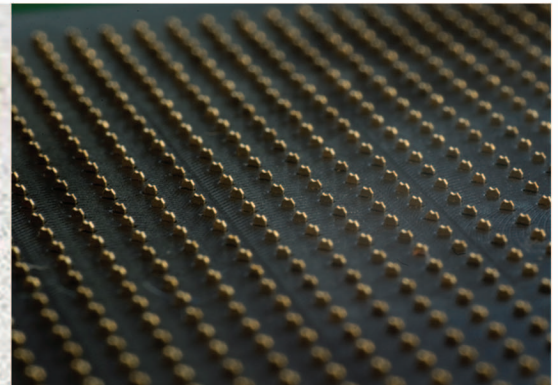
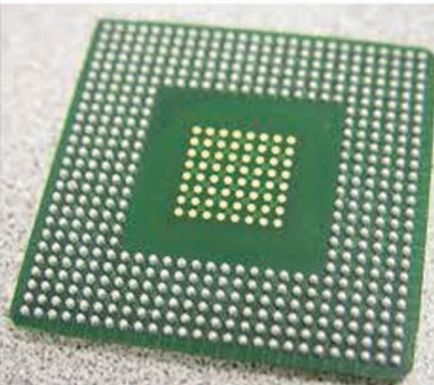
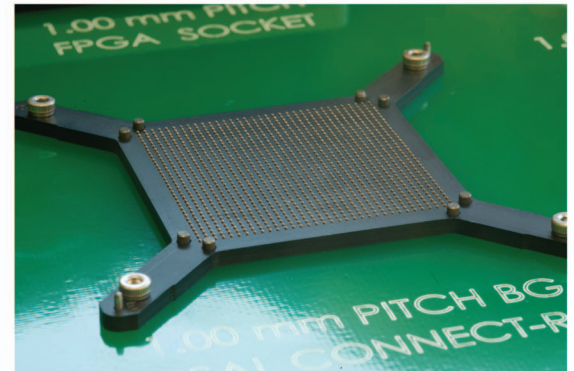


.8mm & 1mm Pitch BGA Sockets using RC Connect-R™ technology are available off the shelf to meet your immediate needs. These durable multi-GHz BGA socket solutions offer low loss compression mount connection for processors, FPGAs, ASIC, MMICS and other high performance devices.

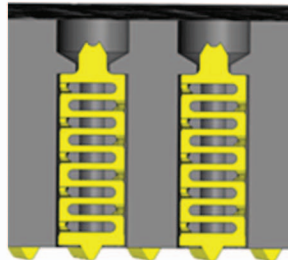
RC Connect-R™ BGA Sockets can be modified for any package size up to 50mm x 50mm with short lead times and no tooling charges.

RC Connect-R™ BGA Sockets are perfect for GHz applications with temperature excursions and can stand up to the most demanding environmental factors.

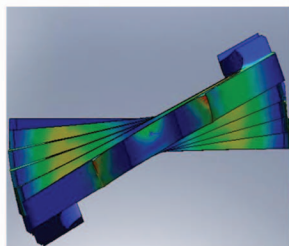
Hardware options are available for a variety of temperature control and mounting configurations.



RC Connect-R™ interconnect technology was designed to address a critical market need for a lower cost BGA socket with high AC performance AND high reliability under extreme environmental conditions.



RC Connect-R™ BGA Sockets have a patented "twist action" at the interface point. This lateral twist provides a critical scrub at the ball interface, allowing for good penetration of oxides and consistent DC resistance. The result is an exceptionally robust contact technology in a rugged & simple mechanical socket design.



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Seabrook, NH 03874 USA

## KEY FEATURES

Reliably socket expensive BGA devices during prototyping and development

Fully array patterns available in 1.00mm & 0.80mm.

Array sizes up to 50 x 50 (1.00mm) & 60 x 60 (0.80mm)

Unique dowel pin design allows for gross alignment of the package to the socket while ball cavity provides fine alignment

Excellent for ROHS or harder material balls

Developed for use in test, development and production OEM environments

Solderless, compression mount allows for easy socket replacement

Super small board footprint and easy mounting

## SPECIFICATIONS

# High Performance RC Connect-R™ Area Array Contact Technology

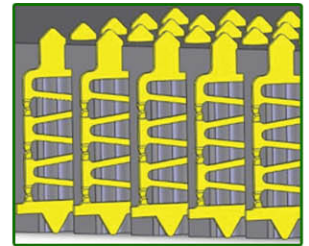
Ardent's latest innovation, RC Connect-R™, is a stamped and formed compliant contact capable of .7mm – 1mm pitch in area array. With excellent mechanical and electrical properties, extremely consistent manufacturing tolerances, and infinite scalability, RC Connect-R™ represents the next generation of compliant interconnect for compression mount applications.

### Key Features

Solderable or Solderless Mount  
 Multi-GHz AC Performance  
 Straight through Z-axis footprint  
 15 Degree Tip "scrub" action  
 Scalable to Tighter Pitches  
 Automated Manufacturing Process

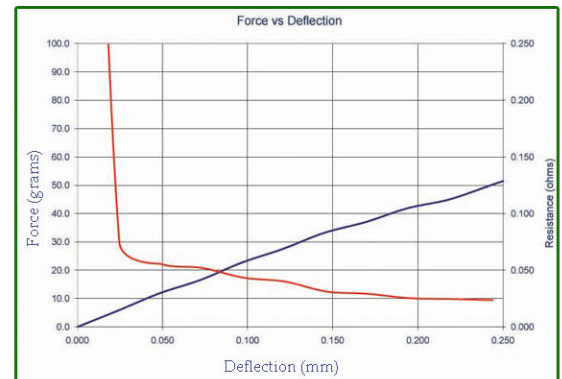
### Applications

BGA & LGA OEM type Sockets  
 Board-to-Board Interposers  
 Flex-to-Board Connectors  
 Military Connectors  
 Medical Device Connectors  
 Functional Test Sockets



## MECHANICAL

|                              |                                  |
|------------------------------|----------------------------------|
| <b>Force</b>                 | 40 grams                         |
| <b>Operating Temp.</b>       | - 50 to 150 C                    |
| <b>Working Travel</b>        | .25 mm                           |
| <b>Mated Height</b>          | 2.5 mm                           |
| <b>Material &amp; Finish</b> | BeCu (base) Au over Ni (plating) |
| <b>Cycle Life</b>            | 5,000 cycles                     |
| <b>Test Center (Pitch)</b>   | .7mm +                           |



## ELECTRICAL

|                        |                                  |
|------------------------|----------------------------------|
| <b>Insertion Loss</b>  | -1dB to 25.9 GHz, -3dB to 40 GHz |
| <b>DC Resistance</b>   | 30 mOhms                         |
| <b>Current Rating</b>  | 2.85 amps @ 30 C Temp Rise       |
| <b>Time Delay</b>      | 25 ps                            |
| <b>Self-Inductance</b> | .82 nH                           |
| <b>Inductance</b>      | .14 nH                           |
| <b>Capacitance</b>     | .18 pF                           |

