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## Form-In-Place

Laird Technologies' Form-In-Place is an automated system for dispensing conductive elastomer EMI shielding and grounding gaskets onto metal or plastic substrates. This product is particularly ideal for mobile phones, PDAs, PC cards, radios and many other cast or plastic enclosures and packaged electronic assemblies.

### Features and Benefits:

- Small consistent bead can be applied to thin walls, saving labor and eliminating material waste
- Soft compressible materials
- Dispense on metal or plastic
- Automated process capable of irregular shapes and tight tolerances

### Applications:

- Cell phones
- Cellular base stations
- Hand held devices
- Electromedical devices

For sales information:

In Asia, please telephone +86-10-67-87-33-11

In Europe, please telephone +46-8-555-722-00

In the USA, please telephone +800-228-4563

or visit: [www.lairdtech.com](http://www.lairdtech.com)

## Form-In-Place Properties:

Compound	Test Method	Units	SNN45-SP	SIL37	SNN-SF	SNL55-SP	SNL65-HS	SNC50-SP
Elastomer			silicone	silicone	polyether	silicone	silicone	silicone
Filler			silver/nickel	none	silver/nickel	silver/Al	silver/Al	Ni/graphite
Color			beige	black or clear	black or gray	tan	tan	dark gray
Electrical Properties	Test Method	Units	SNN45-SP	SIL37	SNN-SF	SNL55-SP	SNL65-HS	SNC50-SP
Volume Resistivity		ohm-cm	0.002	>10 <sup>12</sup>	0.008	0.004	0.012	0.015
Shielding Effectiveness	MIL-DTL-83528C							
200 MHz to 10 GHz	para 4.5.12	dB	> 90 dB	NA	> 90 dB	See Note 3	See Note 3	See Note 3
Physical Properties	Test Method	Units	SNN45-SP	SIL37	SNN-SF	SNL55-SP	SNL65-HS	SNC50-SP
Hardness	ASTM D2240	Shore A	70	33	62	65 IRHD	64	53
Density	ASTM D792	g/cm <sup>3</sup>	3.7	1.1	3.3	1.9	1.9	2
Compression set	ASTM D575	%	<20%	See Note 3	<45%	<20%	See Note 3	<20%
Adhesion strength (Al)		N/cm <sup>2</sup> (psi)	>130 (>190)	>120(>170)	>100 (>150)	>100 (>150)	>200(>300)	See Note 3
Compression-deflection								
at 20% compression		N/cm (lb/in)	1.6 (0.9)	See Note 3	2.3 (1.3)	See Note 3	See Note 3	See Note 3
at 40% compression		N/cm (lb/in)	6.1 (3.5)	See Note 3	8.2 (4.7)	See Note 3	See Note 3	
Temperature Range		°C	-50 to 85C	-50 to 85C	-50 to 85C	-50 to 85C	-50 to 85C	-50 to 125C
Flammability Rating	UL 94		V0	TBD	TBD	V0	TBD	TBD
Curing Requirements	Test Method	Units	SNN45-SP	SIL37	SNN-SF	SNL55-SP	SNL65-HS	SNC50-SP
Cure Conditions								
Time Before Handling			1 hour	2-4 hours	2-4 hours	1 hour	2-4 hours	1 hour
98% Cure			6 hours	12 hours	12 hours	6 hours	12 hours	6 hours

### Notes:

1. Compression/deflection bead size 0.5 mm x 0.6 mm
2. The results are typical for known applications. Please check with Laird Application Engineering for specific customer applications.
3. Contact Laird Application Engineering for test data.

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