



Connection Technology  
For a Connected World™

## PariPoser® Interconnect Technology

### ● Working in Today's World.....

Working in today's world means that electronic devices are smaller, faster, smarter, and generally far more complex than ever before.

The need for packaged devices operating at greater frequencies, presents a new set of challenges in the test and production environment.

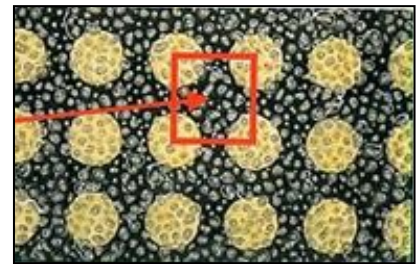
Paricon Technologies provides a state of the art family of high performance contact materials, specifically designed for the advanced needs of the electronic industry.

Our unique contact system has been applied at virtually every level of interconnection, such as test and burn-in sockets, production level sockets, cable to board connectors and mezzanine connectors.

## PariPoser® Interconnect Technology

To achieve optimum performance with PariPoser® materials, it is important to understand their structure and to provide the correct mechanical interface. Paricon's studies have shown that when the design rules are followed, very high performance electrical interconnection capability can be obtained for a wide range of applications including test, burn-in and production interconnection products.

The PariPoser® conductive film is comprised of columns of silver-plated nickel particles uniformly distributed in a thin sheet of silicone. Typical sheet thickness ranges from 0.0025" to 0.015". When the PariPoser film is compressed between a pair of flat conductors the silicone elastically moves allowing the columns to electrically interconnect the conductors. The contact loading force is generated by the elastic displacement of the silicone. Paricon markets these products under the name "BallWire® contact". Unlike wire based elastomeric products, BallWire contacts are not easily damaged by excessive loading and are not subject to Euler Column failure. The nickel particles are very hard and are very effective at penetrating oxide layers.



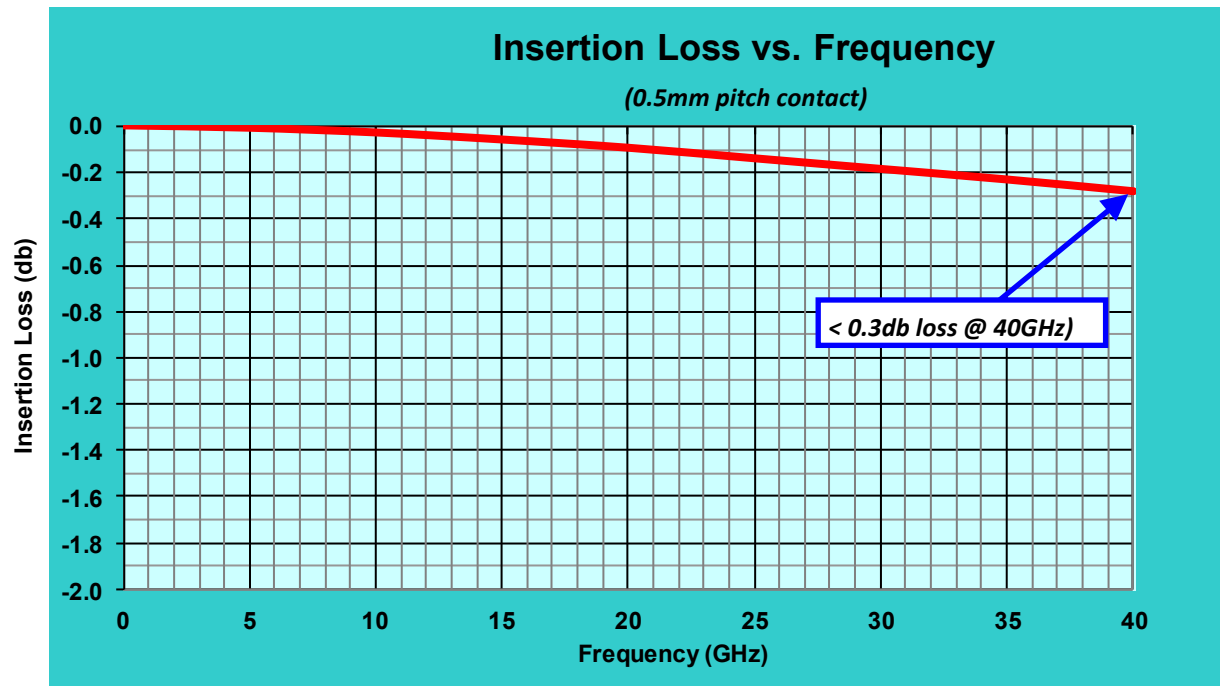
The column density is such that multiple columns will contact each interconnection pad. The PariPoser column density is much greater than the contact spacing. Multiple BallWire columns will be present at each pad location. As a result, no orientation of the material, relative to the pads, is required. One just has to make sure that the components being interconnected are aligned to each other.

PariPoser films do not compress under load but move elastically allowing the contact pads to make intimate contact with the BallWire columns. Space must be provided for the silicone to move into. This space is provided by the PariPoser surface roughness and the interstitial space between the contact pads. When a PariPoser connector is compressed between an LGA device and board, the PariPoser film conforms to the surface tending to fill all the voids providing a stable, gasket like interconnection. Little additional vertical motion will occur with load or time. The result is a very stable, environmentally protected interconnection.

### Paricon Technologies Corporation

500 Myles Standish Blvd  
Taunton, MA 02780 USA  
Tel: 1 (508) 676 6888  
Fax: 1 (508) 676 8111  
Email: [sales@paricon-tech.com](mailto:sales@paricon-tech.com)

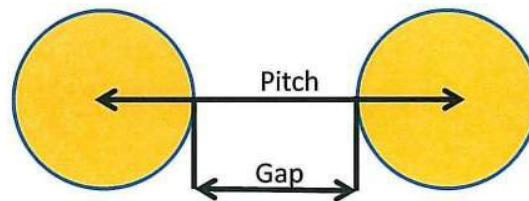
[www.paricon-tech.com](http://www.paricon-tech.com)



Contact Pitch (mm)	Minimum Gap (mm)	Minimum Pad Area (mm) <sup>2</sup>	Minimum Combined Pad Height (Cu weight oz)	Minimum Combined Pad Height (inches)	Sheet Thickness (inches)	Sheet Thickness (mm)
1.27	0.51	0.46	2.00 oz	0.0028	0.0150	0.38
1.00	0.40	0.28	2.00 oz	0.0028	0.0100	0.25
0.80	0.32	0.18	1.50 oz	0.0021	0.0087	0.22
0.65	0.26	0.12	1.50 oz	0.0021	0.0068	0.17
0.50	0.20	0.071	1.00 oz	0.0014	0.0056	0.14
0.40	0.16	0.045	1.00 oz	0.0014	0.0044	0.11
0.30	0.12	0.025	0.75 oz	0.00105	0.0034	0.09
0.20	0.08	0.011	0.50 oz	0.0007	0.0025	0.06
0.10	0.04	0.0028	0.50 oz	0.0007	0.0021	0.05

Gap applies to pads on both surfaces

Area is projected interconnection area between opposing pads



#### FEATURES AND BENEFITS.....

- High Bandwidth (>70GHz)
- Low Profile (<0.4mm)
- Fine Pitch (<0.2mm)
- Low Loss (<0.3dB@40GHz)

#### Markets.....

- Telecom
- Computer
- Instrumentation
- Medical
- Automotive
- Military
- Space

#### Applications.....

- Board to Board
- Memory
- Processor
- Test Fixtures
- Military Equipment
- Ground and Flight Space Application



Connection Technology  
For a Connected World™

## PariPoser® Interconnect Technology

	1.27mm	1.0mm	0.8mm	0.65mm	0.5mm	0.4mm	0.3mm	0.2mm	0.1mm
Construction	Ni/Ag Silicone Sheet	Ni/Ag Silicone Sheet	Ni/Ag Silicone Sheet	Ni/Ag Silicone Sheet	Ni/Ag Silicone Sheet	Ni/Ag Silicone Sheet	Ni/Ag Silicone Sheet	Ni/Ag Silicone Sheet	Ni/Ag Silicone Sheet
Thickness	0.38mm	0.25mm	0.23mm	0.17mm	0.14mm	0.11mm	0.09mm	0.06mm	0.05mm
Min Pad Height (3)	0.075mm	0.075mm	0.075mm	0.075mm	0.05mm	0.05mm	0.05mm	0.05mm	0.035mm
Pad Diameter	0.762mm	0.6mm	0.48mm	0.39mm	0.3mm	0.24mm	0.18mm	0.12mm	0.06mm
Pad Gap (4)	0.51mm	0.4mm	0.32mm	0.26mm	0.20mm	0.16mm	0.12mm	0.08mm	0.04mm
Pad Loading (g/contact) (5)	80.6	50	32	21.1	12.5	8	4.5	2	0.5
Temperature Range	-50C to 210C	-50C to 210C	-50C to 210C	-50C to 210C	-50C to 210C	-50C to 210C	-50C to 210C	-50C to 210C	-50C to 210C
Thermal Conductivity	1300W/m <sup>2</sup> k	2000W/m <sup>2</sup> k	2200W/m <sup>2</sup> k	2900W/m <sup>2</sup> k	3600W/m <sup>2</sup> k	4500W/m <sup>2</sup> k	5600W/m <sup>2</sup> k	8300W/m <sup>2</sup> k	10000W/m <sup>2</sup> k
Current: Amps/pad (6)	40	20	15	12	8	6	2	1	¼
Breakdown Voltage	>500v DC	>500v DC	>500v DC	>500v DC	>500v DC	>500v DC	>500v DC	>500v DC	500v DC
RF insertion Loss at 40Ghz	<1.0dB	<0.6dB	<0.7dB	<0.4dB	<0.3dB	<0.3dB	<0.2dB	<0.1dB	<0.05dB
Out Gassing (CVCN)	0.07%	0.07%	0.07%	0.07%	0.07%	0.07%	0.07%	0.07%	0.07%

### Please Note:

- 1) Data provided is for guidance only.
- 2) Performance may vary in application
- 3) Pad Height includes total height of opposing pads
- 4) Gap applies to pads on both surfaces
- 5) Recommended Pad loading has determination factors subject to application
- 6) Single pad @ 20°C

### Paricon Technologies Corporation

500 Myles Standish Blvd  
Taunton, MA 02780 USA  
Tel: 1 (508) 676 6888  
Fax: 1 (508) 676 8111  
Email: sales@paricon-tech.com

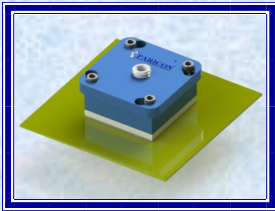
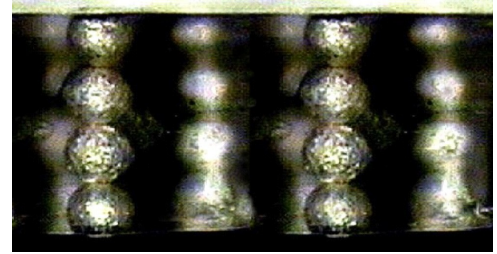
www.paricon-tech.com

Any information furnished by Paricon Technologies Corp. and its agents, is believed to be accurate and reliable. All specifications are subject to change without notice. Responsibility for the use and application of Paricon Technologies materials rest with the end user, since Paricon Technologies and its agents cannot be aware of all potential uses. Paricon Technologies makes no warranties as to the fitness, merchantability or suitability of any Paricon Technologies materials or products for any specific application. Paricon Technologies shall not be liable for incidental or consequential damages of any kind. All Paricon Technologies products are sold pursuant to the Paricon Technologies Terms and Conditions of sale, which may change from time to time, a copy of which will be furnished upon request. © Copyright 2015 Paricon Technologies Corporation. All Rights Reserved. Paricon Technologies, the Paricon Logo, and other marks are trademarks or registered trademarks of Paricon Technologies Corporation or an affiliate company thereof.

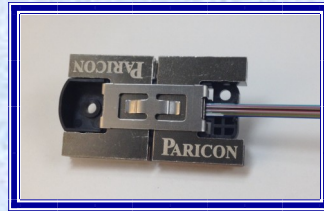
**HIGH PERFORMANCE**



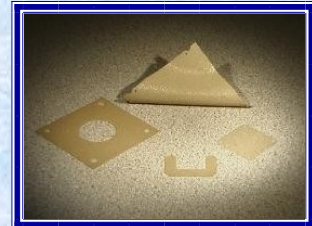
***BALLWIRE<sup>®</sup> CONTACTS CONNECT***



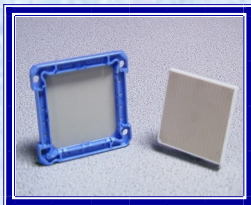
**F10 APPLICATION SOCKETS**



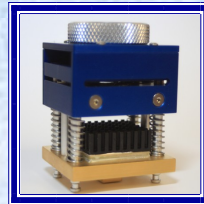
**OPTICAL TRANSCEIVER SOCKET**



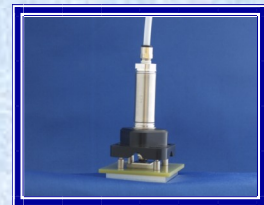
**CUSTOM CUT PARIPOSER<sup>®</sup>**



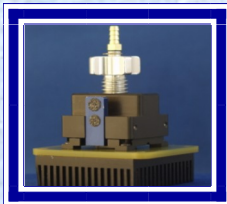
**PRODUCTION SOCKETS**



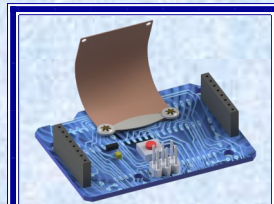
**F12 CUSTOM SOCKET**



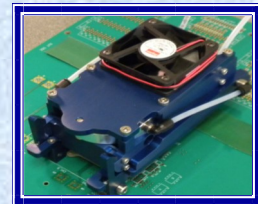
**AIR CLAMP SOCKET**



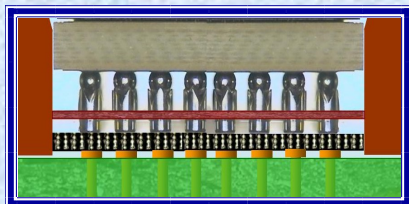
**CALIBRATED LOAD SOCKETS**



**F2B INTERCONNECT**



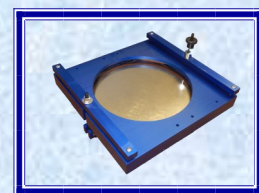
**CUSTOM FIXTURES**



**BGA TEST SOCKETS**



**S02 CUSTOM SOCKET**



**WAFER SCALE CONTACTORS**

**A PROVEN HIGH PERFORMANCE APPROACH TO:**

- **CONNECT DEVICES IN A TEST AND BURN-IN ENVIRONMENT**
- **LOW LOSS PERFORMANCE AT ALL LEVELS OF INTERCONNECTION**
- **CUSTOM INTERCONNECTIONS FOR IC'S IN TEST/PRODUCTION EQUIPMENT**

Paricon Technologies Corporation • 500 Myles Standish Blvd, Taunton MA 02780

Tel 508-676-6888 • Fax 508-676-8111 • [www.paricon-tech.com](http://www.paricon-tech.com) • [sales@paricon-tech.com](mailto:sales@paricon-tech.com)