

Tin/Lead Plated Micro-D Soldercup Connectors

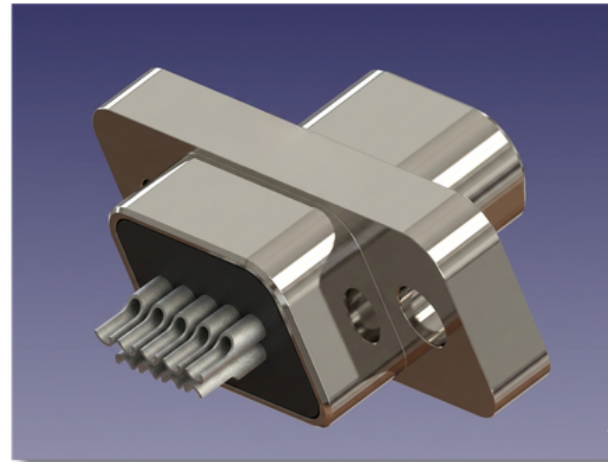
Space Grade Ruggedness You Demand.

The Cost-Out and Labor Velocity You Need.

Engineered as the ultimate prototyping and flight-ready platform, our tin/lead plated solder cup Micro-D connectors bridge the gap between defense-grade survival and ultra-efficient wire harness integration.

KEY PRODUCT ARCHITECTURE & FEATURES

- **Optimal Contact Geometry:** High-reliability beryllium copper pins offer low resistance and superior performance under extreme shock and vibration.
- **Tin/Lead Plated Solder Cups:** Copper alloy base with <3% lead plating explicitly prevents tin-whisker growth in aerospace and defense platforms.
- **Advanced PPS Insulator:** High-grade black Polyphenylene Sulfide per MIL-M-24519 guarantees 5000 MΩ minimum insulation resistance.
- **Premium Shell Construction:** Machined 6061-T6 aluminum offers up to 40% surface area and 60% volume reductions over standard D-Subs.



TARGET MARKETS & APPLICATION HIGHLIGHTS



Aerospace

Ideal for cabin lighting, flight data computers, and radar arrays where weight reduction is mandatory.



Space & Satellites

Outgassing-compliant PPS insulators and zero-cadmium finishes built for vacuum and ionizing radiation



UAVs & Munitions

Optimized for SWaP-C (Size, Weight, Power, and Cost) to maximize payload capacity and range.

THE VALUE PROPOSITION

Harnessing Velocity & Labor Savings

- Up to 80% Labor Reduction: Specialized design slashes wire-termination labor times during harness integration.
- Zero Pre-Compression: Open-entry, precisely oriented solder cups effortlessly accommodate 24 AWG and 26 AWG stranded wires out of the box.
- Eliminates Assembly Bottlenecks: Traditional gold-removal ("de-golding") takes experienced operators 3–5 minutes per contact position, adding hours of labor and driving up harness production costs.

Solder-Joint Integrity & Reliability

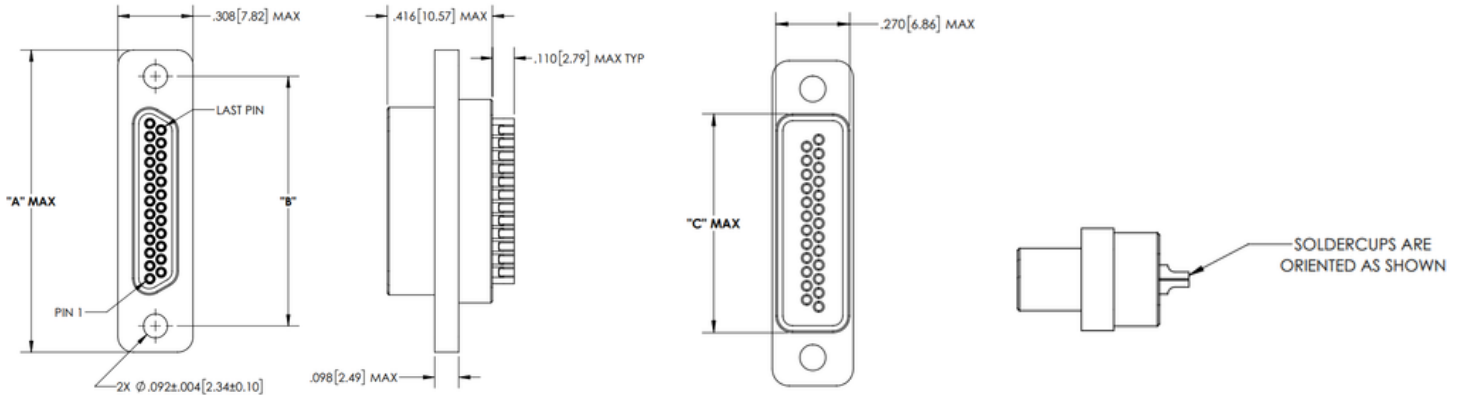
- 100% Ready to Solder: Connectors require no "de-golding" pre-processing, completely eliminating J-STD-001 processing bottlenecks.
- Embrittlement Prevention: Pre-plated tin/lead solder cups eliminate brittle gold-tin (AuSn₃) intermetallic striations.
- High Shock & Vibration Resistance: Prevents intermetallic joint breakage under extreme operating conditions.

Defense-Grade Performance Specifications

Our interfaces deliver exact conformity with demanding environmental requirements:

- Current Rating: 3A Maximum.
- Dielectric Withstanding Voltage (DWV): 600 VAC at sea level.
- Thermal Survivability: Rated for continuous exposure from -55°C to +125°C.
- Contact Engagement & Separation: 6 oz. maximum engagement force; 0.5 oz. minimum separation force ensuring continuous connection security.

PART NUMBER & DIMENSION SELECTION MATRIX



Part Number	Size (Contacts)	Wire Max	"A" Dimension (Max)	"B" Dimension (Max)	"C" Dimension (Max)	Shell Configuration & Finish
834119229	9	24 AWG	.785" [19.94 mm]	.565" [14.35 mm]	.400" [10.16 mm]	Plug, Cadmium Plated
834119230	9	24 AWG	.785" [19.94 mm]	.565" [14.35 mm]	.400" [10.16 mm]	Plug, Electroless Nickel Plated
834219176	9	24 AWG	.785" [19.94 mm]	.565" [14.35 mm]	.400" [10.16 mm]	Receptacle, Cadmium Plated
834219177	9	24 AWG	.785" [19.94 mm]	.565" [14.35 mm]	.400" [10.16 mm]	Receptacle, Electroless Nickel Plated
834119225	9	26 AWG	.785" [19.94 mm]	.565" [14.35 mm]	.400" [10.16 mm]	Plug, Cadmium Plated
834119226	9	26 AWG	.785" [19.94 mm]	.565" [14.35 mm]	.400" [10.16 mm]	Plug, Electroless Nickel Plated
834219180	9	26 AWG	.785" [19.94 mm]	.565" [14.35 mm]	.400" [10.16 mm]	Receptacle, Cadmium Plated
834219181	9	26 AWG	.785" [19.94 mm]	.565" [14.35 mm]	.400" [10.16 mm]	Receptacle, Electroless Nickel Plated
834129229	15	24 AWG	.935" [23.75 mm]	.715" [18.16 mm]	.550" [13.97 mm]	Plug, Cadmium Plated
834129230	15	24 AWG	.935" [23.75 mm]	.715" [18.16 mm]	.550" [13.97 mm]	Plug, Electroless Nickel Plated

PART NUMBER & DIMENSION SELECTION MATRIX (CONT.)

Part Number	Size (Contacts)	Wire Max	"A" Dimension (Max)	"B" Dimension (Max)	"C" Dimension (Max)	Shell Configuration & Finish
834149229	25	24 AWG	1.185" [30.10 mm]	.965" [24.51 mm]	.800" [20.32 mm]	Plug, Cadmium Plated
834149230	25	24 AWG	1.185" [30.10 mm]	.965" [24.51 mm]	.800" [20.32 mm]	Plug, Electroless Nickel Plated
834249176	25	24 AWG	1.185" [30.10 mm]	.965" [24.51 mm]	.800" [20.32 mm]	Receptacle, Cadmium Plated
834249177	25	24 AWG	1.185" [30.10 mm]	.965" [24.51 mm]	.800" [20.32 mm]	Receptacle, Electroless Nickel Plated
834149225	25	26 AWG	1.185" [30.10 mm]	.965" [24.51 mm]	.800" [20.32 mm]	Plug, Cadmium Plated
834149226	25	26 AWG	1.185" [30.10 mm]	.965" [24.51 mm]	.800" [20.32 mm]	Plug, Electroless Nickel Plated
834249180	25	26 AWG	1.185" [30.10 mm]	.965" [24.51 mm]	.800" [20.32 mm]	Receptacle, Cadmium Plated
834249181	25	26 AWG	1.185" [30.10 mm]	.965" [24.51 mm]	.800" [20.32 mm]	Receptacle, Electroless Nickel Plated
834159229	31	24 AWG	1.335" [33.91 mm]	1.115" [28.32 mm]	.950" [24.13 mm]	Plug, Cadmium Plated
834159230	31	24 AWG	1.335" [33.91 mm]	1.115" [28.32 mm]	.950" [24.13 mm]	Plug, Electroless Nickel Plated
834259176	31	24 AWG	1.335" [33.91 mm]	1.115" [28.32 mm]	.950" [24.13 mm]	Receptacle, Cadmium Plated
834259177	31	24 AWG	1.335" [33.91 mm]	1.115" [28.32 mm]	.950" [24.13 mm]	Receptacle, Electroless Nickel Plated
834159225	31	26 AWG	1.335" [33.91 mm]	1.115" [28.32 mm]	.950" [24.13 mm]	Plug, Cadmium Plated
834159226	31	26 AWG	1.335" [33.91 mm]	1.115" [28.32 mm]	.950" [24.13 mm]	Plug, Electroless Nickel Plated
834259180	31	26 AWG	1.335" [33.91 mm]	1.115" [28.32 mm]	.950" [24.13 mm]	Receptacle, Cadmium Plated
834259181	31	26 AWG	1.335" [33.91 mm]	1.115" [28.32 mm]	.950" [24.13 mm]	Receptacle, Electroless Nickel Plated

PART NUMBER & DIMENSION SELECTION MATRIX (CONT.)

Part Number	Size (Contacts)	Wire Max	"A" Dimension (Max)	"B" Dimension (Max)	"C" Dimension (Max)	Shell Configuration & Finish
834229176	15	24 AWG	.935" [23.75 mm]	.715" [18.16 mm]	.550" [13.97 mm]	Receptacle, Cadmium Plated
834229177	15	24 AWG	.935" [23.75 mm]	.715" [18.16 mm]	.550" [13.97 mm]	Receptacle, Electroless Nickel Plated
834129225	15	26 AWG	.935" [23.75 mm]	.715" [18.16 mm]	.550" [13.97 mm]	Plug, Cadmium Plated
834129226	15	26 AWG	.935" [23.75 mm]	.715" [18.16 mm]	.550" [13.97 mm]	Plug, Electroless Nickel Plated
834229180	15	26 AWG	.935" [23.75 mm]	.715" [18.16 mm]	.550" [13.97 mm]	Receptacle, Cadmium Plated
834229181	15	26 AWG	.935" [23.75 mm]	.715" [18.16 mm]	.550" [13.97 mm]	Receptacle, Electroless Nickel Plated
834139229	21	24 AWG	1.085" [27.56 mm]	.865" [21.97 mm]	.700" [17.78 mm]	Plug, Cadmium Plated
834139230	21	24 AWG	1.085" [27.56 mm]	.865" [21.97 mm]	.700" [17.78 mm]	Plug, Electroless Nickel Plated
834239176	21	24 AWG	1.085" [27.56 mm]	.865" [21.97 mm]	.700" [17.78 mm]	Receptacle, Cadmium Plated
834239177	21	24 AWG	1.085" [27.56 mm]	.865" [21.97 mm]	.700" [17.78 mm]	Receptacle, Electroless Nickel Plated
834139225	21	26 AWG	1.085" [27.56 mm]	.865" [21.97 mm]	.700" [17.78 mm]	Plug, Cadmium Plated
834139226	21	26 AWG	1.085" [27.56 mm]	.865" [21.97 mm]	.700" [17.78 mm]	Plug, Electroless Nickel Plated
834239180	21	26 AWG	1.085" [27.56 mm]	.865" [21.97 mm]	.700" [17.78 mm]	Receptacle, Cadmium Plated
834239181	21	26 AWG	1.085" [27.56 mm]	.865" [21.97 mm]	.700" [17.78 mm]	Receptacle, Electroless Nickel Plated

PART NUMBER & DIMENSION SELECTION MATRIX (CONT.)

Part Number	Size (Contacts)	Wire Max	"A" Dimension (Max)	"B" Dimension (Max)	"C" Dimension (Max)	Shell Configuration & Finish
834169229	37	24 AWG	1.485" [37.72 mm]	1.265" [32.13 mm]	1.100" [27.94 mm]	Plug, Cadmium Plated
834169230	37	24 AWG	1.485" [37.72 mm]	1.265" [32.13 mm]	1.100" [27.94 mm]	Plug, Electroless Nickel Plated
834269176	37	24 AWG	1.485" [37.72 mm]	1.265" [32.13 mm]	1.100" [27.94 mm]	Receptacle, Cadmium Plated
834269177	37	24 AWG	1.485" [37.72 mm]	1.265" [32.13 mm]	1.100" [27.94 mm]	Receptacle, Electroless Nickel Plated
834169225	37	26 AWG	1.485" [37.72 mm]	1.265" [32.13 mm]	1.100" [27.94 mm]	Plug, Cadmium Plated
834169226	37	26 AWG	1.485" [37.72 mm]	1.265" [32.13 mm]	1.100" [27.94 mm]	Plug, Electroless Nickel Plated
834269180	37	26 AWG	1.485" [37.72 mm]	1.265" [32.13 mm]	1.100" [27.94 mm]	Receptacle, Cadmium Plated
834269181	37	26 AWG	1.485" [37.72 mm]	1.265" [32.13 mm]	1.100" [27.94 mm]	Receptacle, Electroless Nickel Plated
834199229	69	24 AWG	1.735" [44.07 mm]	1.515" [38.48 mm]	1.440" [36.58 mm]	Plug, Cadmium Plated
834199230	69	24 AWG	1.735" [44.07 mm]	1.515" [38.48 ...]	1.440" [36.58 mm]	Plug, Electroless Nickel Plated
834199225	69	26 AWG	1.735" [44.07 mm]	1.515" [38.48 mm]	1.440" [36.58 mm]	Plug, Cadmium Plated
834199226	69	26 AWG	1.735" [44.07 mm]	1.515" [38.48 mm]	1.440" [36.58 mm]	Plug, Electroless Nickel Plated
834179229	51-3	24 AWG	1.435" [36.45 mm]	1.215" [30.86 mm]	1.140" [28.96 mm]	Plug, Cadmium Plated
834179230	51-3	24 AWG	1.435" [36.45 mm]	1.215" [30.86 mm]	1.140" [28.96 mm]	Plug, Electroless Nickel Plated
834279182	51-3	24 AWG	1.435" [36.45 mm]	1.215" [30.86 mm]	1.140" [28.96 mm]	Receptacle, Size 51-3, Nickel-PTFE Plated

PART NUMBER & DIMENSION SELECTION MATRIX (CONT.)

Part Number	Size (Contacts)	Wire Max	"A" Dimension (Max)	"B" Dimension (Max)	"C" Dimension (Max)	Shell Configuration & Finish
834179225	51-3	26 AWG	1.435" [36.45 mm]	1.215" [30.86 mm]	1.140" [28.96 mm]	Plug, Cadmium Plated
834179226	51-3	26 AWG	1.435" [36.45 mm]	1.215" [30.86 mm]	1.140" [28.96 mm]	Plug, Electroless Nickel Plated
834279178	51-3	26 AWG	1.435" [36.45 mm]	1.215" [30.86 mm]	1.140" [28.96 mm]	Receptacle, Size 51-3, Nickel-PTFE Plated
834189229	100	24 AWG	2.170" [55.12 mm]	1.800" [45.72 mm]	1.442" [36.63 mm]	Plug, Size 100, Cadmium Plated
834189230	100	24 AWG	2.170" [55.12 mm]	1.800" [45.72 mm]	1.442" [36.63 mm]	Plug, Size 100, Electroless Nickel
834289177	100	24 AWG	2.170" [55.12 mm]	1.800" [45.72 mm]	1.442" [36.63 mm]	Receptacle, Size 100, Electroless Nickel
834189225	100	26 AWG	2.170" [55.12 mm]	1.800" [45.72 mm]	1.442" [36.63 mm]	Plug, Size 100, Cadmium Plated
834189226	100	26 AWG	2.170" [55.12 mm]	1.800" [45.72 mm]	1.442" [36.63 mm]	Plug, Size 100, Electroless Nickel
834289181	100	26 AWG	2.170" [55.12 mm]	1.800" [45.72 mm]	1.442" [36.63 mm]	Receptacle, Size 100, Electroless Nickel

Note: Product drawings superseded any information in this document. Custom modifications—including specialized low-profile slot head or hex jackscrews, removable jackposts, or alternative modular layouts—can be rapidly built via our value-added distribution engineering center.