAL  
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**D**

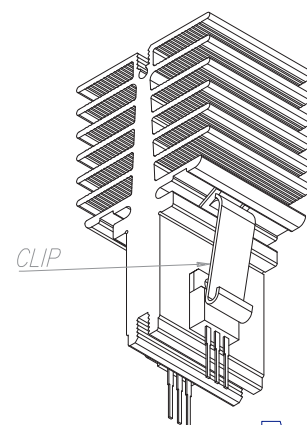
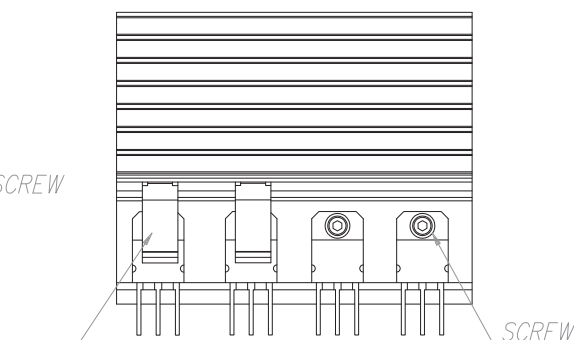
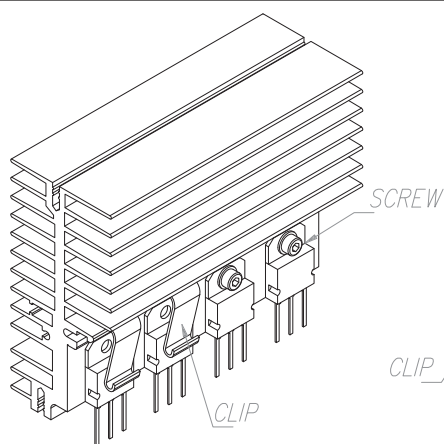
A

MOLLE PER IL FISSAGGIO DEL COMPONENTE SU DISSIPATORI SERIE TECNOCLIP  
CLIPS FOR ASSEMBLY ELECTRONICS COMPONENTS ON HEATSINKS SERIES TECNOCLIP



**TECNODAL**  
www.tecnodal.it

B

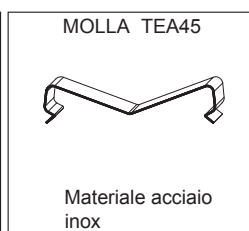
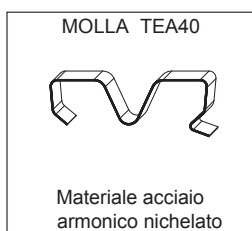
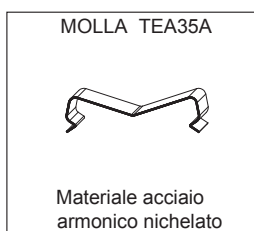
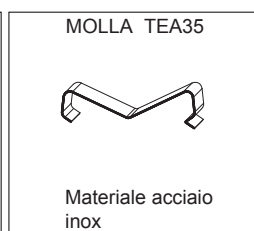
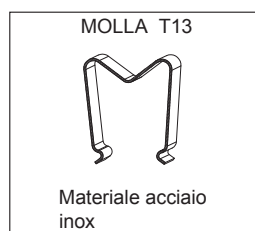


Fissaggio con molla o con vite  
Assembled with clip or with screw

**TECNODAL**  
www.tecnodal.it

C

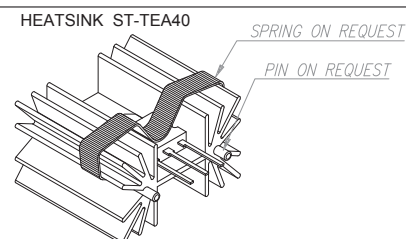
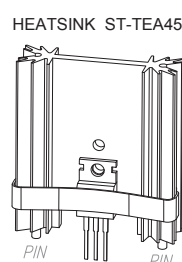
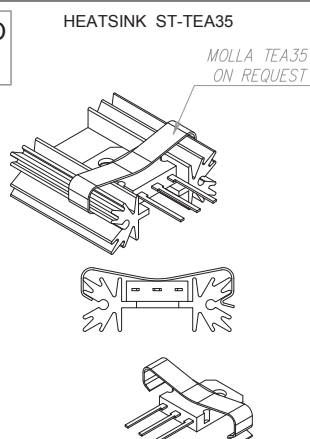
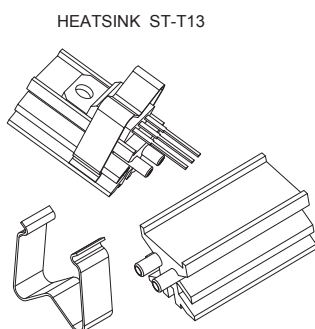
MOLLE PER IL FISSAGGIO DEL COMPONENTE SU DISSIPATORI STANDARD  
CLIPS FOR ASSEMBLY ELECTRONICS COMPONENTS ON STANDARD HEATSINKS



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www.tecnodal.it

D

MOLLE: ESEMPI DI UTILIZZO  
CLIP: EXAMPLES OF USING



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www.tecnodal.it



## Accessoristica

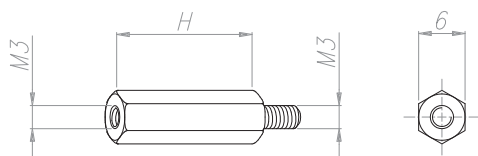
Tecnoal offre oltre ad una ampia gamma di dissipatori adatti ai più svariati utilizzi, anche molti accessori impiegati in ambito elettronico.

## Accessories

*Tecnoal can supply a big series of accessories for electronic employing.*

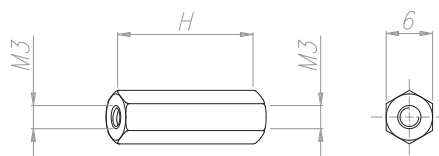
### DISTANZIALI M3 SPACER M3

Materiale ottone nichelato esagono 6  
Material nickel plated brass hexagon 6



MASCHIO-FEMMINA M3  
MALE-FEMALE M3

| H |   |    |    |    |    |    |    |
|---|---|----|----|----|----|----|----|
| 5 | 7 | 10 | 12 | 15 | 20 | 25 | 30 |



FEMMINA-FEMMINA M3  
FEMALE-FEMALE M3

| H |    |    |    |    |    |
|---|----|----|----|----|----|
| 5 | 10 | 15 | 20 | 25 | 30 |

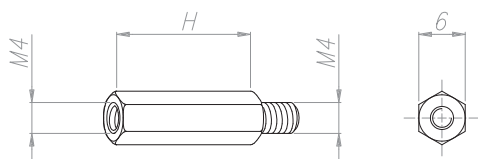
Altre dimensioni a richiesta  
Other dimensions on request

  
www.tecnoal.it

A

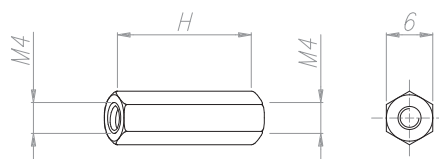
### DISTANZIALI M4 SPACER M4

Materiale ottone nichelato esagono 6  
Material nickel plated brass hexagon 6



MASCHIO-FEMMINA M4  
MALE-FEMALE M4

| H  |    |    |    |    |
|----|----|----|----|----|
| 10 | 15 | 20 | 25 | 30 |



FEMMINA-FEMMINA M4  
FEMALE-FEMALE M4

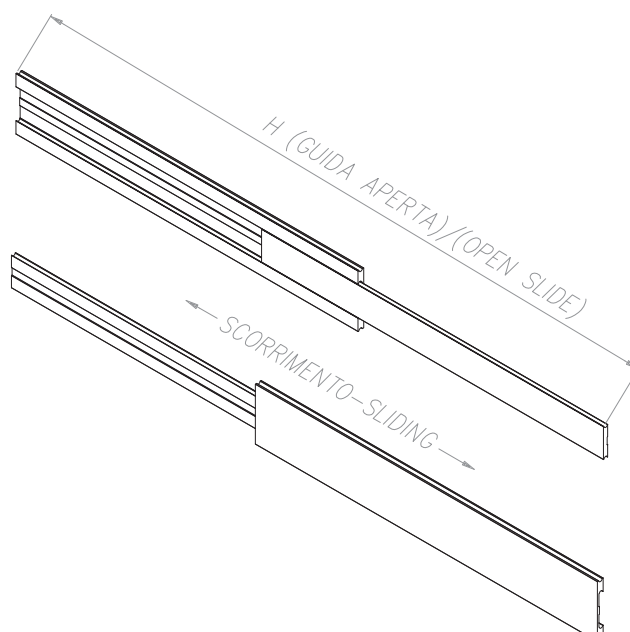
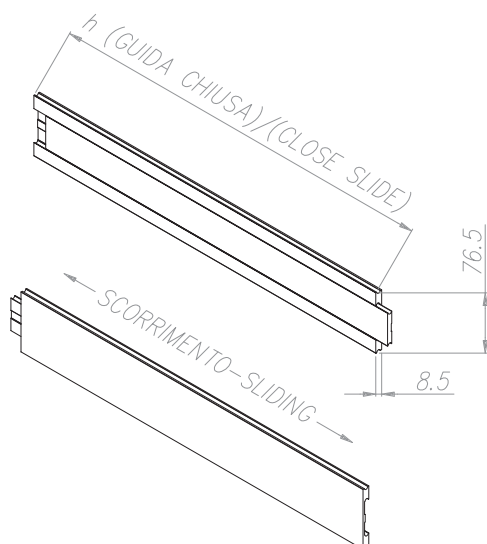
| H  |    |    |    |    |
|----|----|----|----|----|
| 10 | 15 | 20 | 25 | 30 |

Altre dimensioni a richiesta  
Other dimensions on request

  
www.tecnoal.it

B

### GUIDE A SFERE PER CASSETTO RACK BALL BEARING SLIDES FOR RACK



Tecnoal propone delle guide scorrevoli ottenute mediante il montaggio di due profili estrusi in alluminio che conferiscono particolare rigidità e robustezza all'insieme. Essendo ricavate da barre, la lunghezza della guida è a richiesta del cliente.

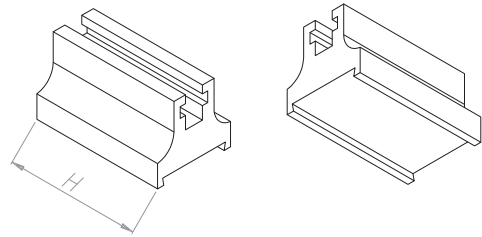
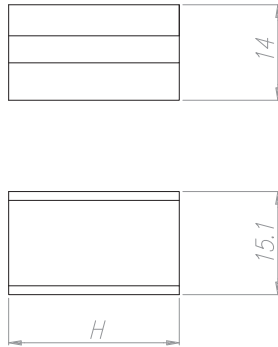
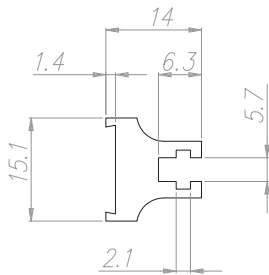
*Tecnoal can supply on request ball bearing slides in any lenght including all machining and assembly.*

  
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C

A

MAN L



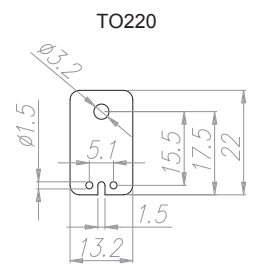
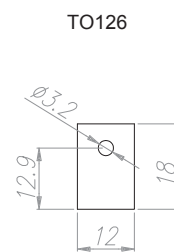
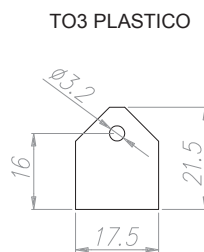
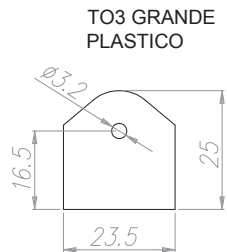
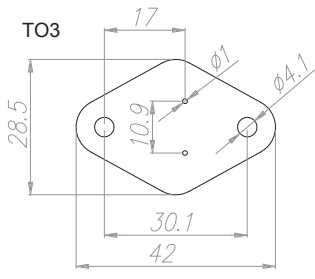
Aluminium, raw, black anodized, silver anodized  
Dimension H on request

Utilizzato come maniglia

**ATECNAL**  
www.atecnal.it

B

**MICHE MINERALI NATURALI  
NATURAL MINERAL MICAS (MICA INSULATOR)**

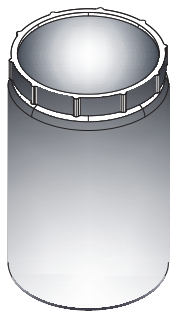


Foglio elastometro termoconduttivo SIL-PAD 400 dimensioni 12" x 12" spessore .007 MIN  
Thermoconductive elastometer sheet SIL-PAD 400 (12"x12") thickness .007 MIN

**ATECNAL**  
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C

CONFEZIONE DA 2 Kg.  
2 Kg. PACKAGE



**GRASSO TERMOCONDUTTIVO  
THERMAL CONDUCTOR GREASE**

**UTILIZZO**  
È consigliabile utilizzare il grasso termoconduttivo al fine di garantire un contatto ottimale fra componente e superficie del dissipatore, in modo particolare quando la superficie del componente è di dimensioni ragguardevoli come ad esempio i moduli IGBT o quando la superficie del dissipatore non è stata spianata.

**USING**  
Thermal conductive greases are chosen for optimize thermal resistance between electronics components and heatsink surface has not a good roughness and flatness.

CONFEZIONE DA 200 g.  
200 g. PACKAGE

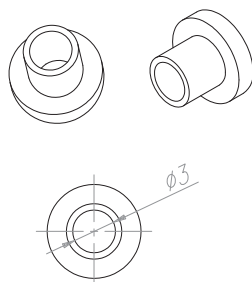
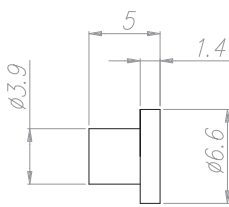


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D

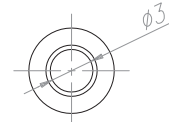
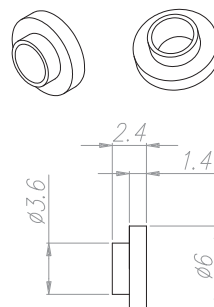
**ISOLANTE PER TO3  
INSULATION FOR CASE TO3**

Materiale nylon  
Material nylon



**ISOLANTE PER T220  
INSULATION FOR CASE TO220**

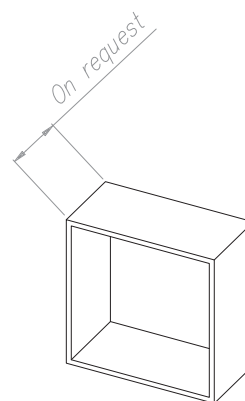
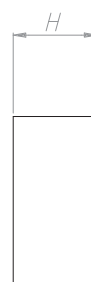
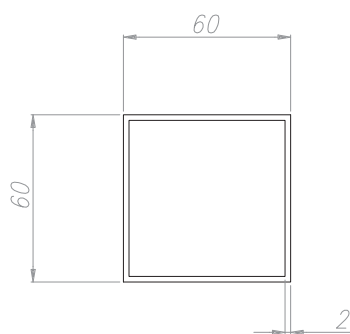
Materiale nylon  
Material nylon



**ATECNAL**  
www.atecnal.it

**SPACER 60**

Aluminium, black anodized, silver on request  
 Aluminium, raw on request  
 Dimensions H, on request

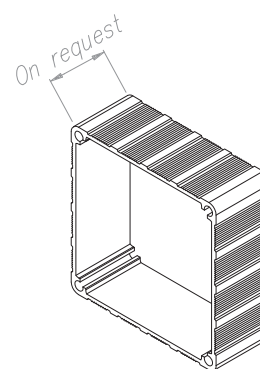
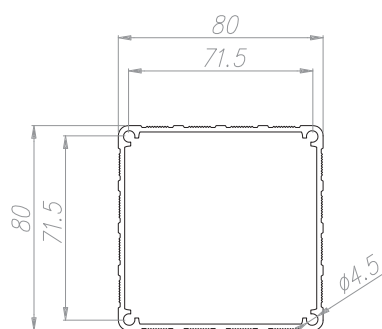


ATECNAL  
 www.tecnoal.it

A

**SPACER 80**

Aluminium, black anodized, silver on request  
 Aluminium, raw on request  
 Dimensions H, on request

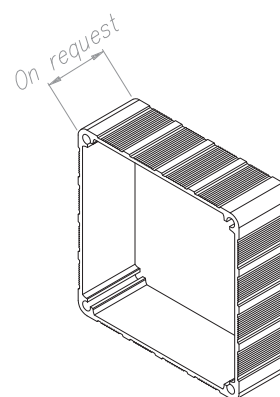
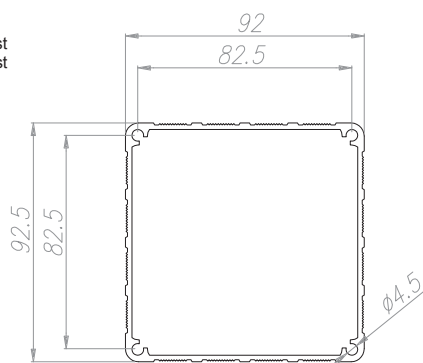


ATECNAL  
 www.tecnoal.it

B

**SPACER 92**

Aluminium, black anodized, silver on request  
 Aluminium, raw on request  
 Dimensions H, on request

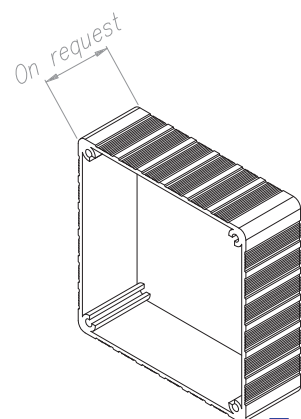
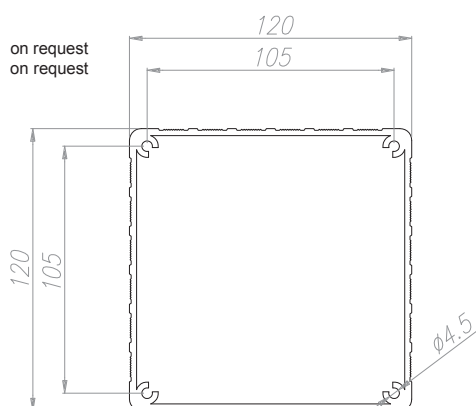


ATECNAL  
 www.tecnoal.it

C

**SPACER 120**

Aluminium, black anodized, silver on request  
 Aluminium, raw on request  
 Dimensions H, on request



ATECNAL  
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D