Xtreme 40 GHz Sockets Featuring Silver Filled Elastomer With Spike Caps.

The Xtreme Ghz Sockets for BGA, LGA, and other SMT IC's are ideal for very high frequency (40 GHz, high endurance, and wide temperature range applications. The sockets deliver the clearest possible signal due to the extremely short current path, low resistance, and ultra-low inductance and capacitance. The socket comes with overcompression stop as well. The operating parameters are shown below:

Below are typical parameters for the contactor:

## **Specifications**

Bandwidth <- 1 dB through 40 GHz

Inductance Self: 0.11 nH

Mutual: 0.015 nH

Capacitance Mutual: 0.028 pF Contact DCResistance < 50 mOhms

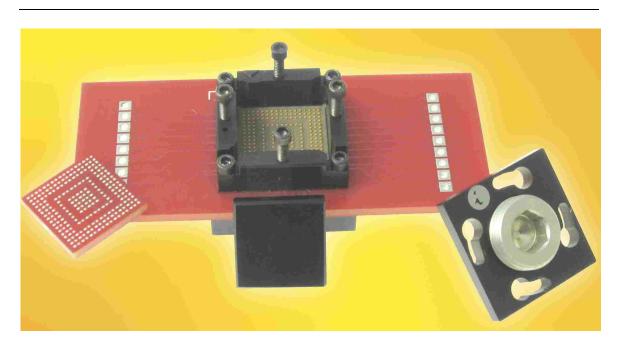
Current Carrying < 5 Amps per pin @ ambient

## Capabilities

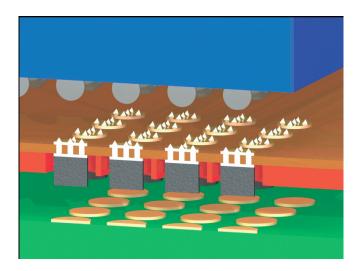
Temperature -40°C - 100°C

Typical Contact Force 25 - 50 grams / pin
Electrical Contact 0.012" to .016"

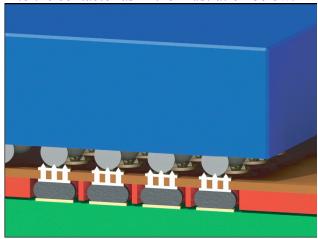
Contact Compliance 0.003" to 0.005"



Below is an illustration of the BGA IC before being compressed onto the contactor.



After the IC is inserted the SMT chip such as BGA is pressed such that each ball is forced into the contactor as in the illustration below:



The basic contactor consists of a kapton PCB, pads on the PCB which have spiked copper covered with nickel/gold, silver filled elastomer is under the pads providing compliance, and overcompression stop to keep contactor from damage.

