Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

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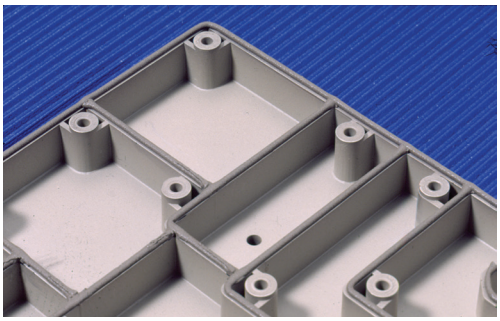
Form-In-Place Conductive and Non-Conductive Gaskets

CHOFORM® & ParPHorm®

Selector Guide for Shielding and Sealing Solutions

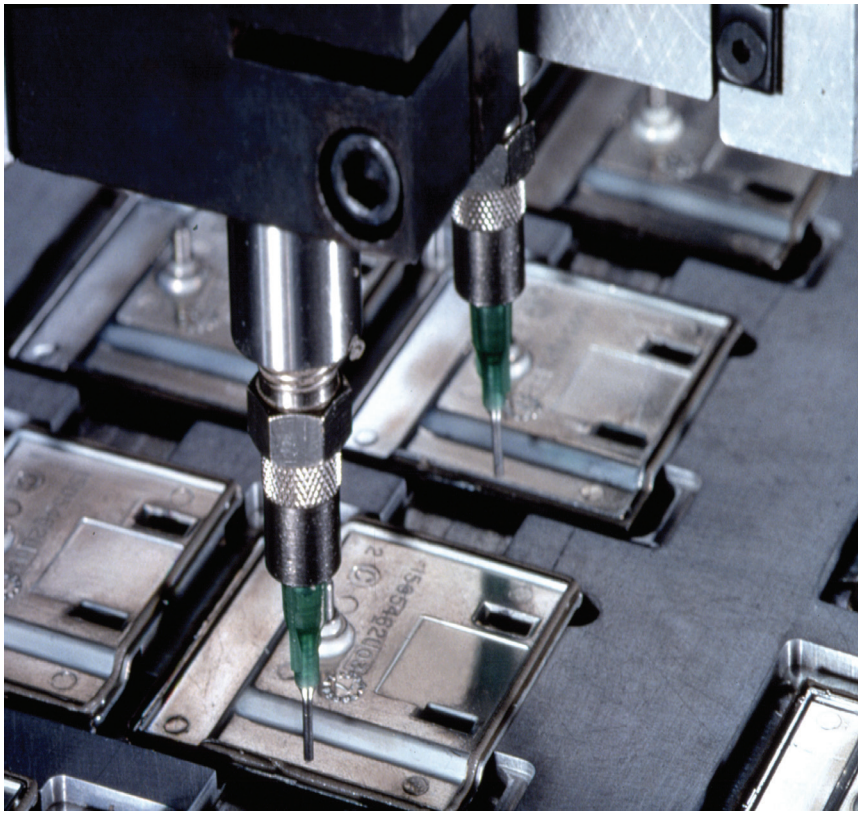


Customer Value Proposition:

This selector guide lists seven EMI shielding Form-In-Place "FIP' gasket materials. They provide the lowest total cost of ownership for small cross section and complex pattern applications, Parker Chomerics CHOFORM and ParPHorm FIP materials can reduce installed cost of an EMI gasket by up to 60%.

A range of conductive particle technologies combined with thermoset and RTV silicone systems provide a material selection for most opportunities. Multiple filler grades balance material cost versus performance and can provide low cost alternatives for less demanding applications. Parker Chomerics corrosion resistant materials inherently provide protection against galvanic activity. They may eliminate the need for nickel or tin plating and or secondary environmental gaskets. Parker Chomerics general purpose materials exhibit excellent electrical and mechanical properties on metallic and shielded plastic housings. Parker Chomerics silver filled materials provide high shielding and conductivity critical for inter-compartmental shielding.

CHOFORM delivers a greater deflection range, lower deflection forces & improved reliability. FIP materials are available in both uncured bulk form and dispensed onto housings. We can reduce costs by material selection, design, dispense technique and supply chain management. Let us work with you in the design phase to avoid unnecessary manufacturing costs.



Product Features:

- >60 dB shielding effectiveness 200 MHz to 12 GHz
- Electrical conductivity as low as .003 ohm-cm
- Lower deflection forces and a broad deflection range
- Corrosion resistant materials can eliminate plating or secondary environmental gasket
- Good adhesion to many substrates
- UL 94 V-0 (as tested by Chomerics), RoHS compliant and halogen free materials
- Supply chain management providing ongoing logistics
- Low cost and rapid prototyping

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ENGINEERING YOUR SUCCESS.

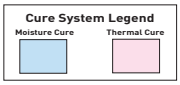
Form-In-Place Selector Guide

Table 1

CHOFORM - Conductive Form-In-Place Gaskets						
Typical Properties	**Test Procedure**	**Units**	**CHOFORM® 5513**	**CHOFORM® 5541**	**CHOFORM® 5550**	**CHOFORM® 5560**
Features	--	--	Excellent electrical properties and adhesion	Corrosion resistant, high temp	Soft Ni/C, corrosion resistant	Excellent corrosion resistance on Aluminum
Conductive Filler	--	--	Ag/Cu	Ni/C	Ni/C	Ni/Al
Resin System	--	--	Silicone	Silicone	Silicone	Silicone
Number of Components	--	--	2	1	1	1
Cure System	--	--	Thermal	Thermal	Thermal	Thermal
Cure Schedule Tack Free Time Handling Time Full Cure	--	--	 30 mins @ 140° C 30 mins @ 140° C 30 mins @ 140° C	 30 mins @ 150° C 30 mins @ 150° C 30 mins @ 150° C	 30 mins @ 150° C 30 mins @ 150° C 30 mins @ 150° C	 30 mins @ 150° C 30 mins @ 150° C 30 mins @ 150° C
Hardness	ASTM D 2240	Shore A	53	75	55	55
Tensile Strength	ASTM D 412	psi	350	500	175	165
Elongation	ASTM D 412	%	255	125	175	150
Specific Gravity	ASTM D 395	--	3.4	2.4	2.2	1.8
Volume Resistivity	Chomerics MAT-1002	Ω-cm	0.004	0.030	0.035	0.13
Galvanic Corrosion Resistance Against Alum	Chomerics TM-100	Weight Loss mg	NR	32	20	4
*Compression Set 22 hrs @ 70° C	ASTM D 395 Method B	%	28	30	25	25
Maximum Use Temp	--	°C (°F)	125 (257)	125 (257)	125 (257)	125 (257)
Flammability Rating	UL 94	--	V-0	V-0	V-0	V-0
Shielding Effectiveness (avg 200 MHz - 12 GHz)	Modified IEEE-299	dB	>70	>65	>65	>90
Adhesion Trivalent Chromate Coating on Alum	Chomerics WI 038	N/cm	20	18	12	6
Force Deflection @ 30% Compression 0.034" x 0.040" sized bead (0.86 mm x 1.02 mm) English Metric	 ASTM D 375 Mod ASTM D 375 Mod	 lb-f/in N/cm	 60 105.1	 81.0 141.8	 32.4 56.7	 12.5 21.9
Bead Size Smallest Recommended Largest Recommended (single pass)	 Height by Width Height by Width	 inches (mm) inches (mm)	 0.018 x 0.022 (0.46 x 0.56) 0.062 x 0.075 (1.57 x 1.91)	 0.026 x 0.032 (0.66 x 0.81) 0.059 x 0.070 (1.50 x 1.80)	 0.038 x 0.045 (0.96 x 1.14) 0.062 x 0.075 (1.57 x 1.91)	 0.038 x 0.045 (0.96 x 1.14) 0.062 x 0.075 (1.57 x 1.91)
Shelf Life (bulk material) from Date of Manufacture	Chomerics	months	6 at 5±2° C	6 at -10±2° C	6 at -10±2° C	6 at -10±2° C

*Compression set is expressed as a percentage of deflection per ASTM D395 Method B., at 25% deflection. To determine percent recovery, subtract 1/4 of stated compression set value from 100%. For example, in the case of 30% compression set, recovery is 92.5%.

Note: NR - Not Recommended, NA - Not Applicable See Chomerics for product specifications if needed



Form-In-Place Selector Guide

Table 1 continued

CHOFORM - Conductive Form-In-Place Gaskets					
Typical Properties	**Test Procedure**	**Units**	**CHOFORM® 5526**	**CHOFORM® 5528**	**CHOFORM® 5538**
Features	--	--	High conductivity, excellent grounding and shielding	Soft, low closure-force	Corrosion resistant, small bead
Conductive Filler	--	--	Ag	Ag/Cu	Ni/C
Resin System	--	--	Silicone	Silicone	Silicone
Number of Components	--	--	1	1	1
Cure System	--	--	Moisture	Moisture	Moisture
Cure Schedule Tack Free Time Handling Time Full Cure	--	--	18 mins @ 22° C& 50% RH 4 hours @ 22° C& 50% RH 24 hours @ 22° C & 50% RH	18 mins @ 22° C& 50% RH 4 hours @ 22° C& 50% RH 24 hours @ 22° C & 50% RH	18 mins @ 22° C& 50% RH 4 hours @ 22° C& 50% RH 4 hours @ 22° C & 50% RH
Hardness	ASTM D 2240	Shore A	38	40	65
Tensile Strength	ASTM D 412	psi	80	125	325
Elongation	ASTM D 412	%	75	100	65
Specific Gravity	ASTM D 395	--	3.6	3.4	2.2
Volume Resistivity	Chomerics MAT-1002	Ω-cm	0.003	0.005	0.050
Galvanic Corrosion Resistance Against Alum	Chomerics TM-100	Weight Loss mg	NR	NR	10
*Compression Set 22 hrs @ 70° C	ASTM D 395 Method B	%	45	45	45
Maximum Use Temp	--	°C (°F)	85 (185)	85 (185)	85 (185)
Flammability Rating	UL 94	--	V-0	V-0	V-0
Shielding Effectiveness (avg 200 MHz - 12 GHz)	Modified IEEE-299	dB	>100	>70	>60
Adhesion Trivalent Chromate Coating on Alum	Chomerics WI 038	N/cm	9	3.8	9
Force Deflection @ 30% Compression 0.034" x 0.040" sized bead (0.86 mm x 1.02 mm) English Metric	 ASTM D 375 Mod ASTM D 375 Mod	 lb-f/in N/cm	 15.0 26.3	 20 35.0	 28.5 49.8
Bead Size Smallest Recommended Largest Recommended (single pass)	 Height by Width Height by Width	 inches (mm) inches (mm)	 0.018 x 0.022 (0.46 x 0.56) 0.042 x 0.049 (1.07 x 1.24)	 0.018 x 0.022 (0.46 x 0.56) 0.039 x 0.052 (1.00x1.32)	 0.015 x 0.020 (0.38 x 0.51) 0.030 x 0.034 (0.76 x 0.86)
Shelf Life (bulk material) from Date of Manufacture	Chomerics	months	6 at 22±5° C	6 at 22±5° C	5 at 22±5° C

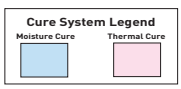
*Compression set is expressed as a percentage of deflection per ASTM D395 Method B., at 25% deflection. To determine percent recovery, subtract 1/4 of stated compression set value from 100%. For example, in the case of 30% compression set, recovery is 92.5%.

Note: NR - Not Recommended, NA - Not Applicable See Chomerics for product specifications if needed

Table 2

ParPHorm - Non-Conductive Form-In-Place Gaskets					
Typical Properties	**Test Procedure**	**Units**	**ParPHorm® 1800**	**ParPHorm® S1945-25**	**ParPHorm® L1938-45**
Hardness	ASTM D2240	Shore A	20	25	45
Tensile Strength	ASTM DD412	(min.) (psi)	150	277	616
Elongation	ASTM D412	%	650	316	271
Specific Gravity	ASTM D297	--	1.4	0.78	1.24
Compression Set 70 hrs., 25% deflection @ 212° F (100° C) 70 hrs. @ 158° F (70° C) 2000 hrs. @ Room Temp 2000 hrs. @ 158° F (70° C)	ASTM D395 Method B	%	 35 -- -- --	 42 21 -- --	 29 14 29 --
Cure System	--	--	Moisture	Thermal	Thermal
Cure Schedule Tack Free Time Handling Time Full Cure	--	--	18 mins @ 22° C & 50% RH 4 hours @ 22° C & 50% RH 24 hours @ 22° C & 50% RH	30 mins @ 140° C 30 mins @ 140° C 30 mins @ 140° C	30 mins @ 140° C 30 mins @ 140° C 30 mins @ 140° C
Resin System	--	--	Silicone	Silicone	Fluorosilicone
Bead Size Smallest Recommended Largest Recommended (single pass)	 Height by Width Height by Width	 inches (mm) inches (mm)	 0.018 x 0.022 (0.46 x 0.56) 0.050 x 0.063 (1.27 x 1.60)	 0.018 x 0.022 (0.46 x 0.56) 0.050 x 0.063 (1.27 x 1.60)	 0.018 x 0.022 (0.46 x 0.56) 0.050 x 0.063 (1.27 x 1.60)
Shelf Life (bulk material) from Date of Manufacture	Chomerics	months	4 at 21±5° C	6 at 21±5° C	6 at -10±5° C

The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.



Value-Added Capabilities

Supply Chain Management
We will coordinate with the housing supplier or can provide in-house injection molding to ensure ontime delivery. We will do secondary assembly of components, labeling, pad printing, painting. Our management will provide one supplier responsible for on time delivery of a quality part.

Table 3 - CHOFORM Ordering Information

Material	Part Number	Material Weight	Packaging Type = Size
5513	19-26-5513-0850	Part A 450 grams, Part B 475 grams	12 fl. oz. SEMCO Tube
5526	19-26-5526-0850	850 grams	12 fl. oz. Aluminum Cartridge
5528	19-26-5528-0850	850 grams	12 fl. oz. Aluminum Cartridge
5538	19-26-5538-0650	650 grams	12 fl. oz. Aluminum Cartridge
5541	19-26-5541-0650	650 grams	12 fl. oz. Aluminum Cartridge
5550	19-26-5550-0575	575 grams	12 fl. oz. Aluminum Cartridge
5560	19-26-5560-0500	500 grams	12 fl. oz. Aluminum Cartridge

Samples typically provided in 30cc syringes

Table 4 - ParPHorm Ordering Information

Material	Part Number	Material Weight	Packaging Type = Size
1800	19-26-1800-0345	345 grams	12 fl. oz. Aluminum Cartridge
1938	19-26-1938-0200	200 grams	6 fl. oz. SEMCO Tube
1945	19-26-1945-0250	250 grams	12 fl. oz. SEMCO Tube

SEMCO is a registered trademark of PRC-DeSoto, Inc.

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To Place an Order Please Contact a Customer Service Representative at the Following Locations

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Manufacturing Facilities:
Woburn, MA; Hudson, NH; Cranford, NJ ; Millville, NJ; Fairport, NY; Grantham, UK; Saint Ouen l'Aumone, France; Beijing, Shanghai, Shenzhen, and Tianjin, China; Guadalajara and Monterrey, Mexico; Sadska, Czech Republic; Chennai, India; Selangor, Malaysia.

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