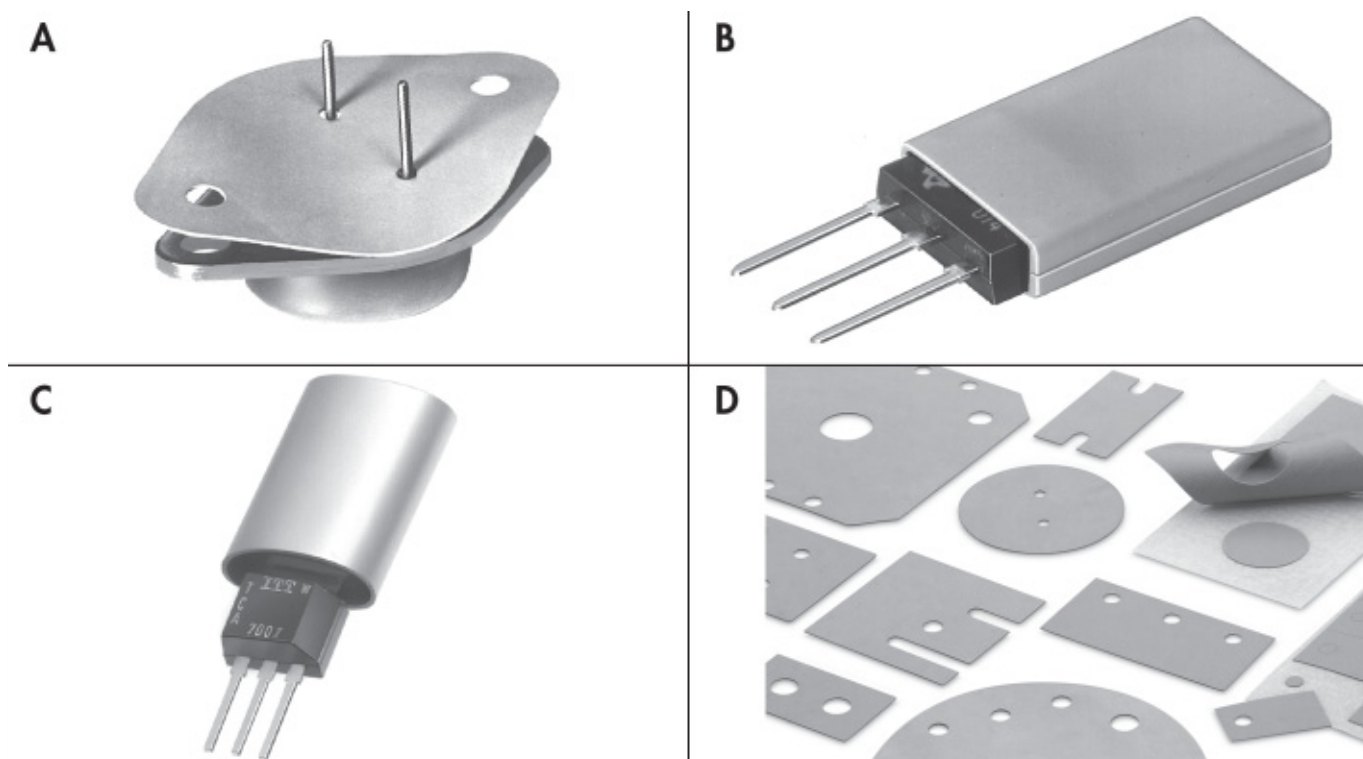


Silicon-rubber insulating material for semiconductors



- A: washer
- B: insulating cap
- C: insulating tube
- D: cuts

Our thermal conduction wafers effect following advantages:

- good surface contact as material is flexible
- reduced production costs as a matter of mounting without thermal conducting paste (clean and fast)
- spring-back of the elastic material protects the transistor against damage
- free of any toxic substances

Customer specific versions:

- punching and cuts of our thermal conductive foil according to drawing
- sold per sheet or by the meter
- other foils, plastics, papers, etc. upon request

The thermal details refer to an area of 1 inch² (6.45 cm²).

Silicone rubber insulating material for semiconductors

– other cuttings on request

<p>TO 3</p>	<p>TO 3 M</p>	<p>TO 3/4</p>		
<p>TOP 3</p>	<p>TOP 3/1</p>	<p>TOP 3 PF</p>	<p>TO 218 Multiwatt</p>	
<p>TO 220</p>	<p>TO 247</p>	<p>TO 247/1</p>	<p>TO 3158</p>	
<p>4 x TO220</p>		<p>TO 126</p>	<p>SOT 32</p>	<p>TO 3159</p>

Thermally conductive foil made of siliconelastomer

foil type	foil WS	foil WG	foil WK	foil WB
material	silicone foil, standard	silicone foil, GF reinforced	silicone foil, GF reinforced, one-sided self-adhesive	silicone foil, GF reinforced
Washer				
TO-3	WS 3	WG 3	WK 3	WB 3
TO-3 M	WS 3 M			
TO-3/4	WS 3/4		WK 3/4	
TO-3 PF	WS 3 P	WG 3 P	WK 3 P	WB 3 P
3158	WS 3158		WK 3158	WB 3158
TOP 3	WS TOP 3			
TOP 3/1	WS TOP 3/1		WK TOP 3/1	
TO 218 (Multiwatt)		WG 218		
TO 247	WS 247		WK 247	
TO 220	WS 220	WG 220	WK 220	WB 220
4 X TO 220	WS 4 220			
3159	WS 3159		WK 3159	WB 3159
TO 126			WK 126	
SOT 32			WK 32	
TO 247/1	WS 247/1			
Insulating tube				
TO-220 Ø 11 mm, length 25 mm	WSC-220			
TO-3 PF Ø 13.5 mm, length 25 mm	WSC-3 P			
TO-247 Ø 14.5 mm, length 30 mm	WSC-247			
Insulating tube as meterpiece				
TO-220 Ø 11 mm	WSM-220			
TO-3 PF Ø 13.5 mm	WSM-3 P			
Tape material (width)				
24 mm			WKT 24	
30 mm	WST 30			WBT 30
36 mm	WST 36			
85 mm	WST 85			
300 mm		WGT 300	WKT 300	WBT 300
	Foil WS	Foil WG	Foil WK	Foil WB
material thickness	0.3 mm	0.2 mm		0.15 mm
material hardness	75 Shore A	87 Shore A		90 Shore A
dielectric strength	10 kV	6.5 kV		3 kV
thermal resistance	0.4 K/W	0.42 K/W	0.45 K/W	0.34 K/W
thermal conductivity	1.22 W/m·K	1.13 W/m·K	0.92 W/m·K	1.43 W/m·K
insulation resistance	2.9·10 ¹⁵ Ω cm	5.7·10 ¹⁵ Ω cm		1.6·10 ¹⁵ Ω cm
extensibility	100 %	2 %		4 %
temperature range	-60 °C ... +180 °C			
class of flammability	UL 94 V-0			

A

Insulating cap

B

C

D

E

F

G

H

I

K

L

M

N

art. no.	type	dim. [mm]			
		A	B	C	D
WSI 220 210	TO 220	11	21.0	5.0	0.9
WSI 220 225	TO 220	11	22.5	5.0	0.3
WSI TOP 3 235	TOP 3	18	23.5	5.0	0.9
WSI TOP 3 280	TO 3 PL/ TO 247	16	28.0	5.0	0.3
WSI TO 3 PL	TO 3 PL / TO 247	22	34.0	5.5	0.9

	Foil WSI
material thickness	0.9 mm
material hardness	75 Shore A
dielectric strength	15 kV
thermal resistance	0.96 K/W
thermal conductivity	1.22 W/m·K
insulation resistance	$2.9 \cdot 10^{15} \Omega \text{ cm}$
extensibility	100 %
temperature range	-60 °C ... +180 °C
class of flammibility	UL 94 V-0

E 5
Thermal conductive foil
GEL thermal conductive foils
Thermal conductive paste
Thermal conductive glue

 → E 7 – 10
 → E 11 – 13
 → E 19 – 20
 → E 21 – 22

Heatsinks for PCB
Heatsinks for BGA
Extruded heatsinks
Technical introduction

 → A 89 – 111
 → B 17 – 20
 → A 22 – 83
 → A 2 – 7