

Tflex™ P100 Series Tgard Lined Gap Filler



Product Description

Laird Tflex P100 is a soft and compliant gap filler with an integrated Tgard liner and adds a complementing performance level to the P series product line from Laird. Laird has leveraged its vast experience and knowledge in the development of thermally conductive materials to develop a soft and compliant gap filler that minimizes contact resistance and board level stresses. In conjunction with these key traits Laird understands that not all applications are the same. As a result, Tflex P100 comes with a unique Tgard liner on one side. This liner provides numerous application benefits like electrical isolation, placement ease during assembly, tear resistance for applications that require shear, to name a few. Tflex P100 will be offered in thicknesses that range from .5mm (.020") up to 5mm (.200").

FEATURES AND BENEFITS

- Compliant nature minimizes contact resistance
- Integrated Tgard liner provides dielectric strength
- Resistance to burrs and mechanical forces
- Resistant to shear forces.
- Contrasting color allows integration with vision system

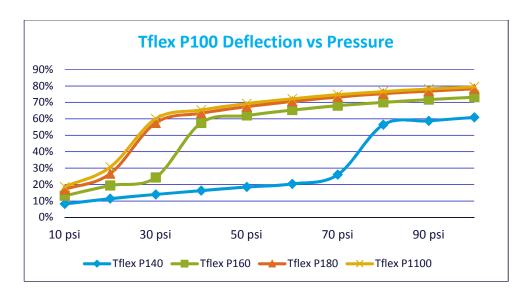
SPECIFICATIONS

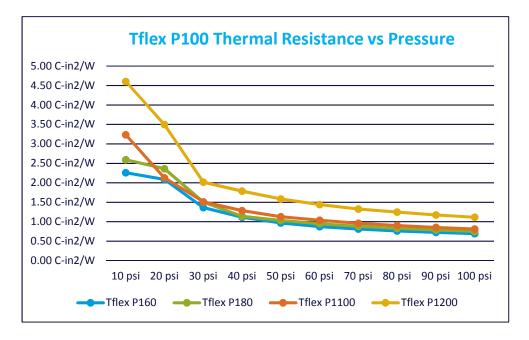
Construction & Composition Tgard lined elastomer Yellow Visual Thickness Range 0.50mm (0.020") 5.0mm (0.20") N/A Thickness Tolerance +/- 10% N/A Thermal Conductivity (W/mK) Density (g/cc) 2.3 Helium Pycnometer Hardness (Shore 00) 13 ASTM D2240 Outgassing TML (weight %) Outgassing CVCM (weight %) Outgassing CVCM (weight %) Temperature Range -40°C to 200°C Laird Test Method Rth@ 40 mils, 10 psi Dielectric Constant @ 1 MHz 7.45 ASTM D150	PROPERTIES	TYPICAL VALUE	TEST METHOD
Thickness Range 0.50mm (0.020") 5.0mm (0.20") N/A Thickness Tolerance +/- 10% N/A Thermal Conductivity (W/mK) 1.2 ASTM D5470 Density (g/cc) 2.3 Helium Pycnometer Hardness (Shore 00) 13 ASTM D2240 Outgassing TML (weight %) 0.32 ASTM E595 Outgassing CVCM (weight %) 0.05 ASTM E595 Temperature Range -40°C to 200°C Laird Test Method Rth@ 40 mils, 10 psi 1.50°C-in2/W ASTM D5470 (Modified)	Construction & Composition	Tgard lined elastomer	N/A
Thickness Tolerance +/- 10% N/A Thermal Conductivity (W/mK) 1.2 ASTM D5470 Density (g/cc) 2.3 Helium Pycnometer Hardness (Shore 00) 13 ASTM D2240 Outgassing TML (weight %) 0.32 ASTM E595 Outgassing CVCM (weight %) 0.05 ASTM E595 Temperature Range -40°C to 200°C Laird Test Method Rth@ 40 mils, 10 psi 1.50°C-in2/W ASTM D5470 (Modified)	Color	Yellow	Visual
Thermal Conductivity (W/mK) Density (g/cc) 2.3 Helium Pycnometer Hardness (Shore 00) 13 ASTM D2240 Outgassing TML (weight %) O.32 ASTM E595 Outgassing CVCM (weight %) Temperature Range -40°C to 200°C Rth@ 40 mils, 10 psi 1.50°C-in2/W ASTM D5470 (Modified)	Thickness Range	0.50mm (0.020") 5.0mm (0.20")	N/A
Density (g/cc) 2.3 Helium Pycnometer Hardness (Shore 00) 13 ASTM D2240 Outgassing TML (weight %) 0.32 ASTM E595 Outgassing CVCM (weight %) 0.05 ASTM E595 Temperature Range -40°C to 200°C Laird Test Method Rth@ 40 mils, 10 psi 1.50°C—in2/W (Modified)	Thickness Tolerance	+/- 10%	N/A
Hardness (Shore 00) 13 ASTM D2240 Outgassing TML (weight %) 0.32 ASTM E595 Outgassing CVCM (weight %) 0.05 ASTM E595 Temperature Range -40°C to 200°C Laird Test Method Rth@ 40 mils, 10 psi 1.50°C-in2/W ASTM D5470 (Modified)	Thermal Conductivity (W/mK)	1.2	ASTM D5470
Outgassing TML (weight %) Outgassing CVCM (weight %) Outgassing TML (weight %) Outgassing CVCM (weight %) Ou	Density (g/cc)	2.3	Helium Pycnometer
Outgassing CVCM (weight %)0.05ASTM E595Temperature Range-40°C to 200°CLaird Test MethodRth@ 40 mils, 10 psi1.50°C-in2/WASTM D5470 (Modified)	Hardness (Shore 00)	13	ASTM D2240
Temperature Range-40°C to 200°CLaird Test MethodRth@ 40 mils, 10 psi1.50°C-in2/WASTM D5470 (Modified)	Outgassing TML (weight %)	0.32	ASTM E595
Rth@ 40 mils, 10 psi 1.50°C-in2/W ASTM D5470 (Modified)	Outgassing CVCM (weight %)	0.05	ASTM E595
(Modified)	Temperature Range	-40°C to 200°C	Laird Test Method
	Rth@ 40 mils, 10 psi	1.50°C–in2/W	ASTM D5470
Dielectric Constant @ 1 MHz 7.45 ASTM D150			(Modified)
	Dielectric Constant @ 1 MHz	7.45	ASTM D150
UL Flammability Rating V-0 UL-94	UL Flammability Rating	V-0	UL-94
Volume Resistivity 1.3 x 10 ¹² ASTM D257	Volume Resistivity	1.3 x 10 ¹²	ASTM D257
Breakdown Voltage >9kV ASTM D149	Breakdown Voltage	>9kV	ASTM D149

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TflexTM P100 Series Tgard Lined Gap Filler





AVAILABILITY

STANDARD THICKNESSES

- 0.5mm (0.020") to 5.0mm (0.200") thick material available in 0.25mm (0.010") increments
- Available in standard sheet sizes of 18" x 18" and 9" x 9" or custom die cut parts

PART NUMBER SYSTEM

Tflex™ indicates Laird elastomeric thermal gap filler product line. P3xxx indicates Tflex P300 product line with thickness in mils (0.001") EXAMPLES:

Tflex™ P140 = 0.040" thick Tflex™ P100 material

A17801-00 Tflex P300 DS 12617

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