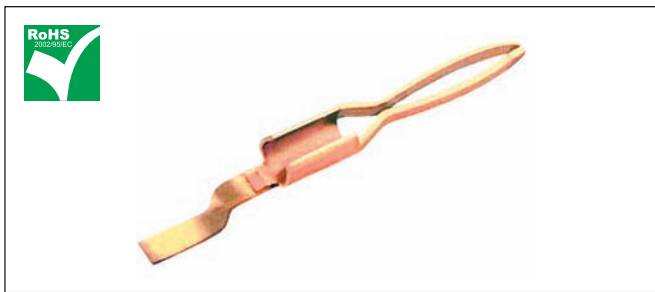


Omnetics Flex-Pin Technology



Omnetics Flex-Pin:

Designed and manufactured for Military, Space and medical applications. The cantilever spring uses a two leaf design, with one end fixed to while one is floating. The length and cross-section area is larger than most other designs available on the market - thus to ensure higher mate-demate life and to sustain a more constant insertion and withdrawal force. The two sizes (Micro and Nano) are designed to mate to Industry Standard. Both sizes are tested according to MIL-DTL-83513 shock and vibration test.

Material Selection:

BeCu pins are of ASTM B194 material and alloy 17200 with a min. tensile strength at 120,000 ksi.
Pins are Ni/Au plated per ASTM B488, Type 3.
Sockets are Cu alloy, Ni/Au plated.



Materials Outgassing Data

Being dedicated to the design and manufacture of quality micro-miniature and nano-miniature connectors, Omnetics Connector Corp. has chosen the highest quality materials; not only for their excellent electrical characteristics, but also for their low outgassing properties.

Listed below are outgassing values of our standard materials:

Material:	%TML:	%CVCM:	%WVR:	Page*:	
Epoxy	Hysol EE 4215/HD 3561	0,90	0,01	0,26	264
	Emerson & Cummings Stycast 2651 / Cat. 11	0,63	0,01	0,22	369
	Frey Engineering CF-3003-80 A/B	0,24	0,02	0,08	website under adhesives**
Ink	Shipley Ronal Ronascreen 752W A/B	0,78	0,02	0,55	347
Body	Vectra A130	0,03	0	0,01	386
	Fortron PPS 1140L4	0,05	0	0,01	284

* Outgassing data from NASA Reference Publication 1124, Rev. 4
** Website: <http://epims.gsfc.nasa.gov/og/>

High Temperature Material Specifications

Material:	Application:	MIL-Spec. or Standard:	Temperature Rating:
Polyphenylene Sulfide Fortron 1140L4 (PPS)	Insulators	MIL-M24519 Type GST-40F ASTM D684, 264psi	265°C
Liquid Crystal Polymer Vectra A130 (LCP)	Insulators	MIL-M-24519 Type GST-40F ASTM D684, 264psi	230°C
BeCu w/Gold Plating	Pins	ASTM B488, Type 3, Code C, Class 1.25	260°C
Cu Alloy w/Gold Plating	Sockets	ASTM B488, Type 3, Code C, Class 1.25	260°C
BeCu w/Electroless Nickel	Micro Latches	AMS-26074	260°C
Cu Alloy w/Electroless Nickel	Guide Pins	AMS-26074	200°C
PTFE Teflon Insulation	Lead Wire	MIL-W-16878/4 & 6 + MIL-W-22759/11	200°C
Frey Engineering 3003*	Epoxy	MIL-I-16923	200°C

* By request