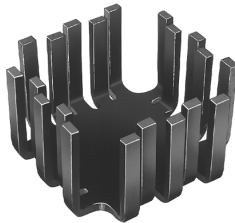
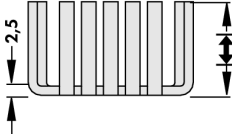
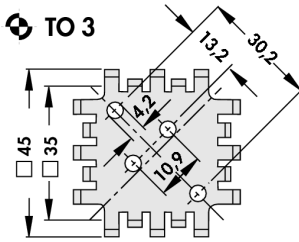
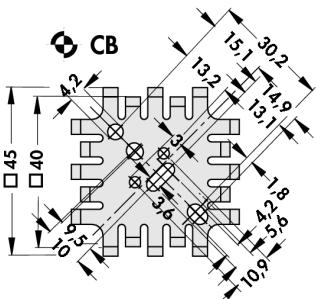
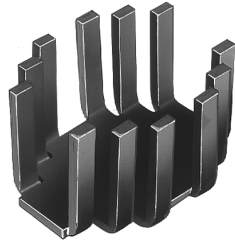
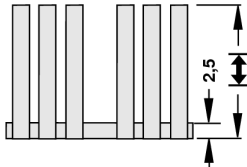
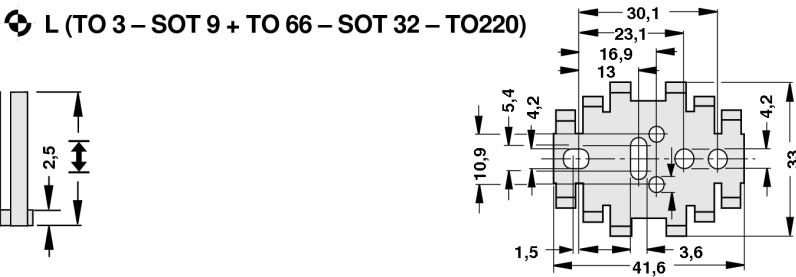
			
Art. Nr.	⌀ [mm]	R _{th} [K/W]	⊗	Art. Nr.	⌀ [mm]	R _{th} [K/W]	⊗
FK 127 SA-3	12,7	8,0	TO 3	FK 127 SA	12,7	8,0	ohne
FK 191 SA-3	19,1	6,6	TO 3	FK 191 SA	19,1	6,6	ohne
FK 318 SA-3	31,8	4,8	TO 3	FK 318 SA	31,8	4,8	ohne
FK 254 SA-3	25,4	5,8	TO 3				

Material: Aluminium Druckguss
Oberfläche: schwarz lackiert

									
Art. Nr.	$\pm$ [mm]	R_{th} [K/W]		Art. Nr.	$\pm$ [mm]	R_{th} [K/W]			
FK 201 SA	25,4	6	ohne	FK 202 SA	12,7	8	ohne		
FK 201 SA 3	25,4	6	TO 3	FK 202 SA 3	12,7	8	TO 3		
FK 201 SA CB	25,4	6	CB	FK 202 SA CB	12,7	8	CB		

						
Art. Nr.	$\pm$ [mm]	R_{th} [K/W]				
FK 205 SA L	31,8	9,0	L			
FK 206 SA L	25,4	10,5	L			
FK 207 SA L	19,1	12,0	L			
FK 208 SA L	12,7	14,0	L			

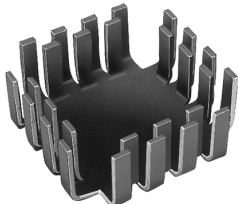
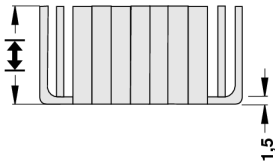
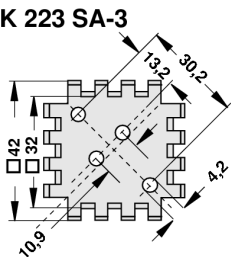
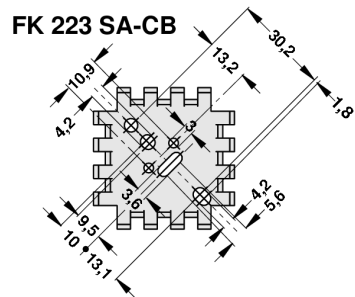
Material: Aluminium
Oberfläche: schwarz eloxiert

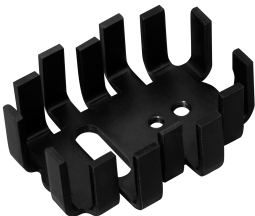
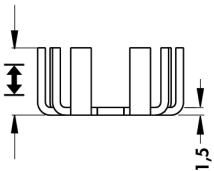
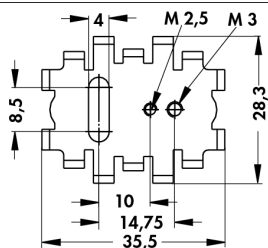
Aufsteckkühlkörper → C 10 – 14
Kleinkühlkörper für TO 5 und TO 18 → C 16 – 17
Kühlkörper für D PAK → C 19
Aluminiumoxydscheiben → E 9 – 10

Einpressniet
Kapton-Isolierscheiben
Silikonscheiben
Glimmerscheiben

→ E 37
→ E 8
→ E 2 – 4
→ E 11

Fingerkühlkörper für Leistungshalbleiter

					
Art. Nr.	± [mm]	R_{th} [K/W]			
FK 223 SA	17	6,8	ohne		
FK 223 SA-3	17	6,8	TO 3		
FK 223 SA-CB	17	6,8	CB		

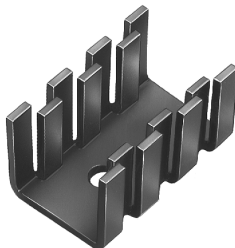
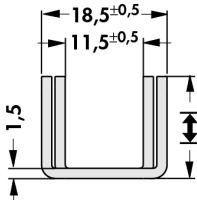
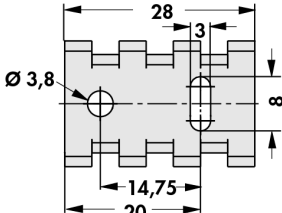
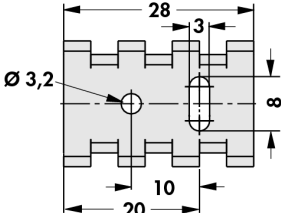
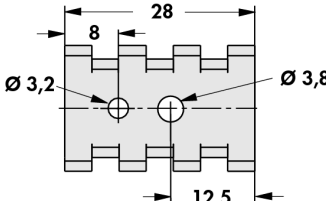
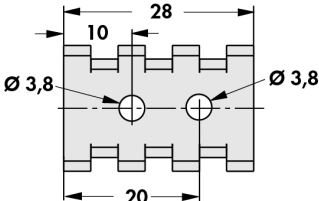
				
Art. Nr.	± [mm]	R_{th} [K/W]		
FK 217 SA	13	16	ohne	
FK 217 SA CB 2	13	16	CB 2 (SOT 32; TO 220)	

Material: Aluminium
Oberfläche: schwarz eloxiert

fischer elektronik

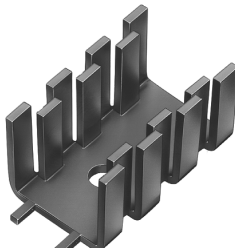
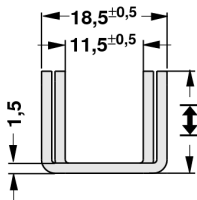
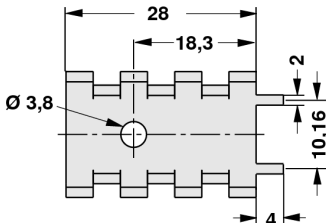
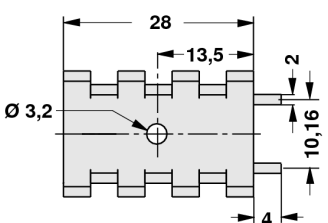
Kühlkörper für Transistoren im Plastikgehäuse

für Halbleiter-Schraubmontage, liegend

		FK 234 SA L 1		FK 234 SA L 2	
					
		FK 234 SA L 3		FK 234 SA L 4	
					
	Art. Nr.	± [mm]	R _{th} [K/W]	⊗	
FK 234 SA L 1	15	17	TO 220		
FK 234 SA L 2	15	17	SOT 32		
FK 234 SA L 3	15	17	CB		
FK 234 SA L 4	15	17	CB		

Material: Aluminium
Oberfläche: schwarz eloxiert

für Halbleiter-Schraubmontage, stehend

	FK 235 ... L 1		FK 235 ... L 2	
				
	FK 235 MI L 1		FK 235 MI L 2	
	FK 235 SA L 1		FK 235 SA L 2	
	FK 235 SA L 2		FK 235 SA L 2	

Art. Nr.	± [mm]	R _{th} [K/W]	⊗
FK 235 MI L 1	15	16	SOT 32
FK 235 MI L 2	15	16	SOT 32
FK 235 SA L 1	15	16	TO 220
FK 235 SA L 2	15	16	TO 220

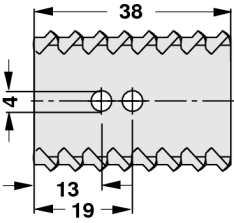
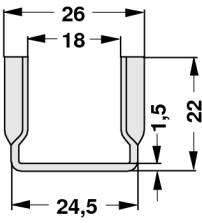
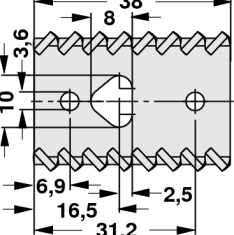
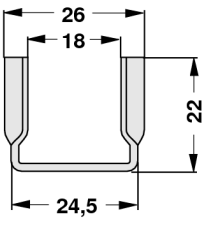
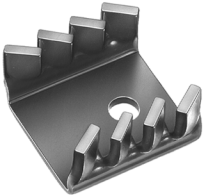
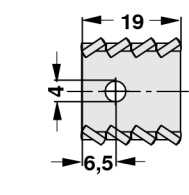
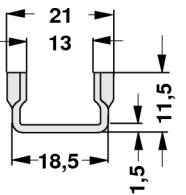
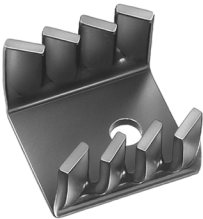
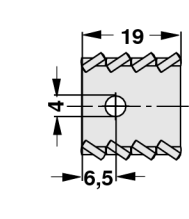
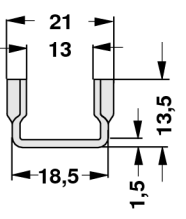
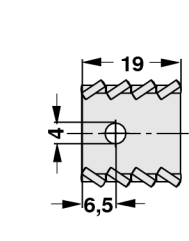
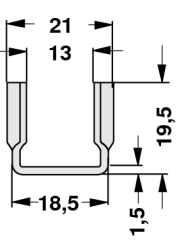
Material: Aluminium

- Aufsteckkühlkörper
Kleinkühlkörper für TO 5 und TO 18
Kühlkörper für D PAK
Aluminiumoxydscheiben

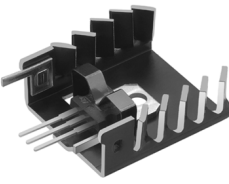
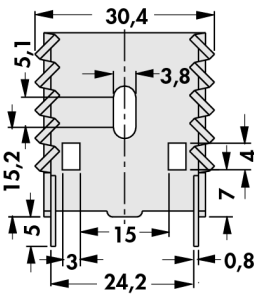
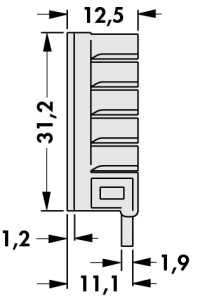
→ C 10 – 14
→ C 16 – 17
→ C 19
→ E 9 – 10
- Einpressniet
Kapton-Isolierscheiben
Silikonscheiben
Glimmerscheiben

→ E 37
→ E 8
→ E 2 – 4
→ E 11

Kühlkörper für Transistoren im Plastikgehäuse

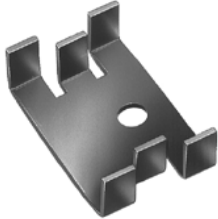
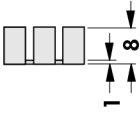
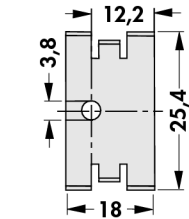
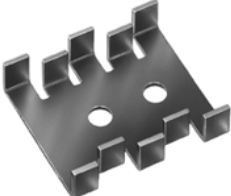
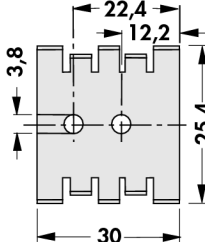
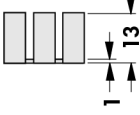
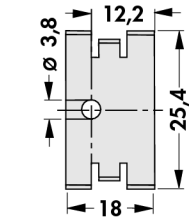
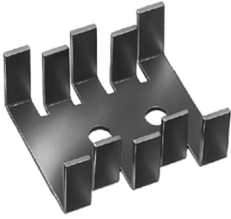
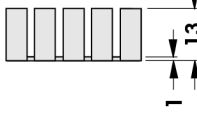
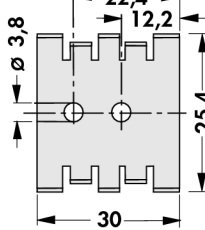
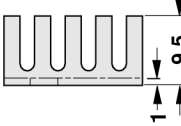
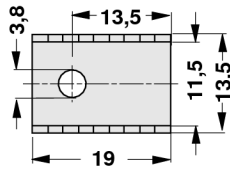
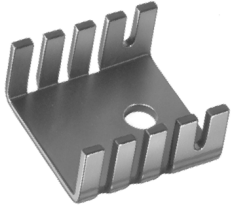
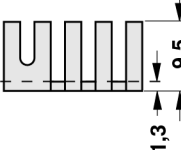
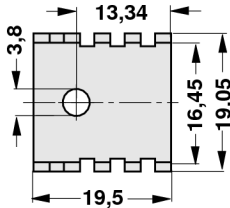
Art. Nr.			9,9 K/W TO 220	
FK 225 SA L 1				
Art. Nr.			9,9 K/W TO 220	
FK 225 SA L 2				
Art. Nr.			30 K/W TO 220	
FK 228 SA L 1				
Art. Nr.			27 K/W TO 220	
FK 229 SA L 1				
Art. Nr.			21 K/W TO 220	
FK 230 SA L 1				

Material: Aluminium
Oberfläche: schwarz eloxiert

Art. Nr.			17 K/W TO 220	
FK 249 SA 220				

Material: Aluminium
Oberfläche: schwarz passiviert, Lötstifte verzinkt

Kühlkörper für Transistoren im Plastikgehäuse

Art. Nr.				
FK 209 SA 32			25 K/W SOT 32	
Art. Nr.				
FK 210 SA CB			18 K/W CB (SOT 32 + TO 220)	
Art. Nr.				
FK 213 SA 32			21 K/W SOT 32	
Art. Nr.				
FK 214 SA CB			15 K/W CB (SOT 32 + TO 220)	
Art. Nr.				
FK 231 SA 220			24 K/W TO 220	
Art. Nr.				
FK 239 SA 32			24 K/W SOT 32	

Die Kühlkörper FK 209 ... 214 sind auch ohne Lochung lieferbar, z. B. FK 209 SA.

Material: Aluminium
Oberfläche: schwarz eloxiert

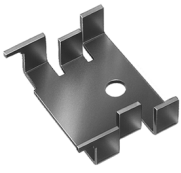
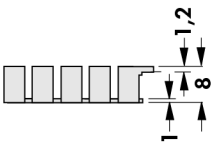
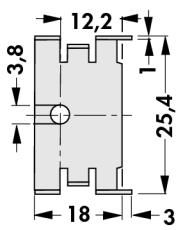
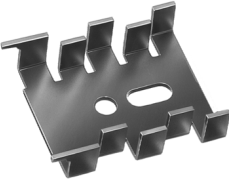
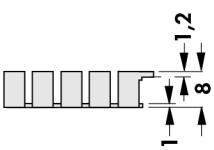
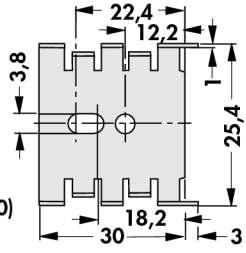
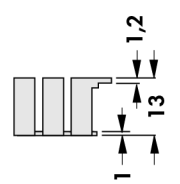
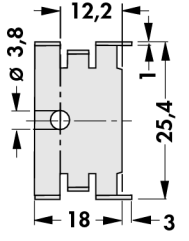
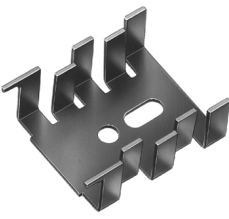
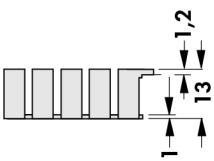
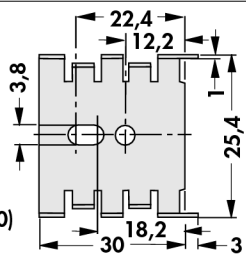
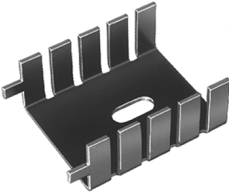
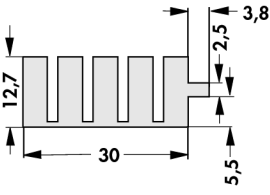
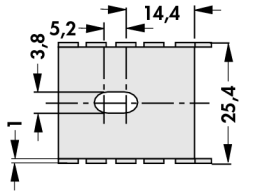
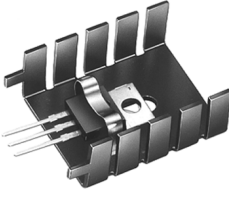
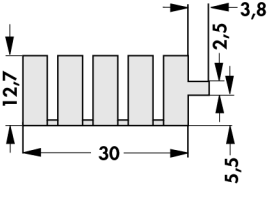
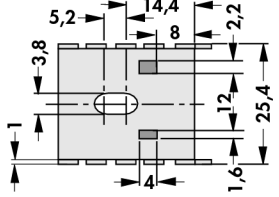
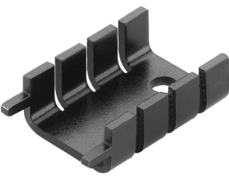
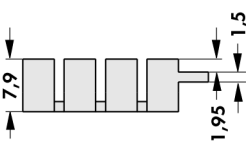
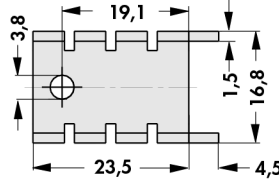
Transistorhaltefedern
Kühlkörper für D PAK
Gel-Wärmeleitfolie
Isolierkappen

→ A 114 – 119
→ C 19
→ E 7
→ E 43

Montagematerial für Halbleiter
Montagescheiben
Montagescheiben für Transistoren
Montageteile für Kühlkörper

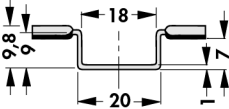
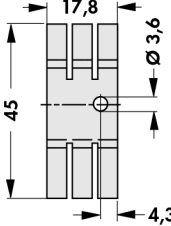
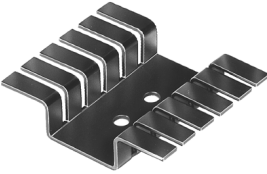
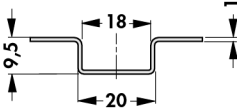
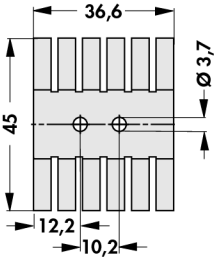
→ E 37 – 41
→ E 39
→ E 40
→ E 42 – 43

Kühlkörper für Transistoren im Plastikgehäuse

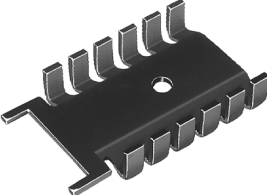
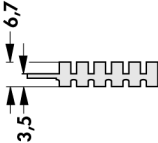
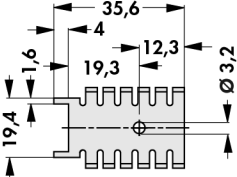
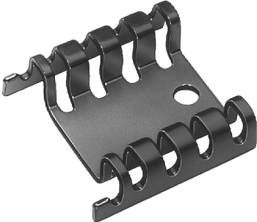
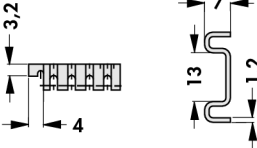
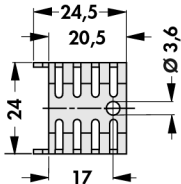
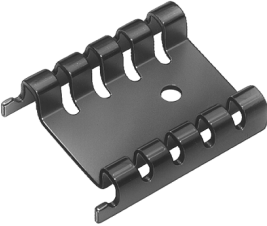
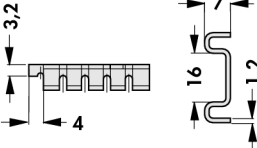
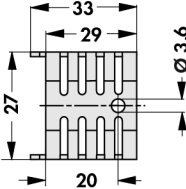
Art. Nr.		 25 K/W SOT 32	
Art. Nr.		 18 K/W CB (SOT 32 + TO 220)	
Art. Nr.		 21 K/W SOT 32	
Art. Nr.		 15 K/W CB (SOT 32 + TO 220)	
Art. Nr.		 20 K/W TO 220	
Art. Nr.		 20 K/W TO 220	
Art. Nr.		 22 K/W TO 220	
bitte angeben: ... Oberfläche SA=schwarz eloxiert MI=lötfähige Oberfläche			

Material: Aluminium / Die Kühlkörper FK 211 ... 216 sind auch ohne Lochung lieferbar, z. B. FK 211 SA.

Kühlkörper für Transistoren im Plastikgehäuse

Art. Nr.				
FK 227 SA L 1			22 K/W TO 220	
Art. Nr.				
FK 238 SA L 1			12 K/W TO 220	

Material: Aluminium
Oberfläche: schwarz eloxiert

Art. Nr.				
FK 218 32 ...			21 K/W SOT 32 TO 220	
Art. Nr.				
FK 232 220 ...			21 K/W TO 220	
Art. Nr.				
FK 233 220 ...			20,2 K/W TO 220	
bitte angeben: ... Oberfläche SA=schwarz eloxiert MI=lötfähige Oberfläche				

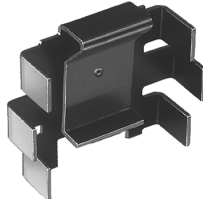
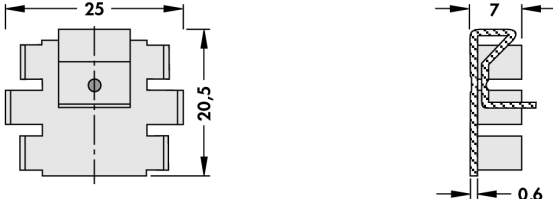
Material: Aluminium

Kühlkörper für Transistoren im Plastikgehäuse

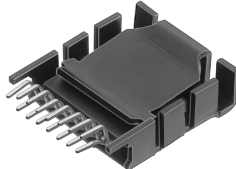
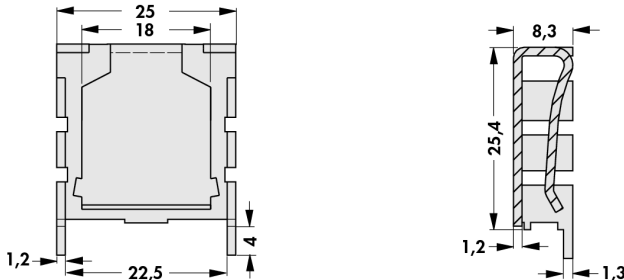
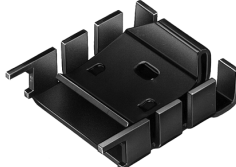
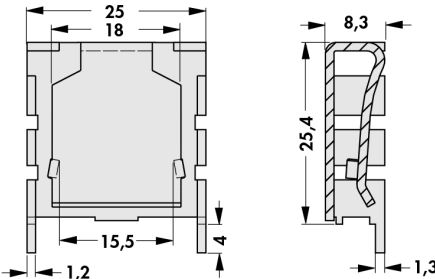
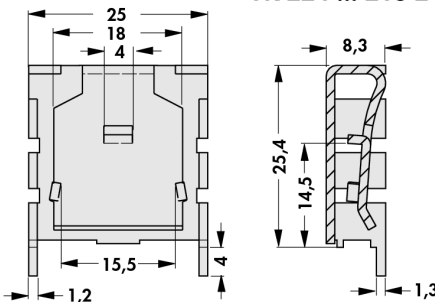
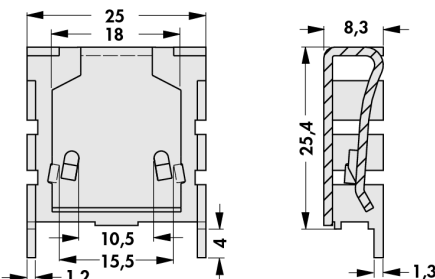
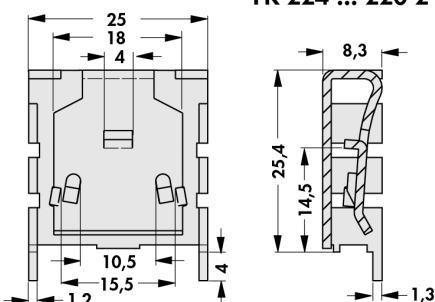
Art. Nr.	↕ [mm]	R _{th} [K/W]	⌀
FK 219 CB 1 ...	12,6	14	CB 1 (TO 220)
FK 219 CB 2 ...	12,6	14	CB 2 (TO 220)
Art. Nr.	↕ [mm]	R _{th} [K/W]	⌀
FK 219 CB 3 ...	12,6	14	CB 3 (TO 220)
Art. Nr.	↕ [mm]	R _{th} [K/W]	⌀
FK 236 220 ...	5	18	TO 220
FK 236 CB ...	5	18	CB
bitte angeben: ... Oberfläche SA=schwarz eloxiert MI=lötfähige Oberfläche			

Material: Aluminium

Aufsteckkühlkörper

		
Art. Nr.	R_{th} [K/W]	
FK 220 SA 220	25	TO 220

Oberfläche: schwarz eloxiert

		
Art. Nr.	R_{th} [K/W]	
FK 224 ... P SIP	18	P SIP
	FK 224 ... 218 1	
		
	FK 224 ... 220 1	
		
	FK 224 ... 220 2	
Art. Nr.	R_{th} [K/W]	
FK 224 ... 218 1	18	TO 218
FK 224 ... 218 2	18	TO 218
FK 224 ... 220 1	18	TO 220
FK 224 ... 220 2	18	TO 220
bitte angeben:		
... Oberfläche		
SA=schwarz eloxiert		
MI=lötfähige Oberfläche		

Material: Aluminium

Kühlkörper für D PAK
Kühlkörper für Transistoren
Silikonscheiben
Glimmerscheiben

→ C 19
→ C 4 – 9
→ E 2 – 4
→ E 11

Technische Erläuterungen
U-Kühlkörper
Kapton-Isolierscheiben

→ A 2 - 7
→ A 120 – 122
→ E 8

Aufsteckkühlkörper

Art. Nr.		
FK 241 SA 218 O	ohne Lötfahne	
Art. Nr.		
FK 241 SA 218 V	mit verzinnter Lötfahne zum direkten Einlöten auf der Leiterkarte, für vertikale Einbaulage	

Material: Aluminium
Oberfläche: schwarz eloxiert

Art. Nr.		
FK 248 SA 220		

Material: Aluminium
Oberfläche: schwarz eloxiert, Lötstifte verzinnt

Aufsteckkühlkörper

- universelle Aufsteckkühlkörper für die Bauformen TO 218, TO 220, TO 247, TO 248, SIP-Multiwatt und ähnliche
- einfache Montage durch aufschieben des Kühlkörpers auf das Bauteil
- für vertikale und horizontale Einlötbefestigung
- Variationen der Rippenhöhe auf Anfrage
- Sonderausführungen nach kundenspezifischen Vorgaben

Art. Nr.		20,2 K/W		
FK 245 MI 247 O	ohne Lötfahne			
Art. Nr.		20,5 K/W		
FK 245 MI 247 H	mit Lötfahne für horizontalen Einbau			
Art. Nr.		19,7 K/W		
FK 245 MI 247 V	mit Lötfahne für vertikalen Einbau			
Art. Nr.		18,4 K/W		
FK 243 MI 247 O	ohne Lötfahne			
Art. Nr.		19 K/W		
FK 243 MI 247 H	mit Lötfahne für horizontalen Einbau			
Art. Nr.		18,4 K/W		
FK 243 MI 247 V	mit Lötfahne für vertikalen Einbau			

Material: Kupfer (Cu)
Oberfläche: lötfähige Oberfläche
Materialstärke: 0,6 mm

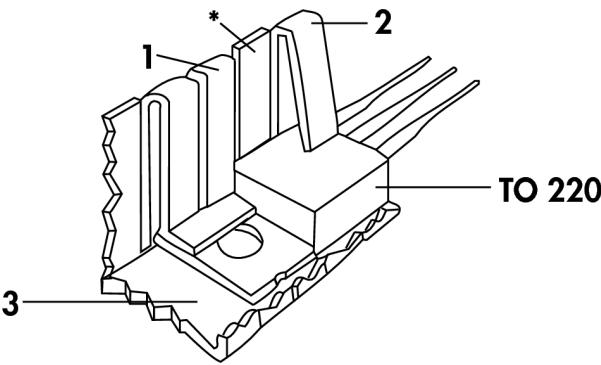
Lötstifte
Lötstützpunkte
Lötstopper
Wärmeleitmaterial

→ E 36
→ E 35
→ E 36
→ E 2 – 15

Kühlkörper für D PAK
Fingerkühlkörper
Kleinkühlkörper für TO 5 und TO 18
Kühlkörper für Transistoren

→ C 19
→ C 2 – 3
→ C 16 – 17
→ C 4 – 9

Aufsteckkühlkörper



- schmale Ausführung mit besserem Wärmewiderstand
- nur max. 14,5 mm breit
- 3 verschiedene Längen für unterschiedliche Verlustleistung
- beansprucht weniger Platz als jeder andere Aufsteckkühlkörper
- einfache Montage durch Aufschieben des Kühlkörpers auf das TO 220 Gehäuse
- die Kühlfinger bilden Klemmfedern (1 + 2), die das TO 220 Gehäuse und seinen Befestigungsflansch an den Kühlkörper (3) andrücken
- optimaler Wärmeübergang durch gleichmäßigen Andruck an die gesamte Anlagefläche des TO 220 Gehäuses
- wirksame Wärmeabstrahlung bei horizontaler und vertikaler Einbaulage

ohne Lötfahne

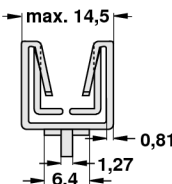
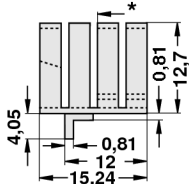
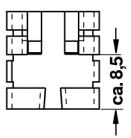
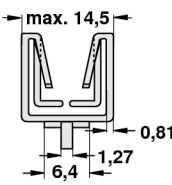
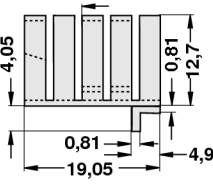
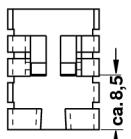
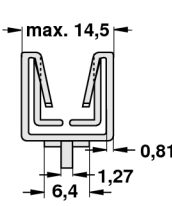
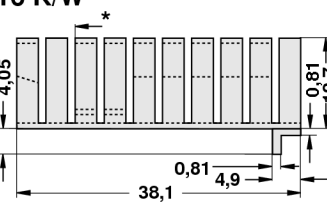
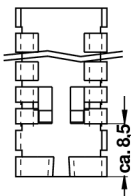
Art. Nr.					
			26 K/W		
FK 242 SA 220 O					
Art. Nr.					
			21 K/W		
FK 237 SA 220 O					
Art. Nr.					
			16 K/W		
FK 240 SA 220 O					

* = Anschlagkante für Transistor

Material: Aluminium
Oberfläche: schwarz eloxiert

Aufsteckkühlkörper

mit verzinnter Löffahne zum direkten Einlöten auf der Leiterkarte, für horizontale Einbaulage

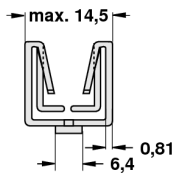
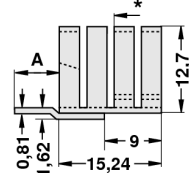
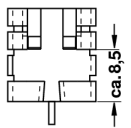
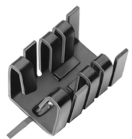
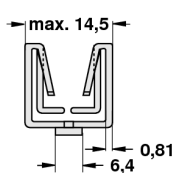
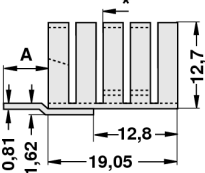
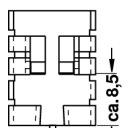
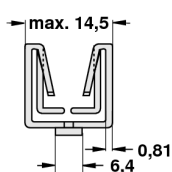
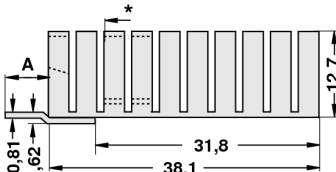
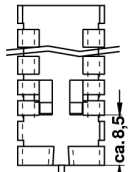
Art. Nr.				
FK 242 SA 220 H				
FK 237 SA 220 H				
FK 240 SA 220 H				

* = Anschlagkante für Transistor

Material: Aluminium

Oberfläche: schwarz eloxiert

mit verzinnter Löffahne zum direkten Einlöten auf der Leiterkarte, für vertikale Einbaulage

					
Art. Nr.	A [mm]	R _{th} [K/W]	Art. Nr.	A [mm]	R _{th} [K/W]
FK 242 SA 220 V	6,35	26	FK 242 SA 220 VL	9,53	26
					
Art. Nr.	A [mm]	R _{th} [K/W]	Art. Nr.	A [mm]	R _{th} [K/W]
FK 237 SA 220 V	6,35	21	FK 237 SA 220 VL	9,53	21
					
Art. Nr.	A [mm]	R _{th} [K/W]	Art. Nr.	A [mm]	R _{th} [K/W]
FK 240 SA 220 V	6,35	16	FK 240 SA 220 VL	9,53	16

* = Anschlagkante für Transistor

Material: Aluminium

Oberfläche: schwarz eloxiert

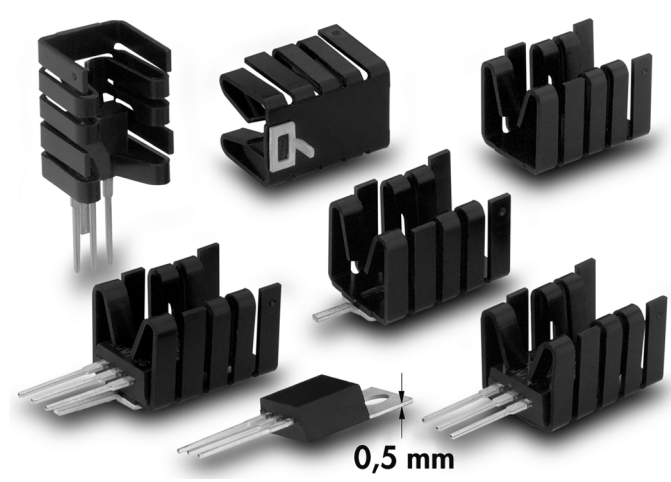
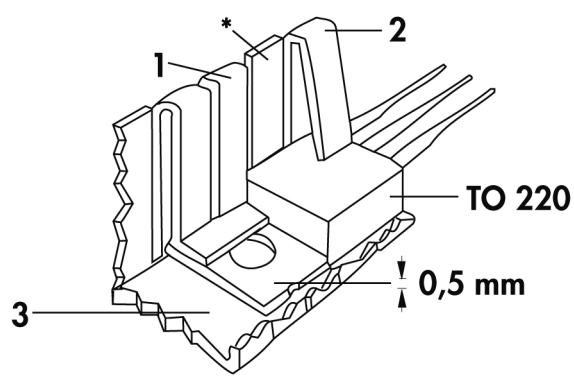
Kühlkörper für D PAK
Kühlkörper für Transistoren
Silikonscheiben
Glimmerscheiben

→ C 19
→ C 4 – 9
→ E 2 – 4
→ E 11

Technische Erläuterungen
U-Kühlkörper
Kapton-Isolierscheiben

→ A 2 - 7
→ A 120 – 122
→ E 8

Aufsteckkühlkörper für TO 220 mit 0,5 mm Bodenplatte



- schmale Ausführung mit besserem Wärmewiderstand
- nur max. 14,5 mm breit
- 3 verschiedene Längen für unterschiedliche Verlustleistung
- beansprucht weniger Platz als jeder andere Aufsteckkühlkörper
- einfache Montage durch Aufschieben des Kühlkörpers auf das TO 220 Gehäuse
- die Kühlfinger bilden Klemmfedern (1 + 2), die das TO 220 Gehäuse und seinen Befestigungsflansch an den Kühlkörper (3) andrücken
- optimaler Wärmeübergang durch gleichmäßigen Andruck an die gesamte Anlagefläche des TO 220 Gehäuses
- wirksame Wärmeabstrahlung bei horizontaler und vertikaler Einbaulage

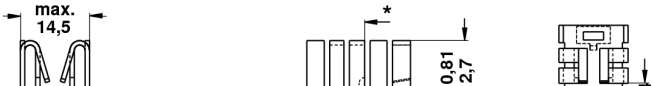
ohne Löffahne

Art. Nr.			21 K/W		
FK 252 SA 220 O					

mit verzinnter Löffahne zum direkten Einlöten auf der Leiterkarte, für horizontale Einbaulage

Art. Nr.			21 K/W		
FK 252 SA 220 H					

mit verzinnter Löffahne zum direkten Einlöten auf der Leiterkarte, für vertikale Einbaulage

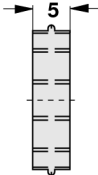
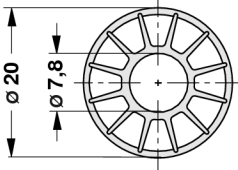
					
Art. Nr.	A [mm]	R _{th} [K/W]	Art. Nr.	A [mm]	R _{th} [K/W]
FK 252 SA 220 V	6,35	21	FK 252 SA 220 VL	9,53	21

* = Anschlagkante für Transistor

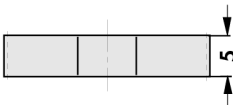
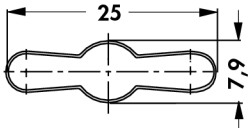
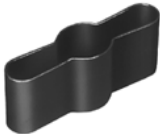
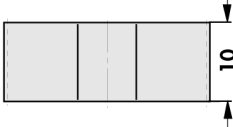
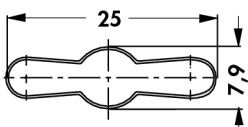
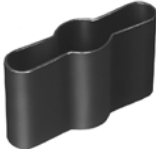
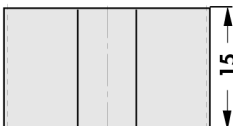
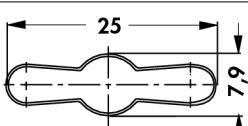
Material: Aluminium
Oberfläche: schwarz eloxiert

C 15	Aluminiumoxydscheiben Kühlkörper für D PAK Kühlkörper für Transistoren Silikonscheiben	→ E 9 - 9 → C 19 → C 4 - 9 → E 2 - 4	Technische Erläuterungen Glimmerscheiben U-Kühlkörper Kapton-Isolierscheiben	→ A 2 - 7 → E 11 → A 120 - 122 → E 8
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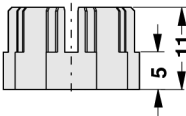
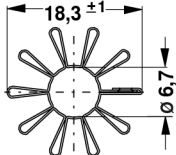
Kleinkühlkörper

Art. Nr.				
KK 55			62 K/W TO 5	

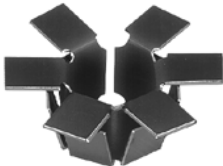
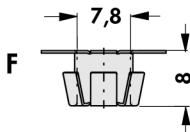
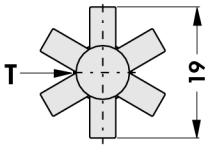
Material: Aluminium
Oberfläche: schwarz eloxiert

Art. Nr.				
KF 5/5			57 K/W TO 5	
Art. Nr.				
KF 5/10			46 K/W TO 5	
Art. Nr.				
KF 5/15			40 K/W TO 5	

Material: Messing
Oberfläche: geschwärzt

Art. Nr.				
KK 5095 S			46 K/W TO 5	

Material: Federbronze Cu Zn 6
Materialstärke: 0,25 mm
Oberfläche: geschwärzt

Art. Nr.				
KK 562 GS			60 K/W TO 5	

T = Trennfuge; F = federnd

Material: Federbronze Cu Zn 15
Materialstärke: 0,3 mm
Oberfläche: geschwärzt

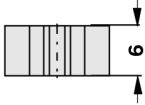
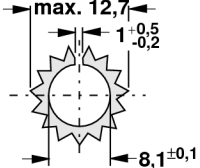
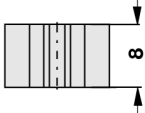
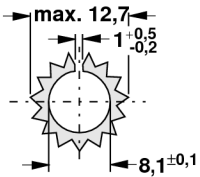
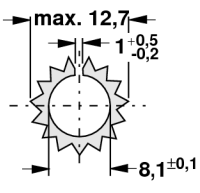
Aufsteckkühlkörper
Fingerkühlkörper
Kühlkörper für D PAK
Kühlkörper für Transistoren

→ C 10 – 14
→ C 2 – 3
→ C 19
→ C 4 – 9

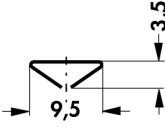
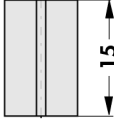
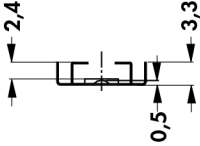
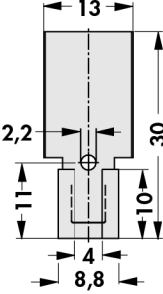
Strangkühlkörper
Standard Aluminium Profile
Kühlkörper-Profilübersicht
Zuordnungstabelle

→ A 22 – 84
→ A 133 – 134
→ A 13 – 17
→ A 18 – 20

Kleinkühlkörper

Art. Nr.				
SKK 56			63 K/W TO 5	
Art. Nr.				
SKK 58			55 K/W TO 5	
Art. Nr.				
SKK 510			44 K/W TO 5	

Material: Aluminium
Oberfläche: gebeizt (andere Oberflächen auf Anfrage)

Art. Nr.				
KK 92			80 K/W TO 126 SOT 32 SOT 82	
Art. Nr.				
KK 32			60 K/W TO 126 SOT 32 SOT 82	

Material: Federbronze Cu Zn 6
Oberfläche: geschwärzt