

HyperSpring® Contact Technology



HyperSpring contacts combine the high reliability of the Hypertac hyperboloid contact technology with the mechanical features of a spring-loaded contact to produce interconnections with improved signal integrity, high reliability and current density, and proven parametric stability over time.

The key innovation in a HyperSpring contact is that the spring itself is not used for electrical conduction: instead, conduction is handled by a Hypertac hyperboloid socket placed between the barrel and the plunger of a common spring-loaded contact. This means that the material used to form the spring may be chosen solely on the basis of its mechanical properties, primarily its elasticity. As a consequence it is possible to optimize the physical performance of the overall system.

HyperSpring produces superior electrical performance because the electrical properties of the conducting material do not need to be balanced with its physical performance. The use of the hyperboloid contact inside the HyperSpring guarantees all the features and benefits of the Hypertac technology.

General Specifications

Contact Diameter	0.50mm	0.60mm	0.76mm
Current Rating	3 Amps	3 Amps	8 Amps
Spring Force	Max. 6.35 oz.	4.23 oz.	7.05 oz.
Contact Resistance	< 20 mΩ	< 10 mΩ	< 8 mΩ
Mating Cycles	100,000		
Contact Material			
Non functional parts	Brass plated with gold or nickel		
Spring contact element	Beryllium copper plated with 1.27μm gold		
Spring element	Stainless steel AISI 302 passivated		
Interface pin connection	Bronze or beryllium copper plated with 1.27μm gold		
Plug contact terminations	Brass or bronze plated with 1.27μm gold		

Features and Benefits

- Spring-loaded contact with Hyperboloid socket
- Available with Hypertac Coax, Power and Signal Contacts
- Suitable for low height printed circuit board interconnect, and high density applications
- Provides cleaning contact action on harsh connection environment
- Provides reliable connection: mechanical provided by internal spring and electrical provided by internal pin and socket mating
- Easy replacement and maintenance
- Connection test system for microchip wafer testing