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You will find your specific solution here from about 200 specific heat sinks for all prevalent semiconductor housing types, such as, e.g. TO 220, TO 3, TO 66, TO 9, SOT 32 and many more.

Our offer is divided into various types of assembly: Screwing, soldering, plug-in and adhesion.

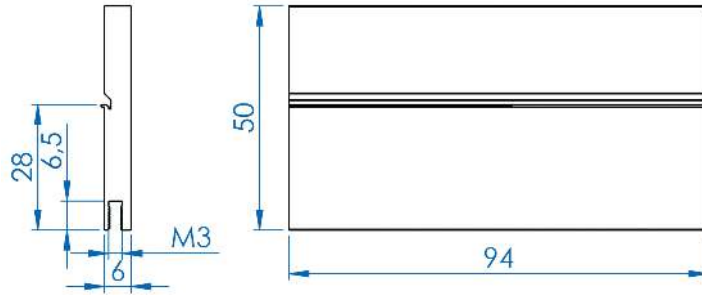
We modify standards for you or we create these based on your technical perceptions or ideas. We are pleased to advise you.

If you are unable to find the solution you are looking for in this catalogue, please call us up.

We are constantly expanding our range of products, and you can also get the latest information by visiting our website at www.alutronic.de

Appropriate clips can be found in chapter Mounting / Mounting Clips

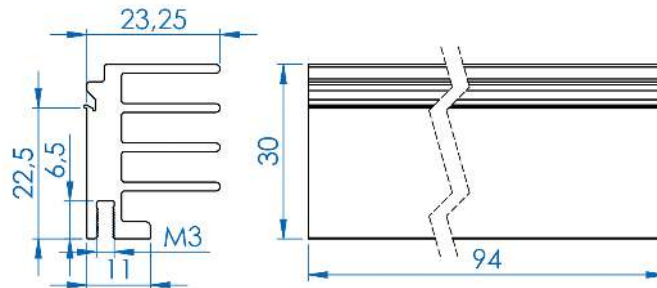
PR 101/94/SE



For Casing: **TO 220, TO 218 (TOP 3)** Rthk: [K/W]: **7**

Device mounted by: **Mounting Clip**

PR 290/94/SE

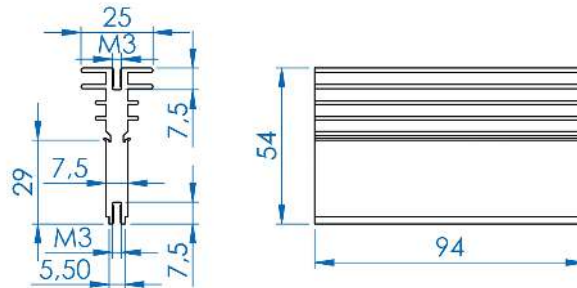


For Casing: **TO 220**

Rthk: [K/W]: **6.3**

Device mounted by: **Mounting Clip**

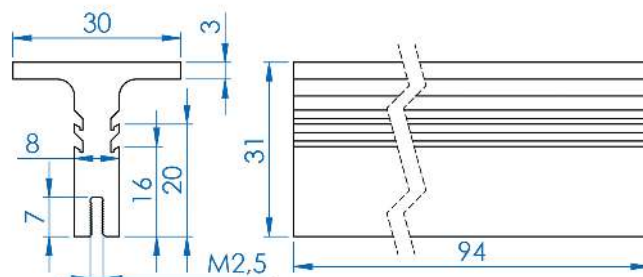
PR 118/94/SE/M3



For Casing: **TO 220, TO 218 (TOP 3)** Rthk: [K/W]: **3.2**

Device mounted by: **Mounting Clip**

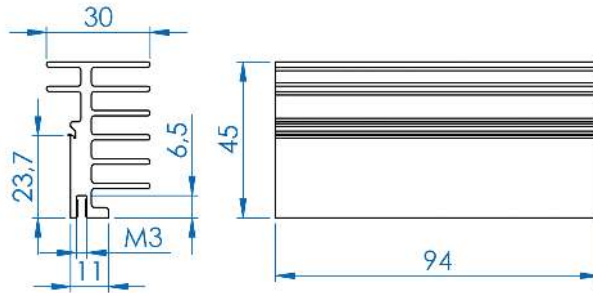
PR 116/94/SE/M2,5



For Casing: **TO 220, TO 218 (TOP 3)** Rthk: [K/W]: **4.8**

Device mounted by: **Mounting Clip**

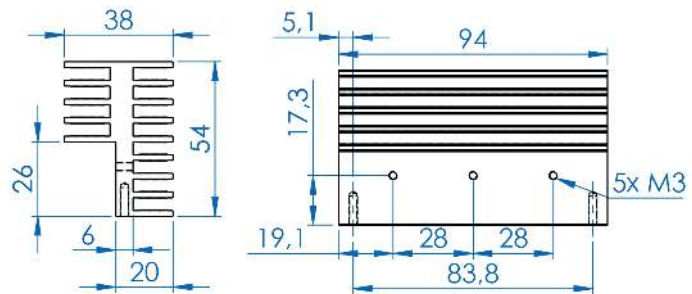
PR 127/94/SE



For Casing: **TO 220, TO 218 (TOP 3)** Rthk: [K/W]: **4**

Device mounted by: **Mounting Clip**

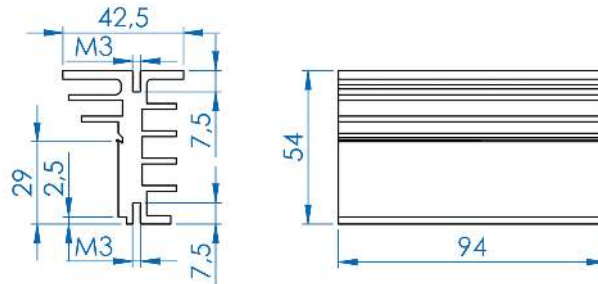
PR 136/94/SE/M3



For Casing: **TO 220, TO 218 (TOP 3)** Rthk: [K/W]: **2.6**

Device mounted by: **Screw**

PR 119/94/SE

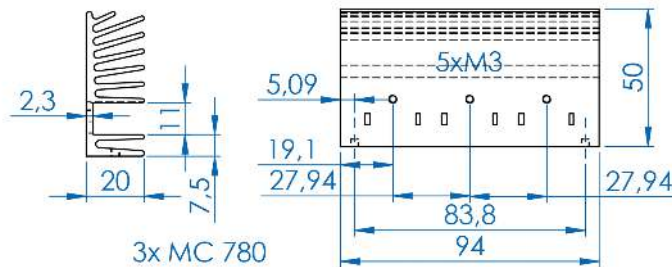


For Casing: **TO 220**

Rthk: [K/W]: **3.4**

Device mounted by: **Mounting Clip**

PR 139/94/SE/M3

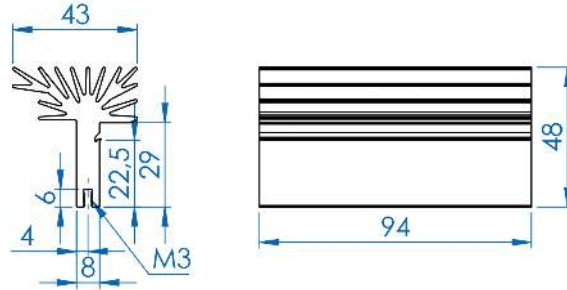


For Casing: **TO 220**

Rthk: [K/W]: **3.9**

Device mounted by: **Mounting Clip**

PR 292/94/SE/M3

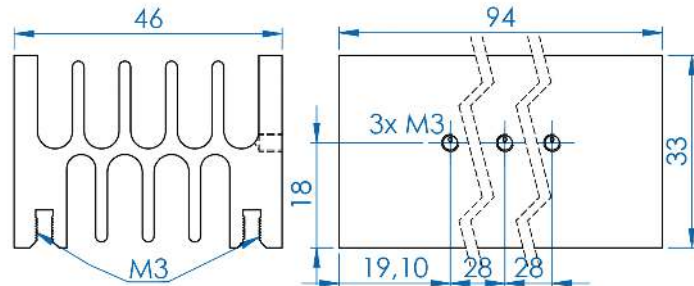


For Casing: **TO 220, TO 218 (TOP 3)** Rthk: [K/W]: **3.2**

Device mounted by: **Mounting Clip**

PR 137/94/SE/M3

with integrated standard holes for fixing the semiconductor

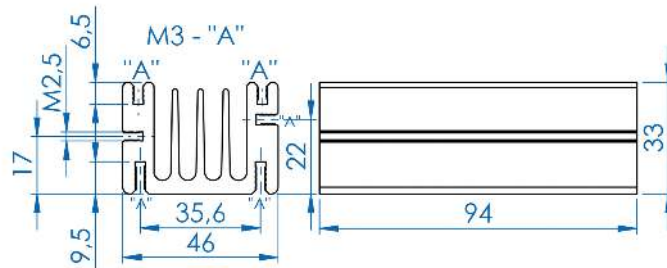


For Casing: **TO 220, TO 218 (TOP 3)** Rthk: [K/W]: **3**

Device mounted by: **Screw**

PR 138/94/SE/M3

with integrated screw channel for fixing the semiconductor

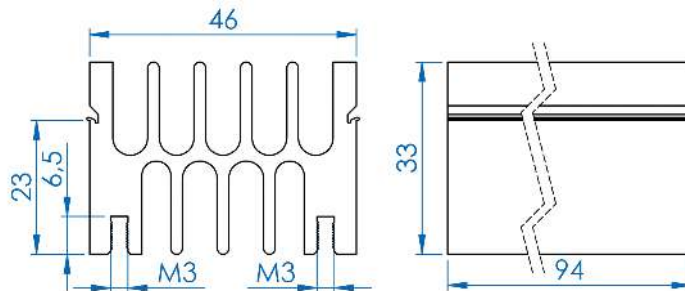


For Casing: **TO 220, TO 218 (TOP 3)** Rthk: [K/W]: **3.2**

Device mounted by: **Screw**

PR 293/94/SE

with integrated clip groove for fixing the semiconductor

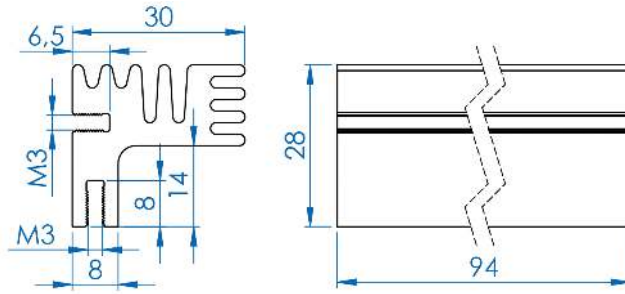


For Casing: **TO 220**

Rthk: [K/W]: **3.2**

Device mounted by: **Mounting Clip**

PR 234/94/SE

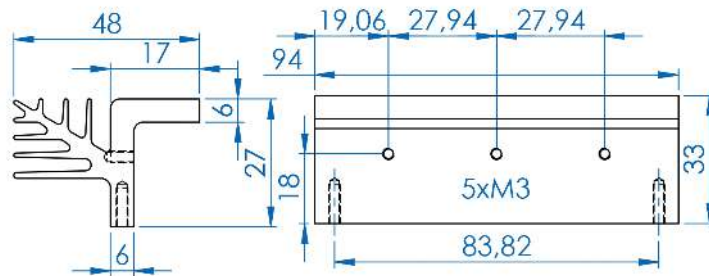


For Casing: **TO 220**

Rthk: [K/W]: **4.5**

Device mounted by: **Screw**

PR 143/94/SE/M3

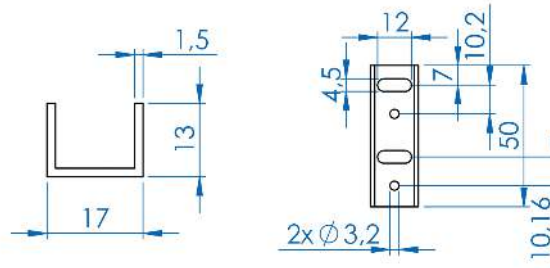


For Casing: **TO 220, TO 218 (TOP 3)**

Rthk: [K/W]: **3.7**

Device mounted by: **Screw**

PR 17/50/SE



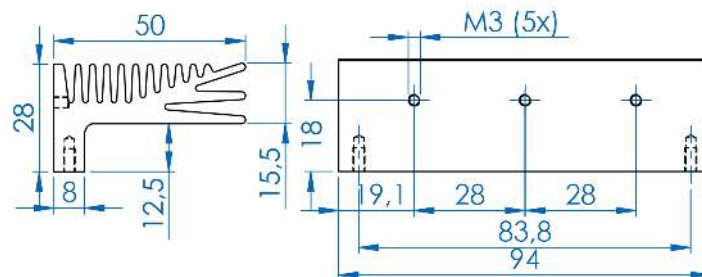
For Casing: **TO 220**

Rthk: [K/W]: **21**

Device mounted by: **Screw**

PR 133/94/SE/M3

with integrated standard holes for fixing the semiconductor



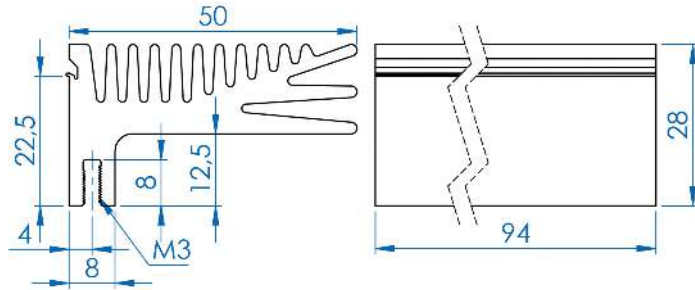
For Casing: **TO 220, TO 218 (TOP 3)**

Rthk: [K/W]: **3.6**

Device mounted by: **Screw**

PR 233/94/SE

with integrated clip groove for fixing the semiconductor

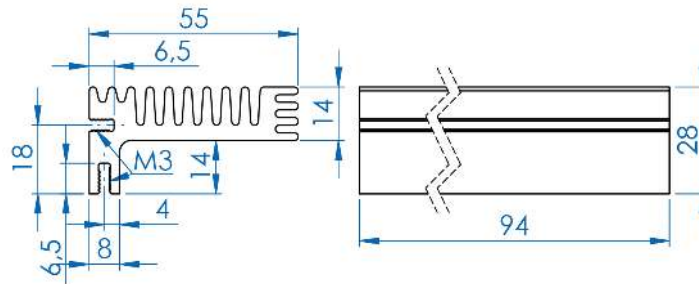


For Casing: **TO 220, TO 218 (TOP 3)** Rthk: [K/W]: **3.6**

Device mounted by: **Mounting Clip**

PR 126/94/SE/M3

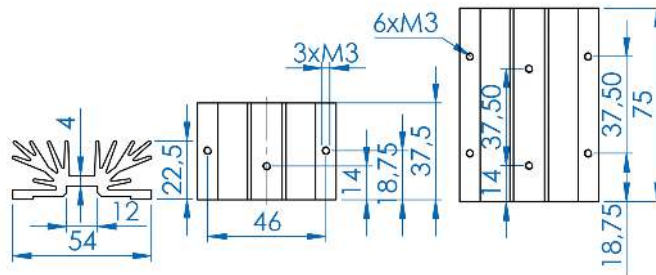
with integrated screw channel for fixing the semiconductor



For Casing: **TO 220, TO 218 (TOP 3)** Rthk: [K/W]: **3.6**

Device mounted by: **Screw**

PR 134 with standard perforation

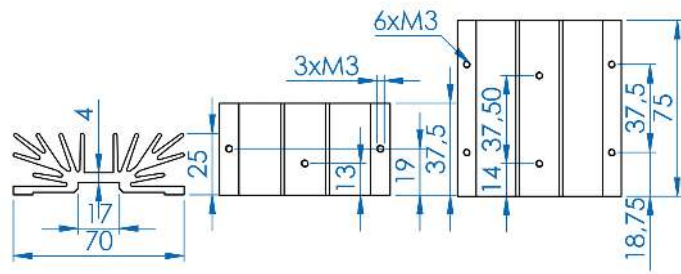


For Casing: **TO220, TO126, (SOT32)**

Device mounted by: **Screw**

article	Rthk [K/W]	length [mm]
PR 134/37,5/SE/M3	5.7	37.5
PR 134/75/SE/M3	3.8	75

PR 135 with standard perforation

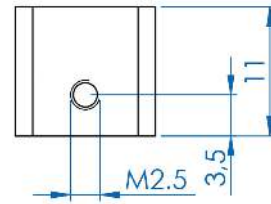
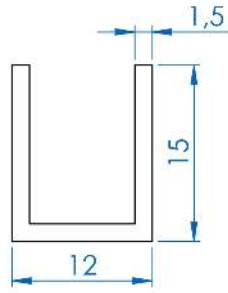


For Casing: **TO 220, TO 218 (TOP 3)**

Device mounted by: **Screw**

article	R _{thk} [K/W]	length [mm]
PR 135/37,5/SE/M3	4.3	37.5
PR 135/75/SE/M3	2.9	75

PR 10/11/SE

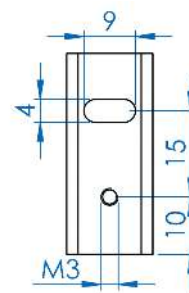
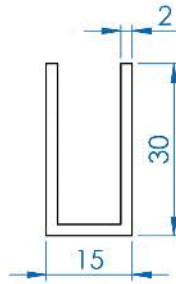


For Casing: **SOT 32, TO 126**

Rthk: [K/W]: **45**

Device mounted by: **Screw**

PR 15/35/SE

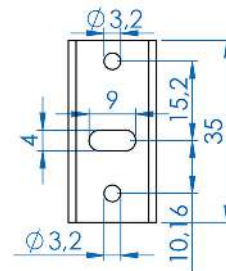
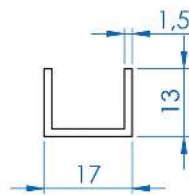


For Casing: **TO 220**

Rthk: [K/W]: **9**

Device mounted by: **Screw**

PR 17/35/II/SE

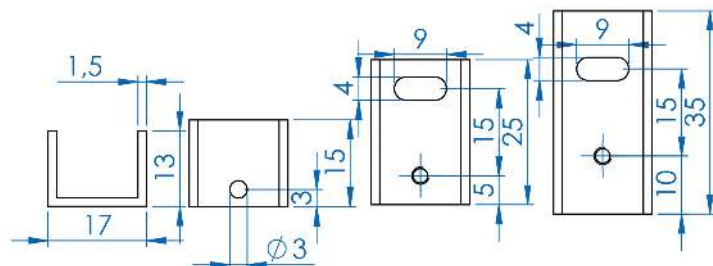


For Casing: **TO 220**

Rthk: [K/W]: **21**

Device mounted by: **Screw**

PR 17 with standard perforation

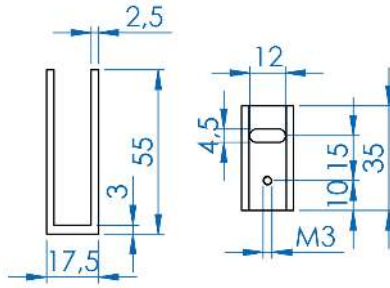


For Casing: **TO 220**

Device mounted by: **Screw**

article	Rthk [K/W]	width [mm]
PR17/15/SE	28	15
PR17/25/SE	24	25
PR17/35/SE	21	35

PR 16/35/SE

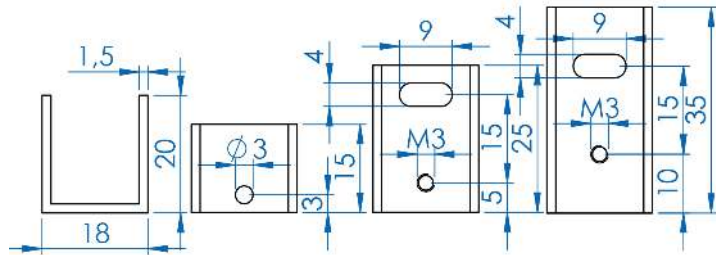


For Casing: **TO 220**

Rthk: [K/W]: **7**

Device mounted by: **Screw**

PR 18 with standard perforation

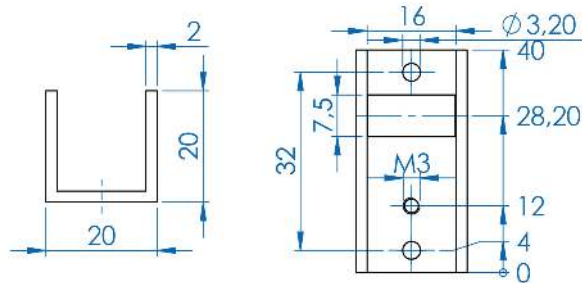


For Casing: **TO 220**

Device mounted by: **Screw**

article	Rthk [K/W]	width [mm]
PR 18/15/SE	20	15
PR 18/25/SE	17	25
PR 18/35/SE	13	35

PR 13/40/SE

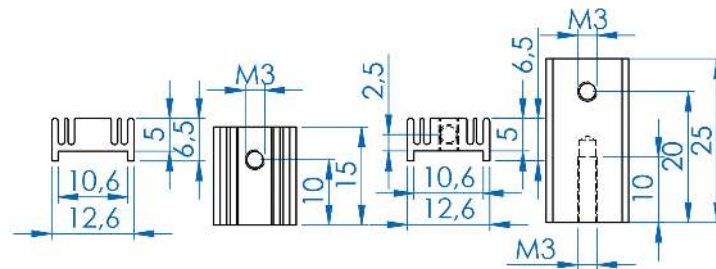


For Casing: **TO 220**

Rthk: [K/W]: **11**

Device mounted by: **Screw**

PR 5 with M3 thread



For Casing: **TO 220**

Device mounted by: **Screw**

article	Rthk [K/W]	height [mm]
PR5/15/SE/M3	36	15
PR5/25/SE/M3	32	25

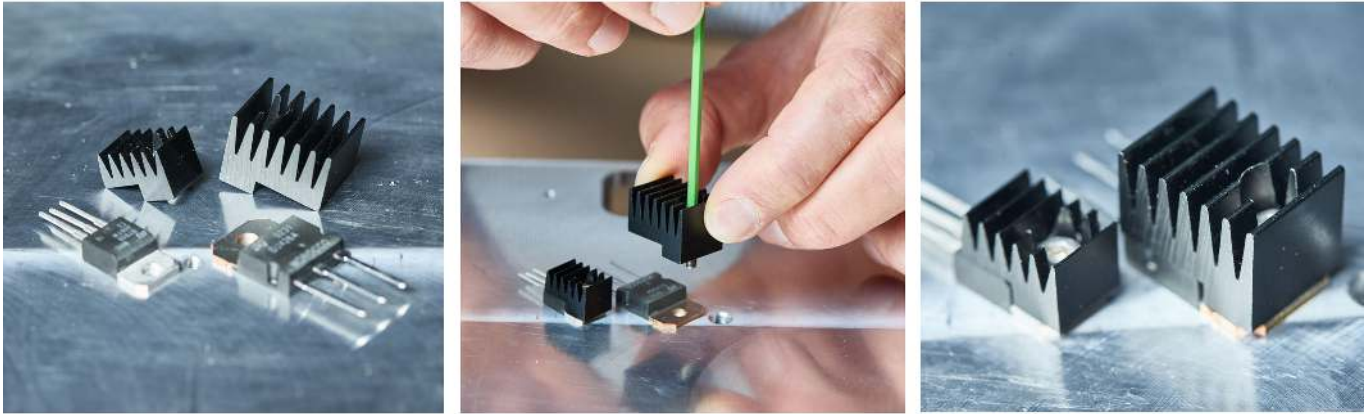
Shell and Pressure Heat Sink

for contact optimisation and additional convection surface.

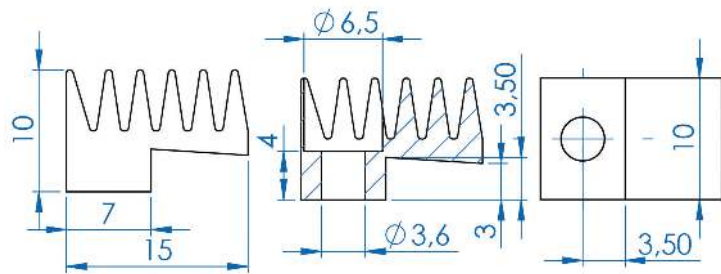
- Reducing the transfer resistance (R_{thGK}) to the main heat sink and improving the heat flow by full area contact pressure
- Reducing the total heat resistance (R_{th}) by additional heat dissipation

Standard article AK350/10/SE and AK352/15/SE

Special dimensions, e.g. for multiple installation on request



AK 350/10/SE

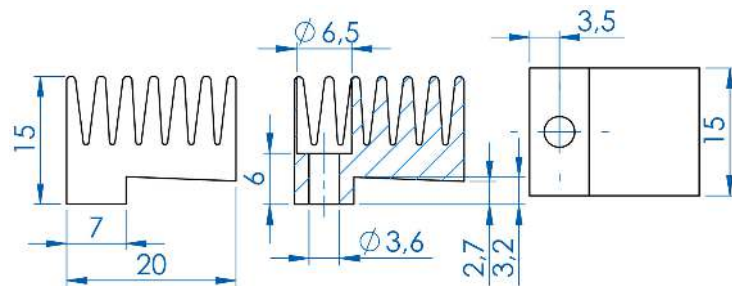
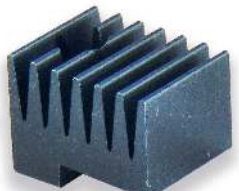


For Casing: **TO 220**

Rthk: [K/W]: **64**

Device mounted by: **Screw**

AK 352/15/SE

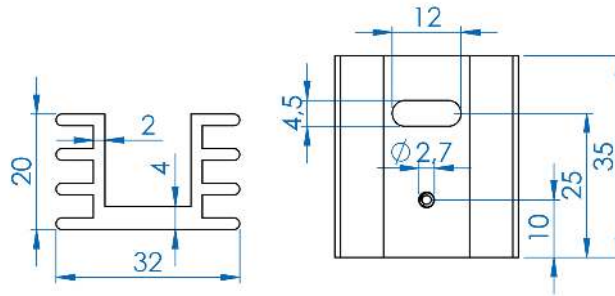


For Casing: **TO 218, TOP 3**

Rthk: [K/W]: **28**

Device mounted by: **Screw**

PR 24



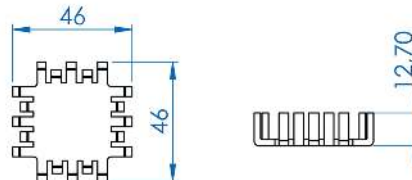
For Casing: **TO 220**

Device mounted by: **Screw**

article	Rthk [K/W]	length [mm]
PR24/20/SE	10.5	20
PR 24/35/SE	8.5	35
PR 24/50/SE	7	50

FI 310/SE

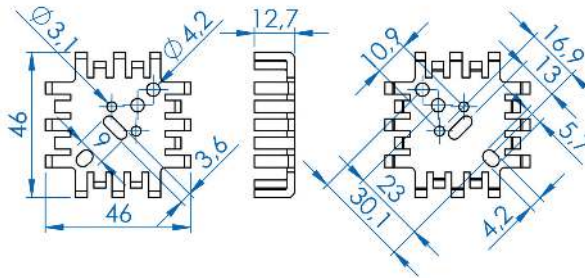
for Custom Perforation



Rthk: [K/W]: **7**

Device mounted by: **Screw**

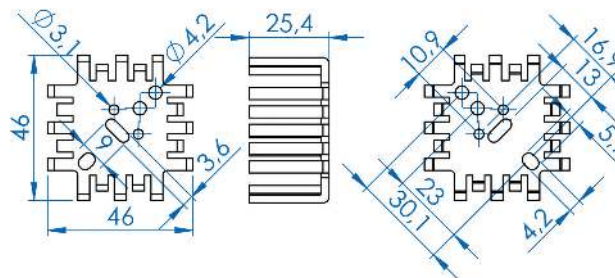
FI 311/SE



For Casing: **TO3, TO66, TO9, SOT32, TO220**, Rthk: [K/W]: **7**

Device mounted by: **Screw**

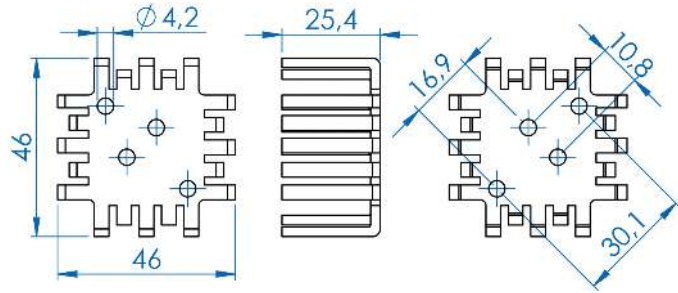
FI 321/SE



For Casing: **TO3, TO66, TO9, SOT32, TO220**, Rthk: [K/W]: **6**

Device mounted by: **Screw**

FI 322/SE



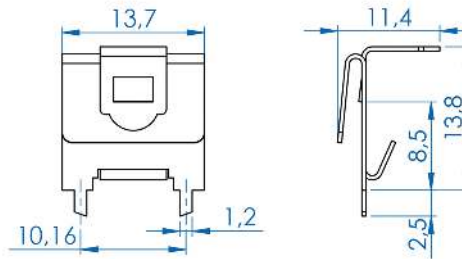
For Casing: **TO 3**

Rthk: [K/W]: **6**

Device mounted by: **Screw**

CK 970

out of Brass.



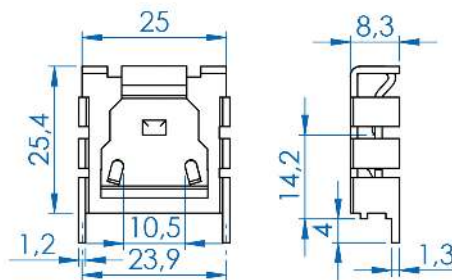
For Casing: **TO 92**

Rthk: [K/W]: **40**

Device mounted by: **Clip on**

FI 353/SN

Full Tinned



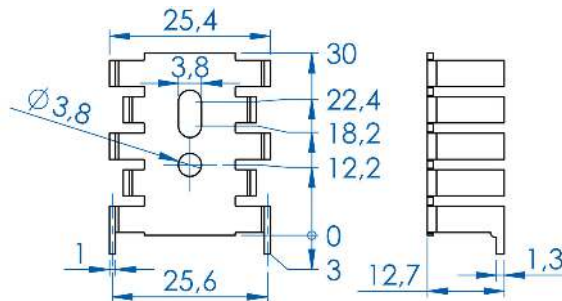
For Casing: **TO 220**

Rthk: [K/W]: **20**

Device mounted by: **Clip on**

FI 351/30/SN

Full Tinned

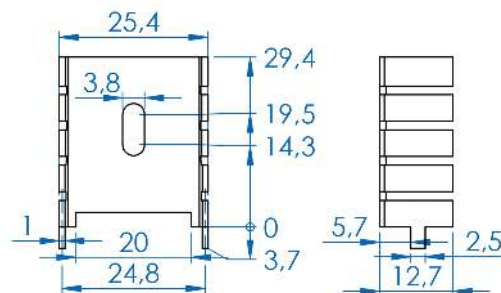


For Casing: **TO 126, (SOT32), TO 220** Rthk: [K/W]: **17**

Device mounted by: **Screw**

FI 306/SN

Full Tinned



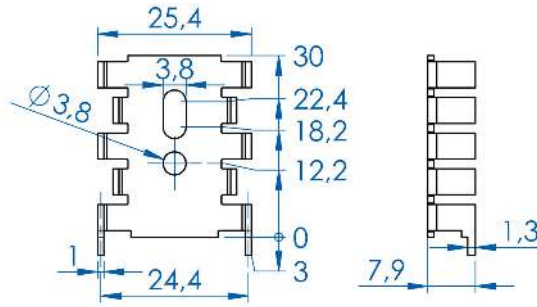
For Casing: **TO 220**

Rthk: [K/W]: **22.5**

Device mounted by: **Screw**

FI 347/30/SN

Full Tinned

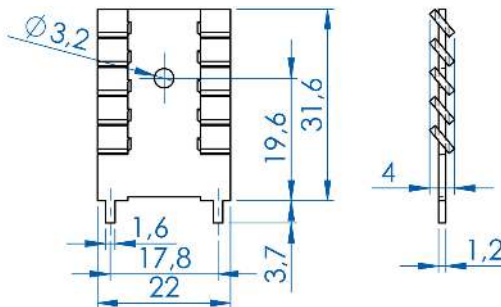


For Casing: **TO220, TO126, (SOT32)** Rthk: [K/W]: **20**

Device mounted by: **Screw**

FI 300/SN

Full Tinned



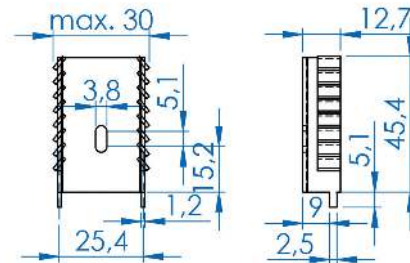
For Casing: **TO 220**

Rthk: [K/W]: **29.5**

Device mounted by: **Screw**

FI 307/SN

Full Tinned



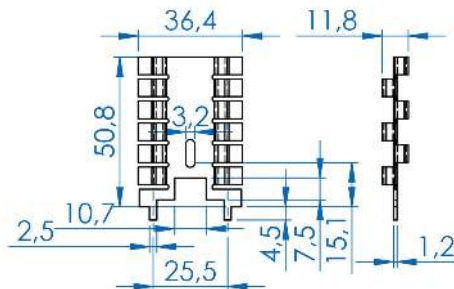
For Casing: **TO 220**

Rthk: [K/W]: **15.5**

Device mounted by: **Screw**

FI 308/SN

Full Tinned



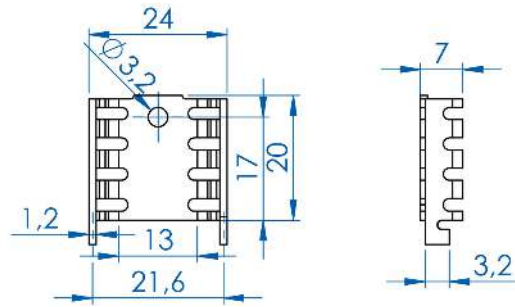
For Casing: **TO 220, TO 202**

Rthk: [K/W]: **16.5**

Device mounted by: **Screw**

FI 302/SN

Full Tinned



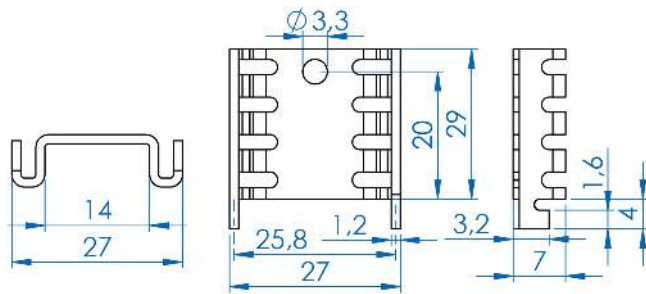
For Casing: **TO 220**

Rthk: [K/W]: **23.5**

Device mounted by: **Screw**

FI 303/SN

Full Tinned



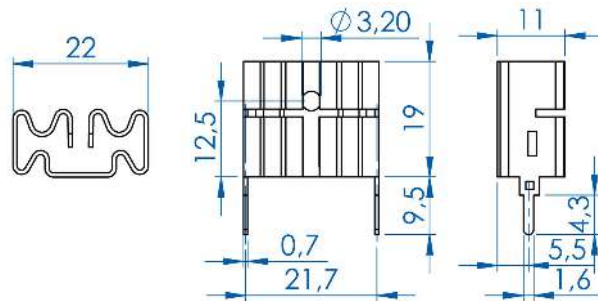
For Casing: **TO 220**

Rthk: [K/W]: **22.5**

Device mounted by: **Screw**

CK 985/SN

Full Tinned



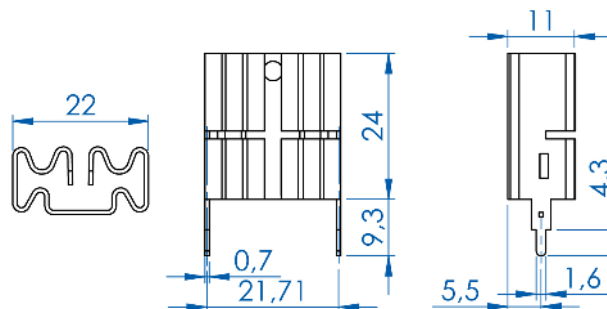
For Casing: **TO 220**

Rthk: [K/W]: **20**

Device mounted by: **Clip on**

CK 990/SN

Full Tinned

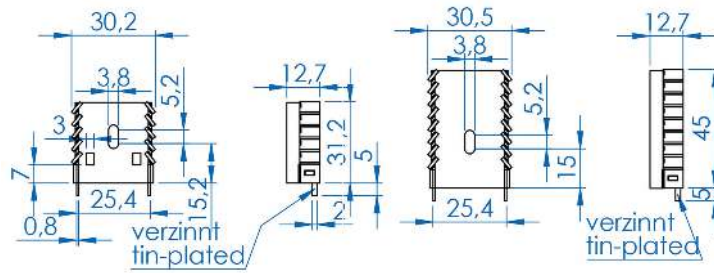


For Casing: **TO 220**

Rthk: [K/W]: **19.5**

Device mounted by: **Clip on**

FI 309

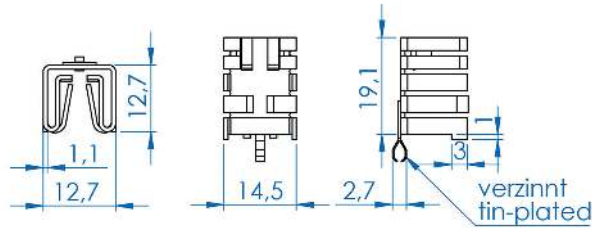


For Casing: **TO 220**

Device mounted by: **Screw**

article	Rthk [K/W]	height [mm]
FI 309/30,2/SE	17	30.2
FI 309/45/SE	13	45

FI 343/SE

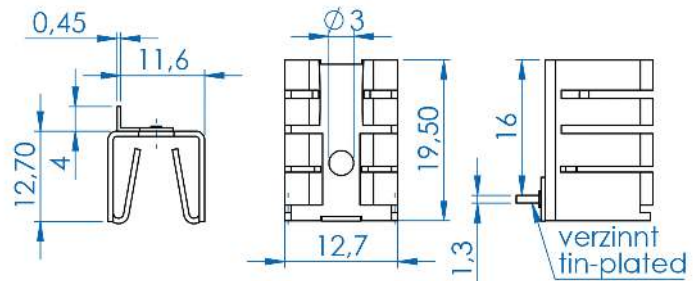


For Casing: **TO 220**

Rthk: [K/W]: **25**

Device mounted by: **Clip on**

FI 342/SE

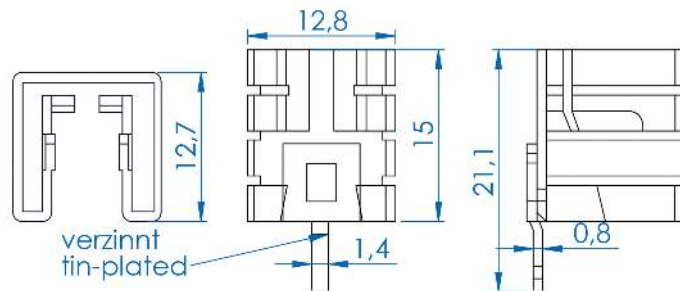


For Casing: **TO 220**

Rthk: [K/W]: **25**

Device mounted by: **Clip on**

FI 326/SE

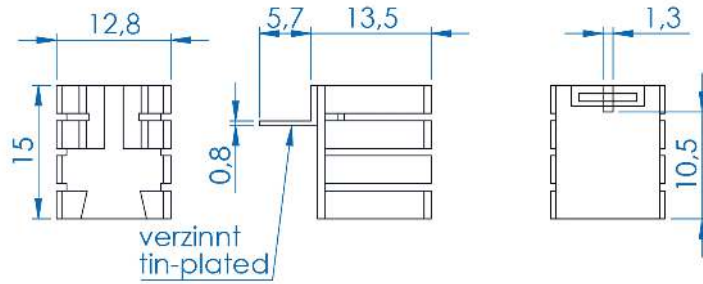


For Casing: **TO 220**

Rthk: [K/W]: **26**

Device mounted by: **Clip on**

FI 327/SE

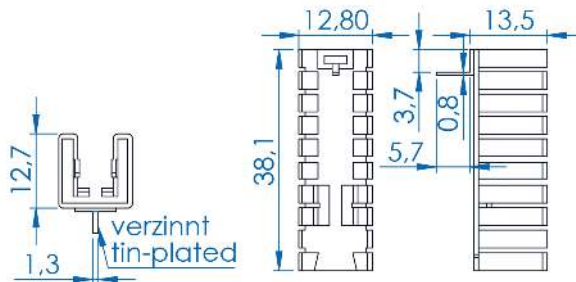


For Casing: **TO 220**

Rthk: [K/W]: **26**

Device mounted by: **Clip on**

FI 330/SE



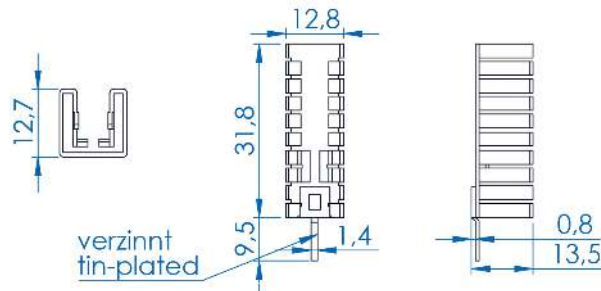
For Casing: **TO 220**

Rthk: [K/W]: **16**

Device mounted by: **Clip on**

FI 331/SE

Soldering pin length 9.5



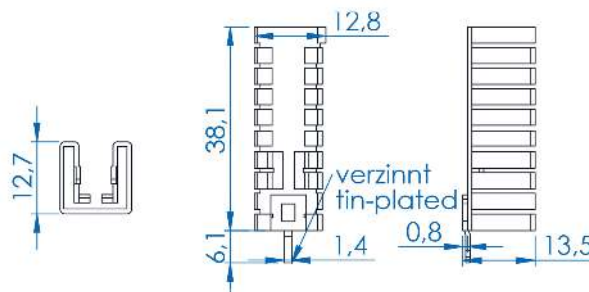
For Casing: **TO 220**

Rthk: [K/W]: **16**

Device mounted by: **Clip on**

FI 329/SE

Soldering pin length 6.1

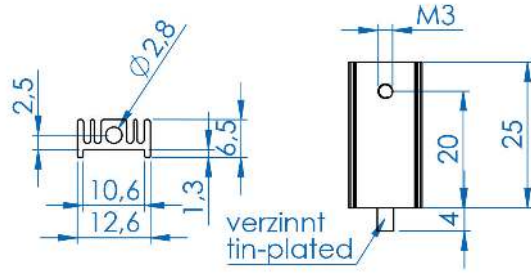


For Casing: **TO 220**

Rthk: [K/W]: **16**

Device mounted by: **Clip on**

PR 5/25/SE/LS

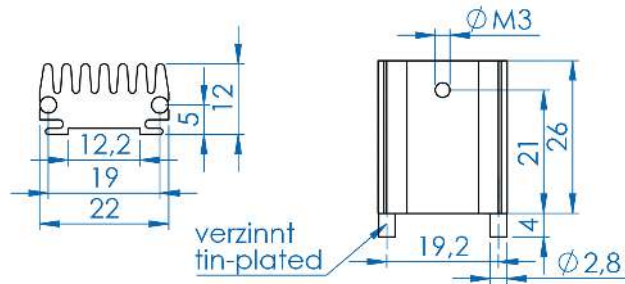


For Casing: **TO 220**

Rthk: [K/W]: **32**

Device mounted by: **Screw**

PR 6/26/SE/LS

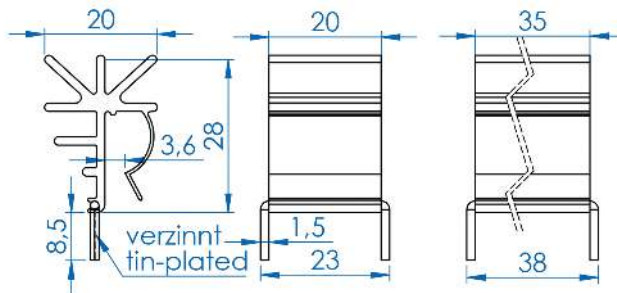


For Casing: **TO 220**

Rthk: [K/W]: **14**

Device mounted by: **Screw**

CK 960

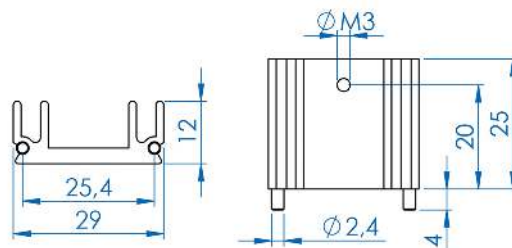


For Casing: **TO 220**

Device mounted by: **Clip on**

article	Rthk [K/W]	width [mm]
CK 960/20/SE	13	20
CK 960/35/SE	11	35

PR 29/25/SE/LS

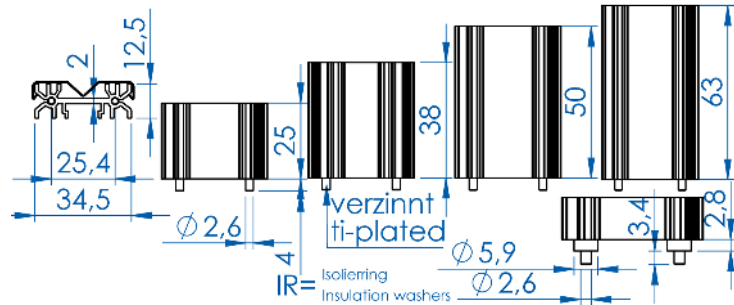
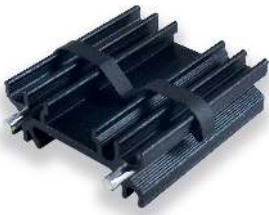


For Casing: **TO 220**

Rthk: [K/W]: **14**

Device mounted by: **Screw**

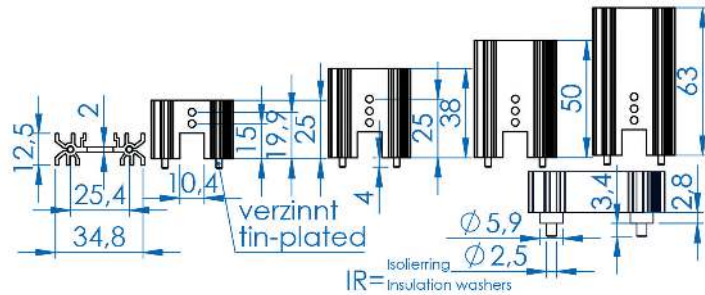
PR 28 for clip mounting



For Casing: **TO220, TO202, TO218 (TOP 3)** Device mounted by: **Mounting Clip** For Mounting Clip: **MC 28**

article	Rthk [K/W]	height [mm]
PR 28/25/MC	13	25
PR 28/38/MC	10	38
PR 28/50/MC	8.6	50
PR 28/63/MC	6.8	63
PR 28/25/MC/IR	13	25
PR 28/38/MC/IR	10	38
PR 28/50/MC/IR	8.6	50
PR 28/63/MC/IR	6.8	63

PR 28 for screw mounting



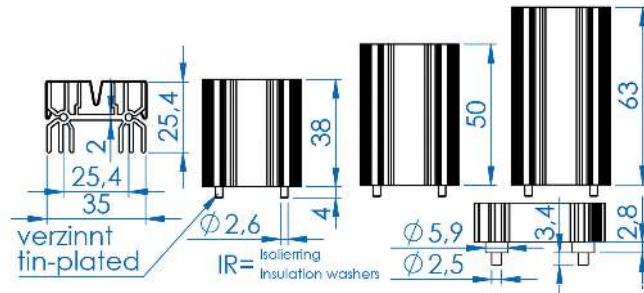
For Casing: **TO220, TO202, TO218 (TOP 3)** Device mounted by: **Screw**

article	Rthk [K/W]	height [mm]
PR 28/25/SE	13	25
PR 28/38/SE	10	38
PR 28/50/SE	8.6	50
PR 28/63/SE	6.8	63
PR28/25/SE/IR	13	25
PR 28/38/SE/IR	10	38
PR 28/50/SE/IR	8.6	50
PR 28/63/SE/IR	6.8	63



Alutronic delivers custom-cut silicone foils to fit you application-starting with lot size 1!

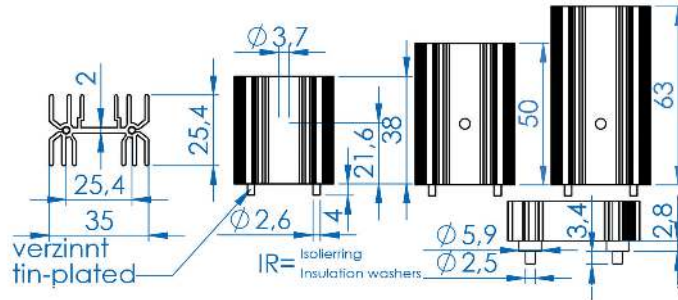
PR 31 for clip mounting



For Casing: **TO220, TO218 (TOP 3)** Device mounted by: **Mounting Clip** For Mounting Clip: **MC 31**

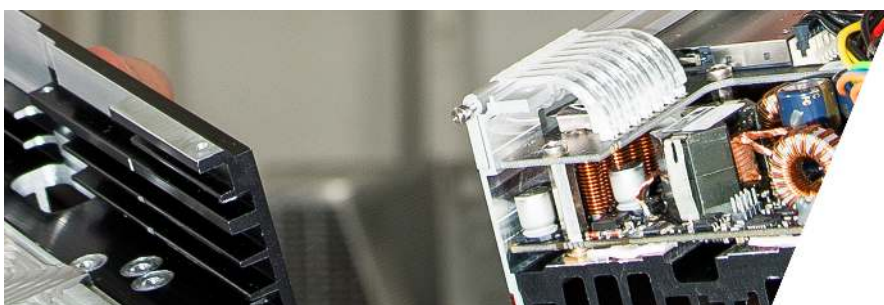
article	Rthk [K/W]	height [mm]
PR 31/38/MC	7.2	38
PR 31/50/MC	5.8	50
PR 31/63/MC	4.7	63
PR 31/38/MC/IR	7.2	38
PR 31/50/MC/IR	5.8	50
PR 31/63/MC/IR	4.7	63

PR 31 for screw mounting



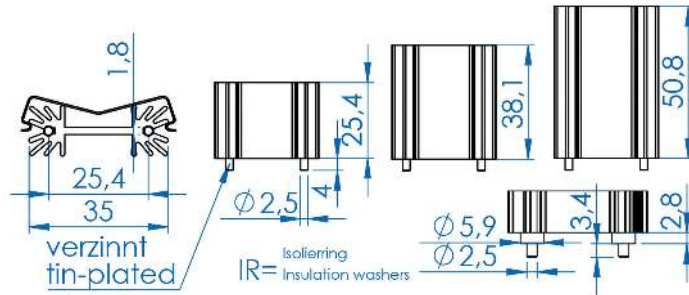
For Casing: **TO 220, TO 218, (TOP 3)** Device mounted by: **Screw**

article	Rthk [K/W]	height [mm]
PR 31/38/SE	7.2	38
PR 31/50/SE	5.8	50
PR 31/63/SE	4.7	63
PR 31/38/SE/IR	7.2	38
PR 31/50/SE/IR	5.8	50
PR 31/63/SE/IR	4.7	63



Alutronic offers pre-assembly of standard and customized distant bolts!

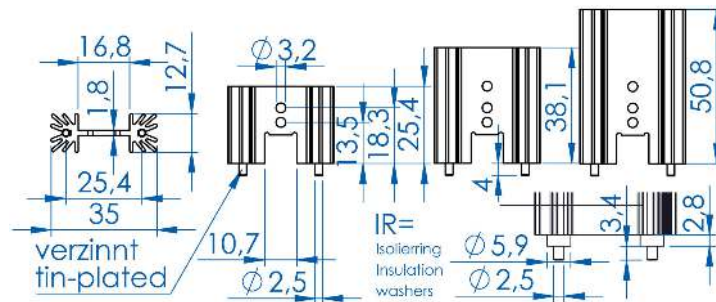
PR 32 for clip mounting



For Casing: **TO 220, TO 218, TOP 3, TO 202** Device mounted by: **Mounting Clip** For Mounting Clip: **MC 32**

article	Rthk [K/W]	height [mm]
PR 32/25,4/MC	14	25.4
PR 32/38,1/MC	11	38.1
PR 32/50,8/MC	9	50.8
PR 32/25,4/MC/IR	14	25.4
PR 32/38,1/MC/IR	11	38.1
PR 32/50,8/MC/IR	9	50.8

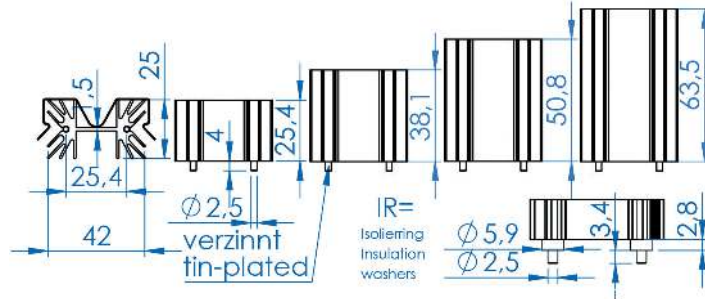
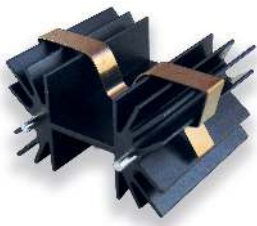
PR 32 for screw mounting



For Casing: **TO 220, TO202, TO218 (TOP 3)** Device mounted by: **Screw**

article	Rthk [K/W]	height [mm]
PR 32/25,4/SE	14	25.4
PR 32/38,1/SE	11	38.1
PR 32/50,8/SE	9	50.8
PR 32/25,4/SE/IR	14	25.4
PR 32/38,1/SE/IR	11	38.1
PR 32/50,8/SE/IR	9	50.8

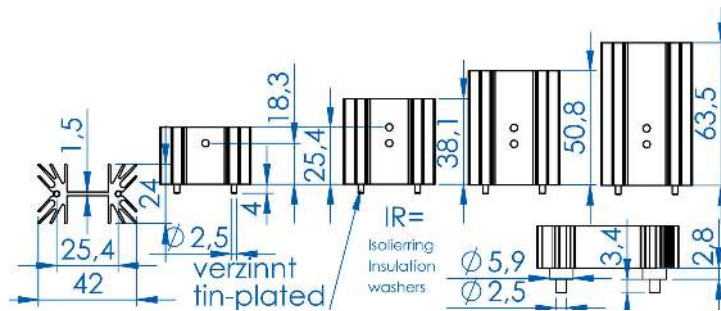
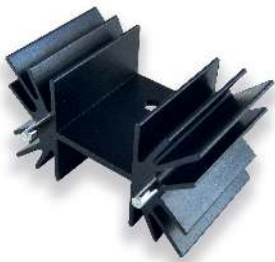
PR 33 for clip mounting



For Casing: **TO220, TO 218 (TOP 3)** Device mounted by: **Mounting Clip** For Mounting Clip: **MC 33**

article	Rthk [K/W]	height [mm]
PR 33/25,4/MC	6.2	25.4
PR 33/38,1/MC	5	38.1
PR 33/50,8/MC	4.2	50.8
PR 33/63,5/MC	3.6	63.5
PR 33/25,4/MC/IR	6.2	25.4
PR 33/38,1/MC/IR	5	38.1
PR 33/50,8/MC/IR	4.2	50.8
PR 33/63,5/MC/IR	3.6	63.5

PR 33 for screw mounting



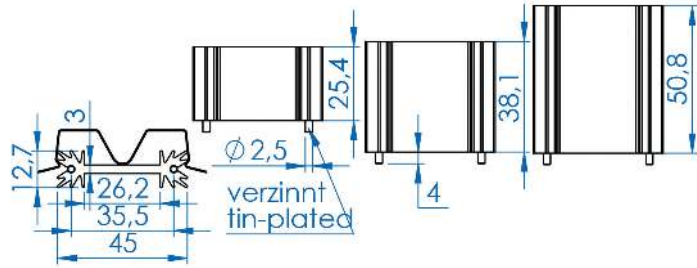
For Casing: **TO 220, TO 218, (TOP 3)** Device mounted by: **Screw**

article	Rthk [K/W]	height [mm]
PR 33/25,4/SE	6.2	25.4
PR 33/38,1/SE	5	38.1
PR 33/50,8/SE	4.2	50.8
PR 33/63,5/SE	3.6	63.5
PR 33/25,4/SE/IR	6.2	25.4
PR 33/38,1/SE/IR	5	38.1
PR 33/50,8/SE/IR	4.2	50.8
PR 33/63,5/SE/IR	3.6	63.5



Alutronic offers the "ClipTool" as a easy manual mounting of clip-on semiconductors- simple and efficient!

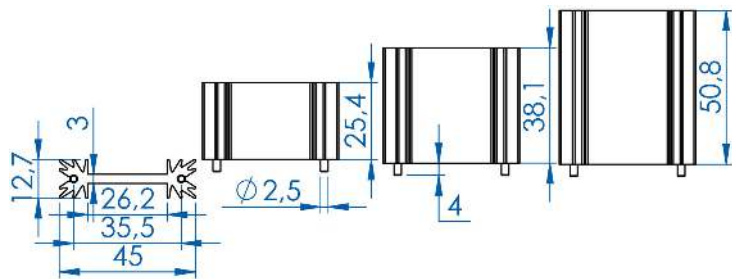
PR 34 for clip mounting



For Casing: **TO220, TO202, TO218 (TOP 3)** Device mounted by: **Mounting Clip** For Mounting Clip: **MC 34**

article	Rthk [K/W]	height [mm]
PR 34/25,4/MC	8.2	25.4
PR 34/38,1/MC	7	38.1
PR 34/50,8/MC	6.2	50.8

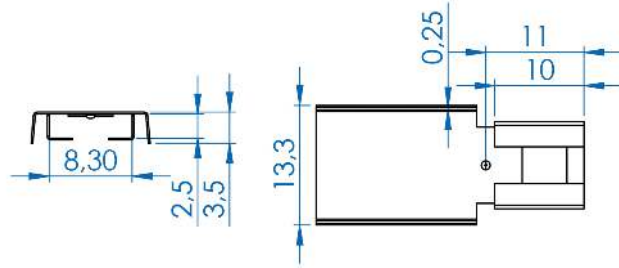
PR 34 for screw mounting



For Casing: **TO220, TO202, TO218 (TOP 3)** Device mounted by: **Screw**

article	Rthk [K/W]	height [mm]
PR 34/25,4/SE	8.2	25.4
PR 34/38,1/SE	7	38.1
PR 34/50,8/SE	6.2	50.8

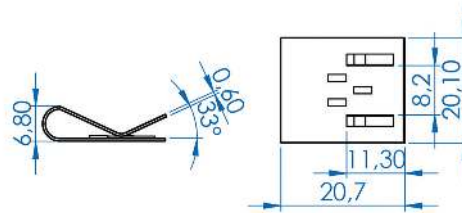
CK 932



For Casing: **TO126, (SOT32), SOT82** Rthk: [K/W]: **60**

Device mounted by: **Clip on**

CK 632/SE

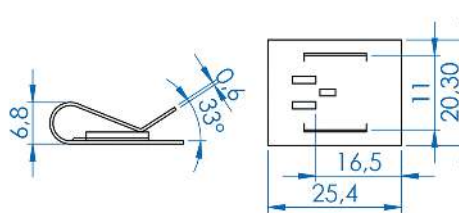


For Casing: **TO126 (SOT32)**

Rthk: [K/W]: **22**

Device mounted by: **Clip on**

CK 633/SE

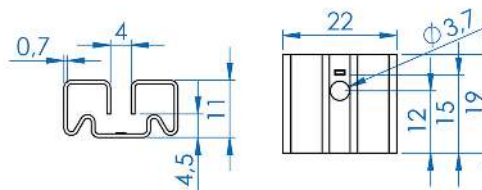


For Casing: **TO 220**

Rthk: [K/W]: **21**

Device mounted by: **Clip on**

CK 980



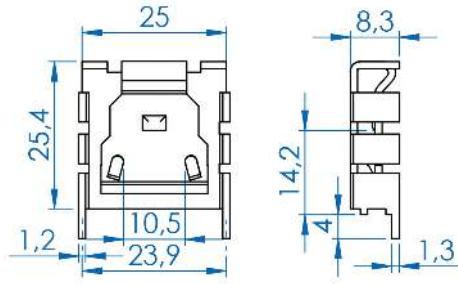
For Casing: **TO 220**

Rthk: [K/W]: **21**

Device mounted by: **Clip on**

article	Surface
CK 980/SE	
CK 980/AL	

FI 353/SE

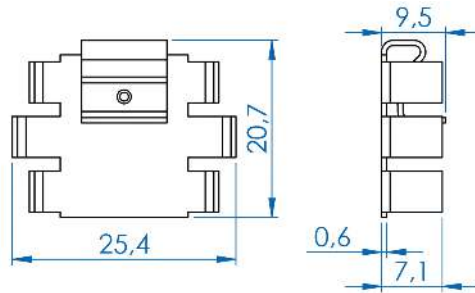


For Casing: **TO 220**

Rthk: [K/W]: **18**

Device mounted by: **Clip on**

FI 344/SE

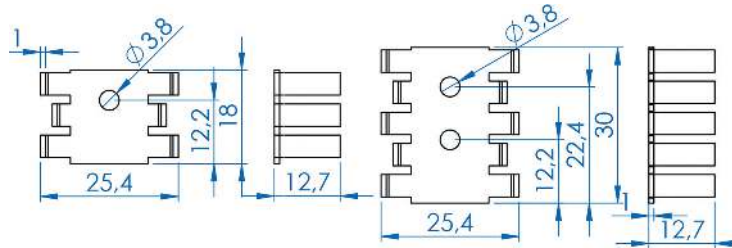


For Casing: **TO 220**

Rthk: [K/W]: **27**

Device mounted by: **Clip on**

FI 349

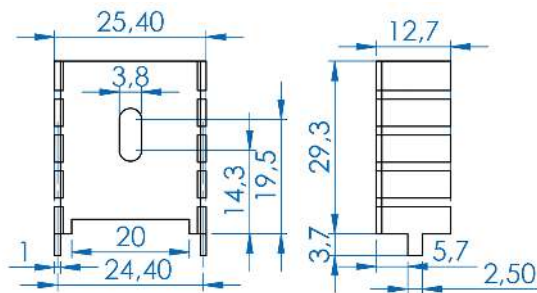


For Casing: **SOT32 (TO126), TO220**

Device mounted by: **Screw**

article	Rthk [K/W]	height [mm]
FI 349/18/SE	21	18
FI 349/30/SE	15	30

FI 306/SE

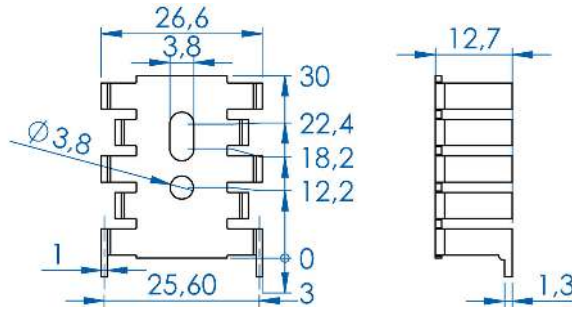


For Casing: **TO 220**

Rthk: [K/W]: **20**

Device mounted by: **Screw**

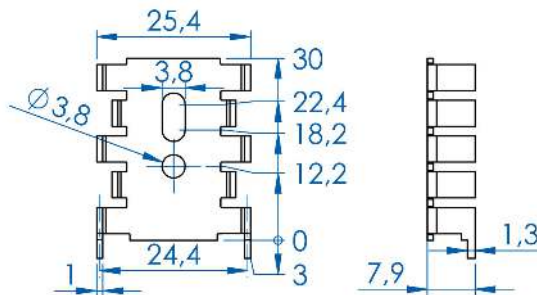
FI 351/30/SE



For Casing: **TO 126, (SOT32), TO 220** Rthk: [K/W]: **15**

Device mounted by: **Screw**

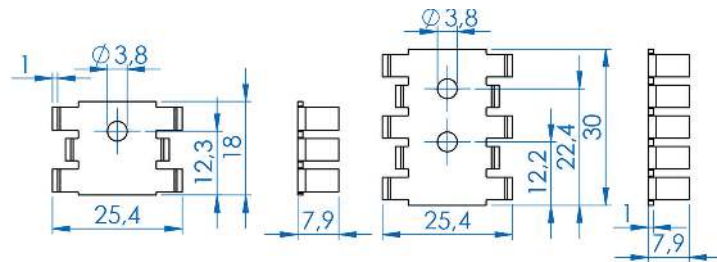
FI 347/30/SE



For Casing: **TO 126, (SOT32), TO 220** Rthk: [K/W]: **18**

Device mounted by: **Screw**

FI 345

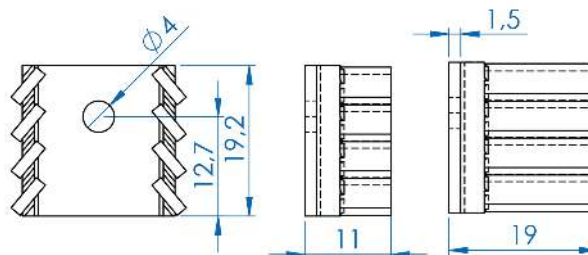


For Casing: **SOT32 (TO126), TO220**

Device mounted by: **Screw**

article	Rthk [K/W]	height [mm]
FI 345/18/SE	25	18
FI 345/30/SE	18	30

FI 355

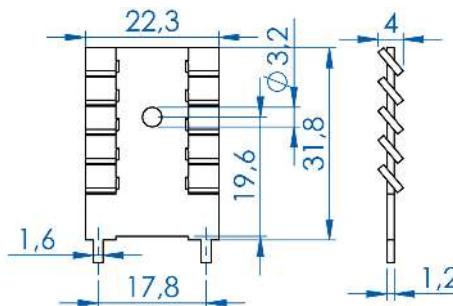


For Casing: **TO 220**

Device mounted by: **Screw**

article	Rthk [K/W]	height [mm]
FI 355/11/SE	30	11
FI 355/19/SE	21	19

FI 300/SE

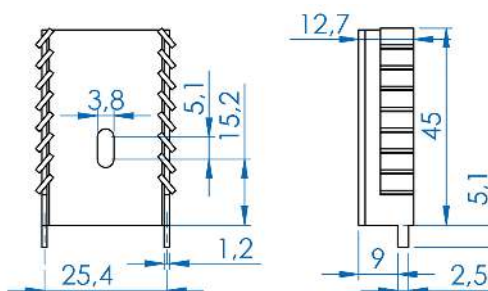


For Casing: **TO 220**

Rthk: [K/W]: **27**

Device mounted by: **Screw**

FI 307/SE

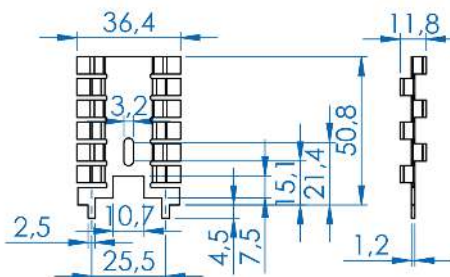


For Casing: **TO 220**

Rthk: [K/W]: **13**

Device mounted by: **Screw**

FI 308/SE

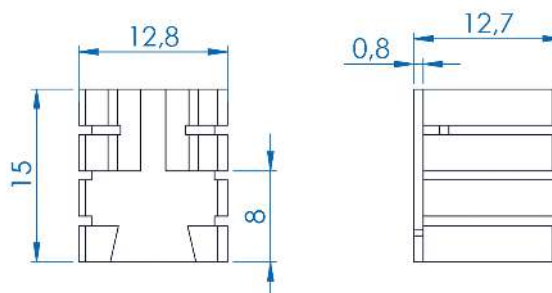


For Casing: **TO 220, TO 202**

Rthk: [K/W]: **14**

Device mounted by: **Screw**

FI 328/SE

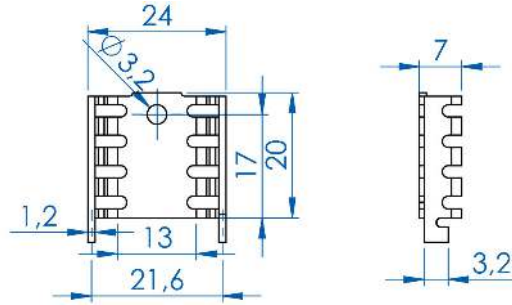


For Casing: **TO 220**

Rthk: [K/W]: **26**

Device mounted by: **Clip on**

FI 302/SE

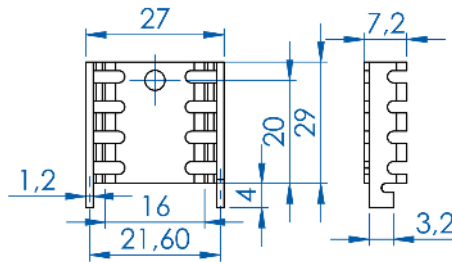


For Casing: **TO 220**

Rthk: [K/W]: **21**

Device mounted by: **Screw**

FI 303/SE

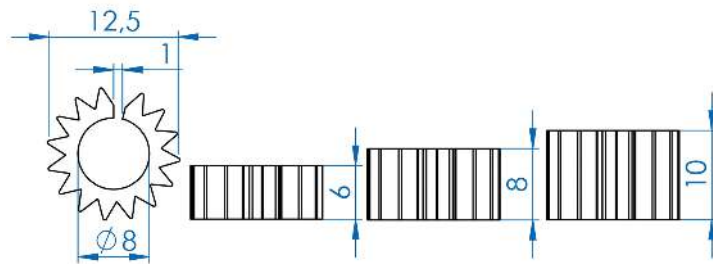


For Casing: **TO 220**

Rthk: [K/W]: **20**

Device mounted by: **Screw**

FE 372



For Casing: **TO5, TO 39**

Device mounted by: **Clip on**

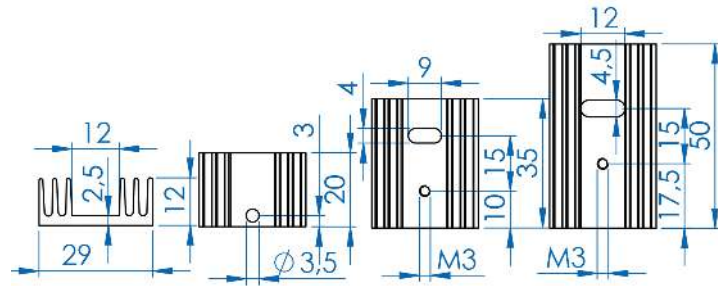
article	Rthk [K/W]	height [mm]
FE372/6/AL	63	6
FE372/8/AL	54	8
FE372/10/AL	44	10



Questions?
We like to help out!
Call us at +49-2353-915-5

PR 19 with standard perforation

You will find the basic profile PR 20 in the section Heat Sink Extrusions with Gap on Fin Side



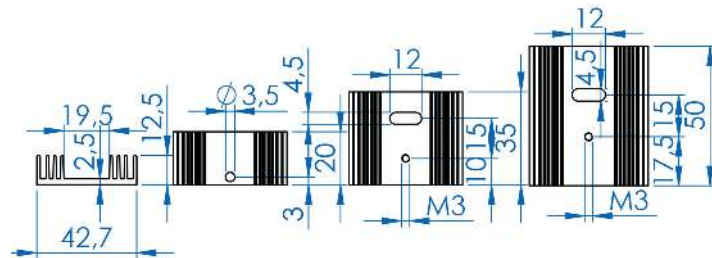
For Casing: **TO 220**

Device mounted by: **Screw**

article	Rthk [K/W]	length [mm]
PR 19/20/SE	13.5	20
PR19/35/SE	12	35
PR 19/50/SE	9.5	50

PR 21 with standard perforation

You will find the basic profile PR 22 in the section Heat Sink Extrusions with Gap on Fin Side

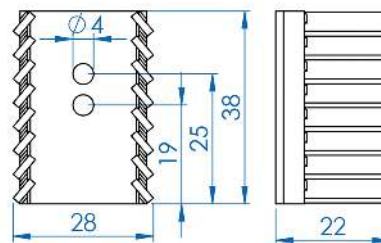


For Casing: **TO 220**

Device mounted by: **Screw**

article	Rthk [K/W]	length [mm]
PR21/20/SE	11	20
PR21/35/SE	9.5	35
PR21/50/SE	8	50

FI 356/SE



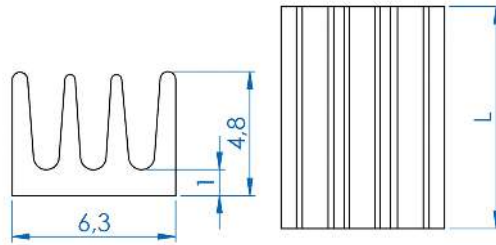
For Casing: **TO 220**

Rthk: [K/W]: **9.9**

Device mounted by: **Screw**

The attachment method of the following heat sinks is by double-sided adhesive, thermally conducting film, e.g. SI 0,13-DS.
 Technical specifications for the SI 0,13-DS are given in the chapter Insulation + Heat Conduction / Silicone Washers.

PR 7 standard length

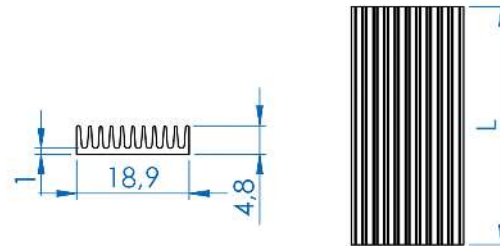


For Casing: **DIL**

Device mounted by: **adhesive**

article	Rthk [K/W]	length [mm]
PR 7/8,5/SE	80	8,5
PR 7/8,5/SE	73	10
PR 7/8,5/SE	48	19
PR 7/8,5/SE	32	23

PR8 standard length



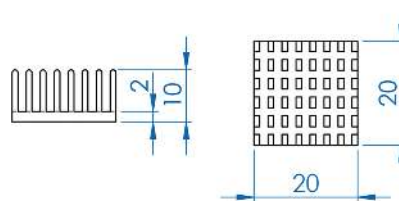
For Casing: **DIL**

Device mounted by: **adhesive**

article	Rthk [K/W]	length [mm]
PR 8/6,3/SE	50	6,3
PR 8/33/SE	13	33
PR 8/37/SE	11	37
PR 8/47/SE	9,5	47
PR 8/51/SE	8,5	51

PG 2020/10/SE/SF

with already pre-mounted, double-sided adhesive foil



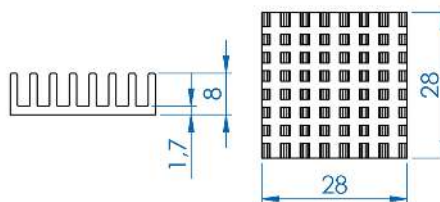
For Casing: **PGA, BGA, IC**

Rthk: [K/W]: **18**

Device mounted by: **adhesive**

PG 2828/8/SE/SF

with already pre-mounted, double-sided adhesive foil



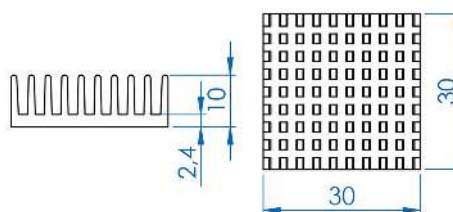
For Casing: **PGA, BGA, IC**

Rthk: [K/W]: **11**

Device mounted by: **adhesive**

PG 3030/10/SE/SF

with already pre-mounted, double-sided adhesive foil



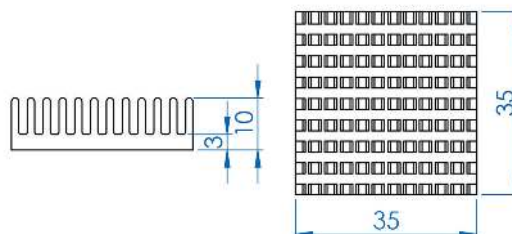
For Casing: **PGA, BGA, IC**

Rthk: [K/W]: **9.6**

Device mounted by: **adhesive**

PG 3535/10/SE/SF

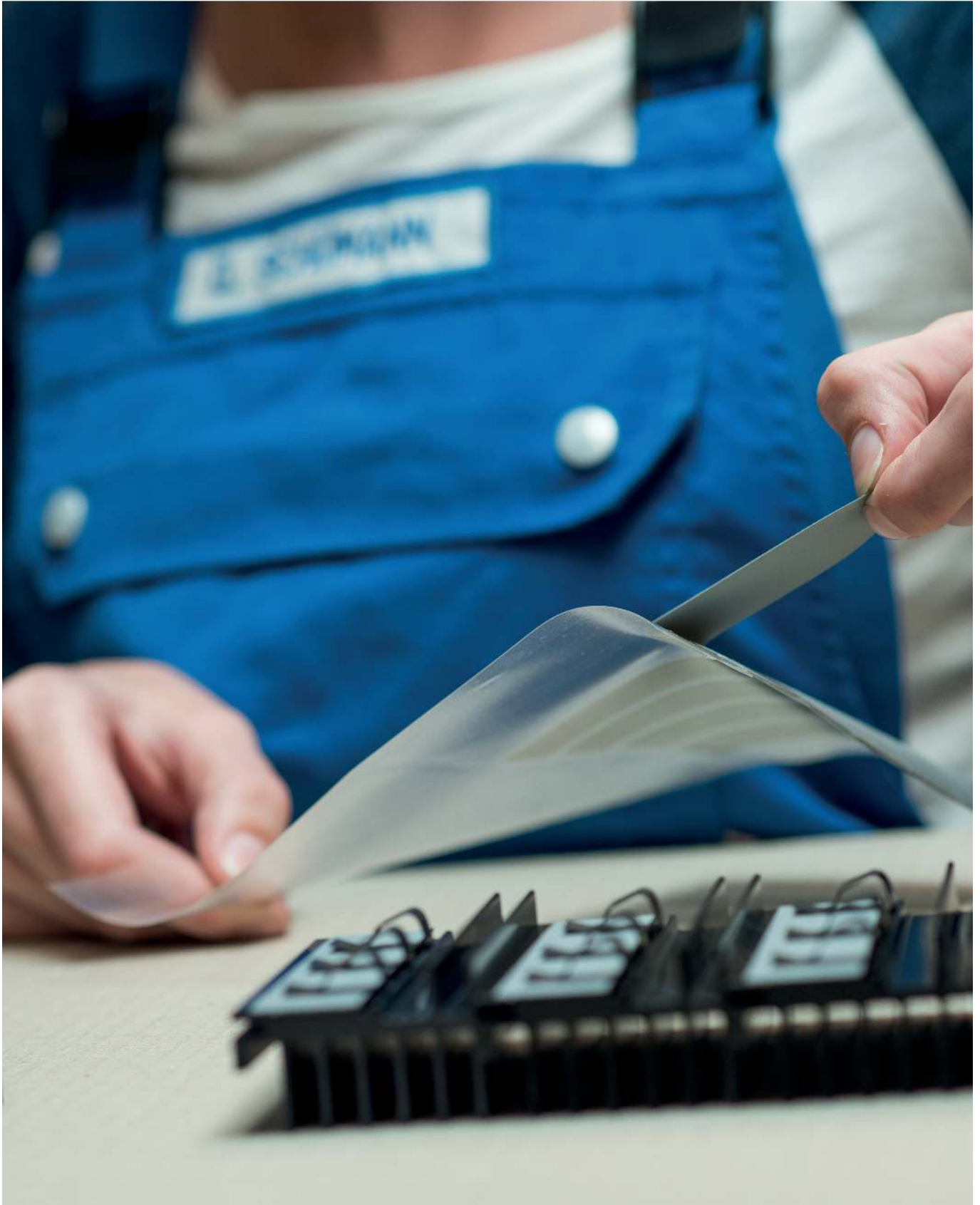
with already pre-mounted, double-sided adhesive foil



For Casing: **PGA, BGA, IC**

Rthk: [K/W]: **7.8**

Device mounted by: **adhesive**



type	page	type	page	type	page	type	page
A		FI 353/SN	15	PR 31/50/MC/IR	22	PR	9
AK 350/10/SE	12	FI 355/11/SE	28	PR 31/50/SE	22	135/37,5/SE/M3	
AK 352/15/SE	12	FI 355/19/SE	28	PR 31/50/SE/IR	22	PR 136/94/SE/M 3	5
C		FI 356/SE	31	PR 31/63/MC	22	PR 137/94/SE/M3	6
CK 632/SE	26	P		PR 31/63/MC/IR	22	PR 138/94/SE/M3	6
CK 633/SE	26	PG	32	PR 31/63/SE	22	PR 139/94/SE/M 3	5
CK 932	26	2020/10/SE/SF		PR 31/63/SE/IR	22	PR 143/94/SE/M 3	7
CK 960/20/SE	20	PG 2828/8/SE/SF	33	PR 32/25,4/MC	23	PR 233/94/SE	8
CK 960/35/SE	20	PG	33	PR 32/25,4/MC/IR	23	PR 234/94/SE	7
CK 970	15	3030/10/SE/SF		PR 32/25,4/SE	23	PR 290/94/SE	4
CK 980/AL	26	PG	33	PR 32/25,4/SE/IR	23	PR 292/94/SE/M3	6
CK 980/SE	26	3535/10/SE/SF		PR 32/38,1/MC	23	PR 293/94/SE	6
CK 985/SN	17	PR 5/25/SE/LS	20	PR 32/38,1/MC/IR	23	PR17/15/SE	10
CK 990/SN	17	PR 6/26/SE/LS	20	PR 32/38,1/SE	23	PR17/25/SE	10
F		PR 7/8,5/SE	32	PR 32/38,1/SE/IR	23	PR17/35/SE	10
FE372/10/AL	30	PR 8/33/SE	32	PR 32/50,8/MC	23	PR19/35/SE	31
FE372/6/AL	30	PR 8/37/SE	32	PR 32/50,8/MC/IR	23	PR21/20/SE	31
FE372/8/AL	30	PR 8/47/SE	32	PR 32/50,8/SE	23	PR21/35/SE	31
FI 300/SE	29	PR 8/51/SE	32	PR 32/50,8/SE/IR	23	PR21/50/SE	31
FI 300/SN	16	PR 8/6,3/SE	32	PR 33/25,4/MC	24	PR24/20/SE	13
FI 302/SE	30	PR 10/11/SE	10	PR 33/25,4/MC/IR	24	PR28/25/SE/IR	21
FI 302/SN	17	PR 13/40/SE	11	PR 33/25,4/SE	24	PR5/15/SE/M3	11
FI 303/SE	30	PR 15/35/SE	10	PR 33/25,4/SE/IR	24	PR5/25/SE/M3	11
FI 303/SN	17	PR 16/35/SE	11	PR 33/38,1/MC	24		
FI 306/SE	27	PR 17/35/11/SE	10	PR 33/38,1/MC/IR	24		
FI 306/SN	15	PR 17/50/SE	7	PR 33/38,1/SE	24		
FI 307/SE	29	PR 18/15/SE	11	PR 33/38,1/SE/IR	24		
FI 307/SN	16	PR 18/25/SE	11	PR 33/50,8/MC	24		
FI 308/SE	29	PR 18/35/SE	11	PR 33/50,8/MC/IR	24		
FI 308/SN	16	PR 19/20/SE	31	PR 33/50,8/SE	24		
FI 309/45/SE	18	PR 19/50/SE	31	PR 33/50,8/SE/IR	24		
FI 309/30,2/SE	18	PR 24/35/SE	13	PR 33/63,5/MC	24		
FI 310/SE	13	PR 24/50/SE	13	PR 33/63,5/MC/IR	24		
FI 311/SE	13	PR 28/25/MC	21	PR 33/63,5/SE	24		
FI 321/SE	13	PR 28/25/MC/IR	21	PR 33/63,5/SE/IR	24		
FI 322/SE	14	PR 28/25/SE	21	PR 34/25,4/MC	25		
FI 326/SE	18	PR 28/38/MC	21	PR 34/25,4/SE	25		
FI 327/SE	19	PR 28/38/MC/IR	21	PR 34/38,1/MC	25		
FI 328/SE	29	PR 28/38/SE	21	PR 34/38,1/SE	25		
FI 329/SE	19	PR 28/38/SE/IR	21	PR 34/50,8/MC	25		
FI 330/SE	19	PR 28/50/MC	21	PR 34/50,8/SE	25		
FI 331/SE	19	PR 28/50/MC/IR	21	PR 101/94/SE/M3	4		
FI 342/SE	18	PR 28/50/SE	21	PR 116/94/SE/ M2,5	4		
FI 343/SE	18	PR 28/50/SE/IR	21	PR 118/94/SE/M3	4		
FI 344/SE	27	PR 28/63/MC	21	PR 119/94/SE	5		
FI 345/18/SE	28	PR 28/63/MC/IR	21	PR 126/94/SE/M3	8		
FI 345/30/SE	28	PR 28/63/SE	21	PR 127/94/SE	5		
FI 347/30/SE	28	PR 28/63/SE/IR	21	PR 133/94/SE/M3	7		
FI 347/30/SN	16	PR 29/25/SE/LS	20	PR 134/75/SE/M3	8		
FI 349/18/SE	27	PR 31/38/MC	22	PR	8		
FI 349/30/SE	27	PR 31/38/MC/IR	22	134/37,5/SE/M3			
FI 351/30/SE	28	PR 31/38/SE	22	PR 135/75/SE/M3	9		
FI 351/30/SN	15	PR 31/38/SE/IR	22				
FI 353/SE	27	PR 31/50/MC	22				