



SOFT, FREESTANDING GAP FILLER

Tflex™ 200 V0 is a very soft, freestanding gap filler that is more compliant than most other gap fillers. Combining good thermal conductivity of 1.1 W/mK with high conformability, this gap filler produces low thermal resistance. The alumina filler allows the product to remain a cost effective solution where moderate thermal performance is acceptable.

Naturally tacky and not requiring additional adhesive coating, the Tflex™ 200 V0 can inhibit thermal performance. This gap filler is both electrically insulating and stable from -40°C to 160°C and meets UL 94 V0 rating.

FEATURES AND BENEFITS

- Soft and compressible for low stress applications
- Naturally tacky needing no further adhesive coating
- 1.1 W/mK thermal conductivity
- Available in thicknesses from 0.010" (0.25mm) to 0.200" (5.0mm)

APPLICATIONS

- Cooling components to the chassis or frame
- High speed mass storage drives
- RDRAM memory modules
- Heat pipe thermal solutions
- Automotive engine control units
- Wireless communication hardware

Farnell Description :

Tflex 220V0 9x9in, thickness = 0.5 mm

Tflex 240V0 9x9in, thickness = 1.0 mm

Tflex 280V0 9x9in, thickness = 2.0 mm

Tflex 2160V0 9x9in, thickness = 4.0 mm

Tflex 2200V0 9x9in, thickness = 5.0 mm

Laird-PN:

A14162-25

A14162-27

A14162-06

A10198-11

A14162-19

global solutions: local support.™

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	Tflex™ 220 V0	Tflex™ 240 V0	Tflex™ 260 V0	Tflex™ 280 V0	Tflex™ 2100 V0	TEST METHOD
Construction & Composition	Reinforced ceramic filled silicone elastomer	Ceramic filled silicone elastomer	Ceramic filled silicone elastomer	Ceramic filled silicone elastomer	Ceramic filled silicone elastomer	
Color	Light Gray	Light Gray	Light Gray	Light Gray	Light Gray	Visual
Thickness	0.02" (0.508mm)	0.04" (1.016mm)	0.06" (1.524mm)	0.08" (2.032mm)	0.10" (2.54mm)	
Thickness Tolerance	± 0.002" (± 0.05mm)	± 0.004" (± 0.10mm)	± 0.006" (± 0.15mm)	± 0.008" (± 0.20mm)	± 0.010" (± 0.25mm)	
Density	1.75 g/cm ³	1.73 g/cm ³	1.73 g/cm ³	1.73 g/cm ³	1.73 g/cm ³	Helium Pycnometer
Hardness	50 Shore 00	45 Shore 00	45 Shore 00	45 Shore 00	45 Shore 00	ASTM D2240
Tensile Strength	464 psi	48 psi	48 psi	48 psi	48 psi	ASTM D412
% Elongation	10.5	63.0	60.6	60.6	60.6	ASTM D412
Outgassing TML (Post Cured)	0.34%	0.34%	0.34%	0.34%	0.34%	ASTM E595
Outgassing CVCM (Post Cured)	0.10%	0.10%	0.10%	0.10%	0.10%	ASTM E595
UL Flammability Rating	94 V0	94 V0	94 V0	94 V0	94 V0	E180840
Temperature Range	-45°C to 160°C	-45°C to 160°C	-45°C to 160°C	-45°C to 160°C	-45°C to 160°C	
Thermal Conductivity	1.1 W/mK	1.1 W/mK	1.1 W/mK	1.1 W/mK	1.1 W/mK	ASTM D5470 (modified)
Total Thermal Resistance @ 10 psi @ 69KPa	0.80 °C-in ² /W 5.13 °C-cm ² /W	1.57 °C-in ² /W 10.13 °C-cm ² /W	2.05 °C-in ² /W 13.23 °C-cm ² /W	2.51 °C-in ² /W 16.19 °C-cm ² /W	2.93 °C-in ² /W 18.90 °C-cm ² /W	ASTM D5470 (modified)
Coefficient of Thermal Expansion	229 ppm/°C 35°C to 130°C	229 ppm/°C 35°C to 130°C	229 ppm/°C 35°C to 130°C	229 ppm/°C 35°C to 130°C	229 ppm/°C 35°C to 130°C	IPC-TM-650 2.4.24
Breakdown Voltage	12,000 Volts AC	>27,000 Volts	>27,000 Volts	>27,000 Volts	>27,000 Volts	ASTM D149
Volume Resistivity	4 x 10 ¹³ ohm-cm	4 x 10 ¹³ ohm-cm	4 x 10 ¹³ ohm-cm	4 x 10 ¹³ ohm-cm	4 x 10 ¹³ ohm-cm	ASTM D257
Dielectric Constant @ 1MHz	5.5	5.5	5.5	5.5	5.5	

STANDARD THICKNESSES

0.020" (0.51mm)	0.030" (0.76mm)	0.040" (1.02mm)	0.050" (1.27mm)
0.060" (1.52mm)	0.070" (1.78mm)	0.080" (2.03mm)	0.090" (2.29mm)
0.100" (2.54mm)	0.110" (2.79mm)	0.120" (3.05mm)	0.130" (3.30mm)
0.140" (3.56mm)	0.150" (3.81mm)	0.160" (4.06mm)	0.170" (4.32mm)
0.180" (4.57mm)	0.190" (4.83mm)	0.200" (5.08mm)	

Consult the factory for alternate thicknesses

STANDARD SHEET SIZES

9" x 9" (229mm x 229mm) Tflex™ 200V0 may be die cut into individual shapes. Pressure sensitive adhesive is not applicable for Tflex™ products.

REINFORCEMENT

0.020" (0.51mm) and 0.030" (0.762mm) are fiberglass reinforced.

Data for design engineer guidance only. Observed performance varies in application. Engineers are reminded to test the material in application.

THR-DS-Tflex-200V0 0710

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