



### TRANSTHERM® THERMALLY CONDUCTIVE SILICONE RUBBER & SILICONE-FREE RUBBER



#### TRANSTHERM® THERMALLY CONDUCTIVE RUBBER

Transtherm® Thermally Conductive Silicone Rubber and Silicone-Free Rubber materials combine high thermal conductivity and electrical isolation into a single component. By integrating aluminum oxide fillers, Transtherm® Rubber interface materials benefit from higher thermal conductivity while maintaining high dielectric strength even at high temperatures.

Most Transtherm® Silicone Rubbers and Silicone-Free Rubbers are available with a mechanical reinforcement option, typically woven fiberglass, for additional mechanical stability. Resolve dry out, cracking, and silicone migration issues by replacing mica and thermal grease applications with cleaner and reproducible rubber materials.

Boyd's Transtherm® Silicone Rubbers and Silicone-Free Rubbers conform with REACH and RoHS regulations.

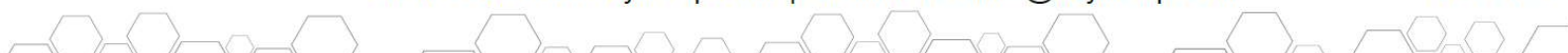


#### ORDERING INFORMATION

Contact your Boyd representative for more information or contact us at [www.boydcorp.com/boyd-contact](http://www.boydcorp.com/boyd-contact)

Part Number	Structure Type	Thermal Conductivity	Structure	Illustration	Description
TAP11	A	1.8	A		Silicone Rubber With Polyimide
T400-7	B	0.9	B		Silicone Rubber With Glass Fiber
TGP19	B	1.5	C		Silicone Rubber With Glass Fiber Adhesive
T3	B	1.9	D		Silicone Free Rubber
BDC	B	8.0	E		Silicone Free Rubber With Glass Fiber Adhesive
T1200-9-2023	C	1.0			
TAG	C	1.8			
TEG	C	3.4			
BGD	C	4.1			
BGDx	C	5.0			
SFB	E	1.4			

*\*Single-sided adhesive variations typically have up to 20% lower thermal conductivity*





### TRANSTHERM® THERMALLY CONDUCTIVE SILICONE RUBBER & SILICONE-FREE RUBBER

#### MATERIAL PROPERTIES

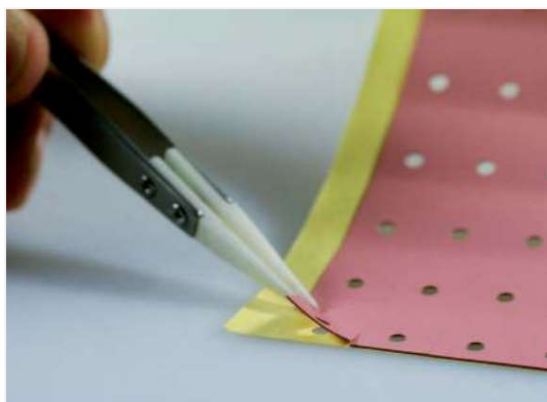
Structures A & B

Properties	TAP11* <sup>1</sup>	T400-7	TGP19* <sup>2</sup>	T3	BDC* <sup>A</sup>	Units
Color	Light Brown	Gray	Pink	Black	Light Blue	-
Thickness	0.11 ± 0.02	0.18 ± 0.03	0.19 ± 0.02	0.13 ± 0.02	0.2 ± 0.05 0.3 ± 0.05	mm
Structure	A	B	B	B	B	-
Breakdown Voltage	10,000	4000	6000	Electrically Not Insulating	4000 5000	V (AC)
Thermal Conductivity	1.8	0.9	1.5	1.9	8.0	W/mk
Thermal Resistance - inch <sup>2</sup> (cm <sup>2</sup> )	0.29 (1.87)	0.45 (2.9)	0.49 (3.16)	0.11 (0.71)	0.08 (0.50) 0.11 (0.64)	°C/W
Shore Hardness	87	85	88	84	83	A
Continuous Usage Temperature	-40 to +180	-60 to +180	-60 to +180	-60 to +180	-50 to +180	°C
Flame Rating UL 94	V0	V0	TBD	N/A	N/A	-
Format Type	Roll	Roll	Roll	Roll	Sheet: 440 x 510	-

\*1 Known as KU-TAP11

\*2 Known as BCTIM 210-1010

\*A Breakdown Voltage measured with step-by-step voltage increments until dielectric breakdown (JIS C 2110), not measured with Voltage ramp 1000 V/s (JIS K





### TRANSTHERM® THERMALLY CONDUCTIVE SILICONE RUBBER & SILICONE-FREE RUBBER

#### MATERIAL PROPERTIES

Structures C & D

Properties	T1200-9-2023	TAG*3	TEG*4	BGD*5*A	BGDx*6*A	SFB*7	Units
Color	Green	Gray Brown	Gray	0.2: Lime 0.3: White	White	White	-
Thickness	0.23 ± 0.03	0.2 ± 0.05 0.3 ± 0.05	0.2 ± 0.05 0.3 ± 0.05	0.2 ± 0.05 0.3 ± 0.05	0.08 ± 0.05 0.2 ± 0.05 0.3 ± 0.05	0.3 ± 0.0	mm
Structure	C	C	C	C	C	E	-
Breakdown Voltage	4000	7000 10,000	7000 9000	3000*5 6500*5	1000 3000 6000	7500	V (Ac)
Thermal Conductivity	1.0	1.8	3.4	4.1	5.0	1.4	W/mk
Thermal Resistance – inch <sup>2</sup> (cm <sup>2</sup> )	0.38 (2.45)	0.26 (1.67) 0.37 (2.39)	0.21 (1.35) 0.25 (1.61)	0.31 (1.99) 0.36 (2.32)	0.1 (0.645) 0.28 (1.806) 0.29 (1.871)	0.33 (2.13)	°C/W
Shore Hardness	80	90	90	88	90	70	A
Continuous Usage Temperature	-60 to +180	-40 to +180	-40 to +180	-50 to +180	-50 to +180	-20 to	°C
Flame Rating UL 94	N/A	V0	V0	V0	V0	V0	-
Format Type	Roll	Roll	Roll	Sheet: 440 x 510	Sheet: 440 x 510	Roll	mm

\*3 Known as KU-TAG20 and KU-TAG30

\*4 Known as KU-TEG20 and KU-TEG3

\*5 Known as KU-BGD20 / KU-BGD30

\*6 Known as KU-BGDx08 / KU-BGDx20 and KU-BGDx30

\*7 Known as KU-SFB30

\*A Breakdown Voltage measured with step-by-step voltage increments until dielectric breakdown (JIS C 2110), not measured with Voltage ramp 1000 V/s (JIS K 6249)



Disclaimer: Boyd Corporation disclaims all liability for accuracy of this information. The data in this document are only for general information purposes. Please confirm compatibility with your applications prior to use. For advice please contact a Boyd Representative. Technical details are subject to change.

To maintain the material integrity, recommended storage temperature is between +10°C to +35°C, with a humidity of 23% to 71%. Exposure to direct sunlight or direct pressure on packaging or parts is prohibited. Process material at + 20 °C and above.