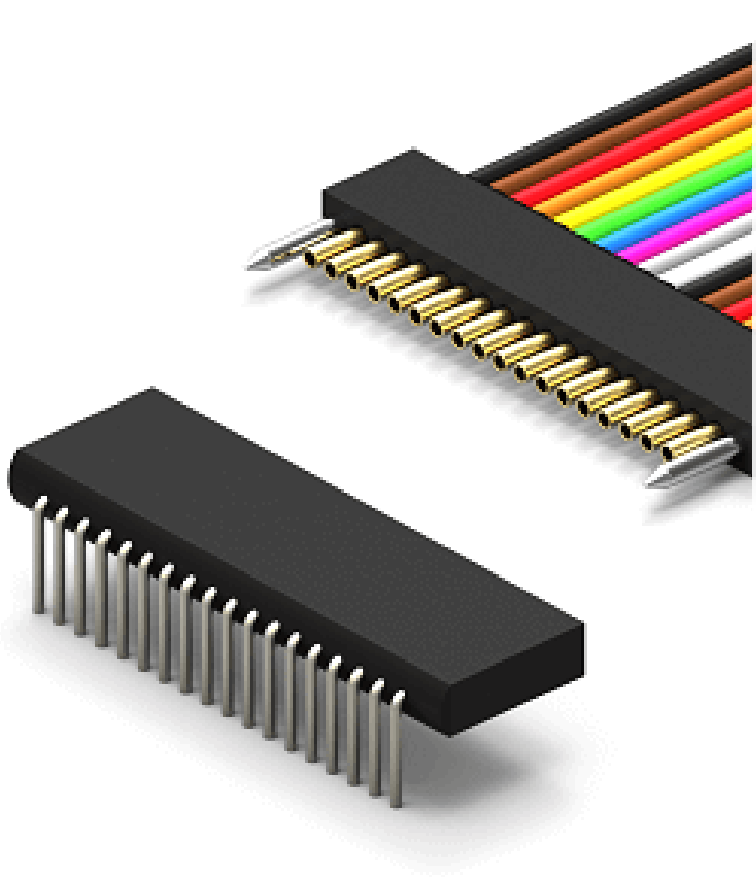
Ulti-Mate™ Connectors



Rectangular Nano-Strip

As the premier manufacturer for high density, lightweight Nano strip connectors, Winchester Interconnect takes pride in offering a full line of Nano Strip connector styles with fully molded liquid crystal polymer bodies. Our Nano Strip connectors, part of our Ulti-Mate™ brand, are designed with a contact center-to-center pitch of .025", ensuring precise and reliable connections.

Our Nano Strip connectors are the perfect choice for your next project .

Winchester Interconnect

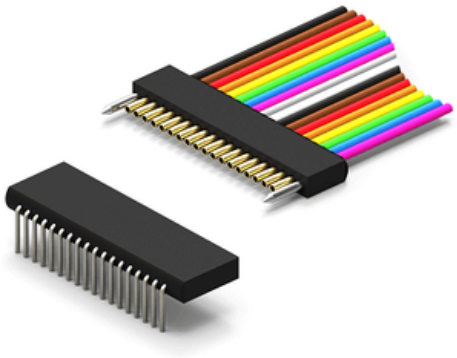
www.winconn.com

Table of Contents

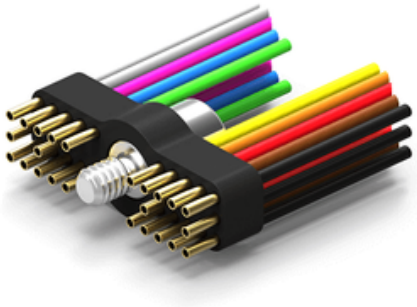
3–15.....Nano Strip Connectors

4....Single Row Series
10...Dual Row Center Jackscrew

Winchester Interconnect



Nano Strip



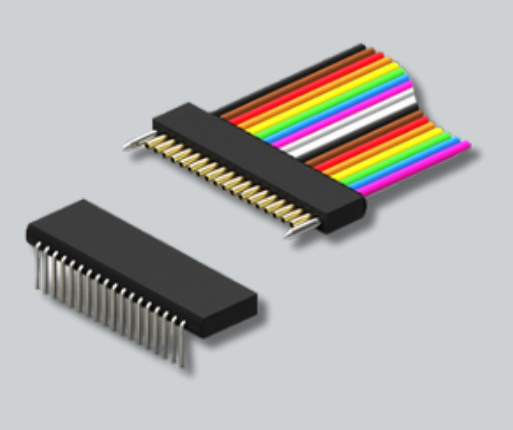
Winchester Interconnect™

Ulti-Mate Connectors

Ulti-Mate Nano Strip

Single Row Series Connectors

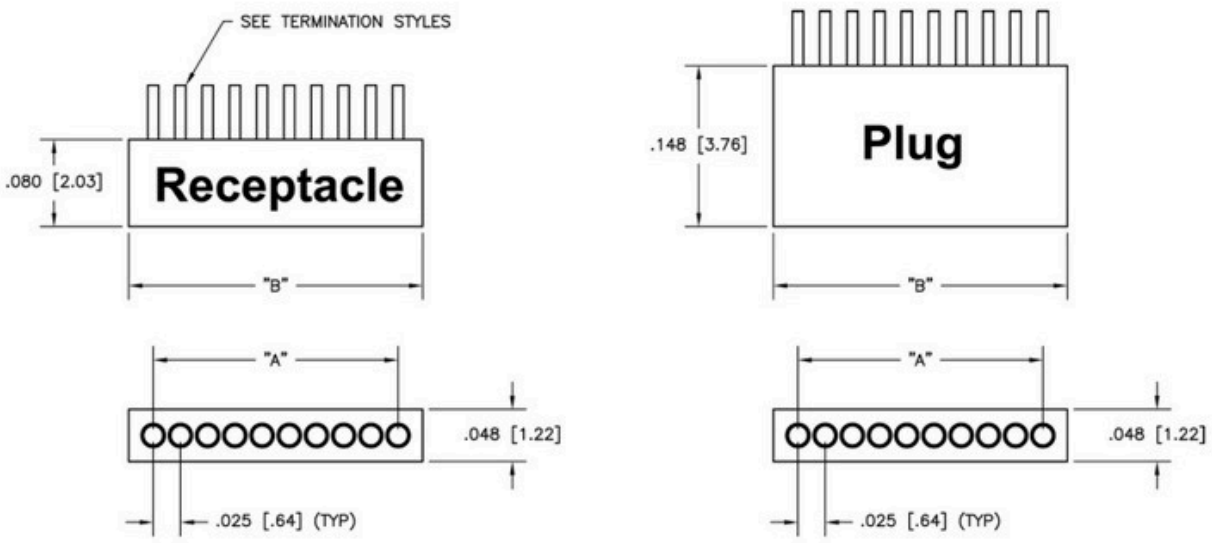
Winchester Interconnect Micro offers Nano Strip Single Row Series Connectors, precision-engineered for high-density, lightweight interconnect applications. Featuring a durable plastic strip and wire leads, these connectors perform reliably across extreme temperature ranges from -55°C to 125°C, and even up to 200°C with the high-temperature (HT) option. As a QPL-qualified supplier for MIL-DTL-32139 products, Winchester ensures military-grade quality and performance for critical systems requiring miniature, robust connectivity.



KEY FEATURES & BENEFITS

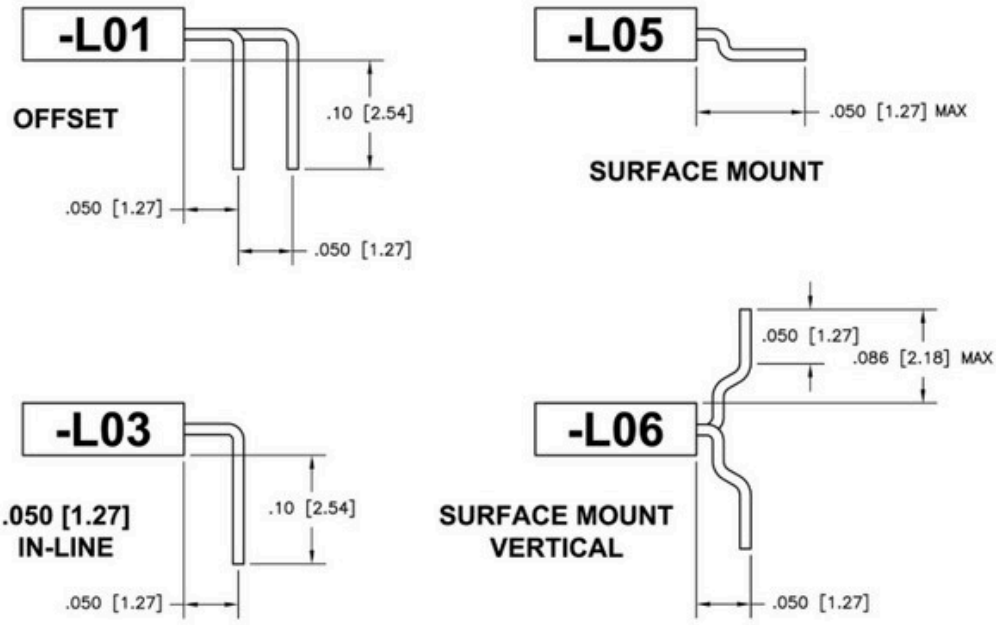
- Wide Temperature Range – Operates from -55°C to 125°C; high-temperature (HT) versions withstand up to 200°C.
- Versatile Configurations – Available with 2 to 40 contacts and optional guide posts for secure alignment.
- High-Quality Contact Materials – Signal Pin and Socket Contacts made from C17410 Beryllium Copper for superior conductivity and resilience.
- Durable Plating Options – Contacts feature Gold plating, and PC Tails are offered in 60/40 Tin/Lead or Gold plating for corrosion resistance and stable electrical performance.
- Rugged Construction – Shell and insulator made from LCP (GLCP-30F) or PPS (MIL-M-24519 GST-40F), providing excellent mechanical and thermal stability.
- QPL Qualified to MIL-DTL-32139 – Meets stringent military specifications for nano connector reliability and consistency.
- Lightweight and Compact – Ideal for applications requiring miniaturized interconnects without compromising strength or durability.

DIMENSIONAL



A = (NO. OF POSITIONS -1) X .025 [.64] 1ST TO LAST CONTACT

B = A + .050 [1.27] = OVERALL



RECEPTACLE (SOCKET) TERMINATIONS ARE SELF-LEAD (ONE PIECE) .014 [.35] DIAMETER

PLUG (PIN) TERMINATIONS ARE SOLID 30 AWG .010 [.25] DIAMETER

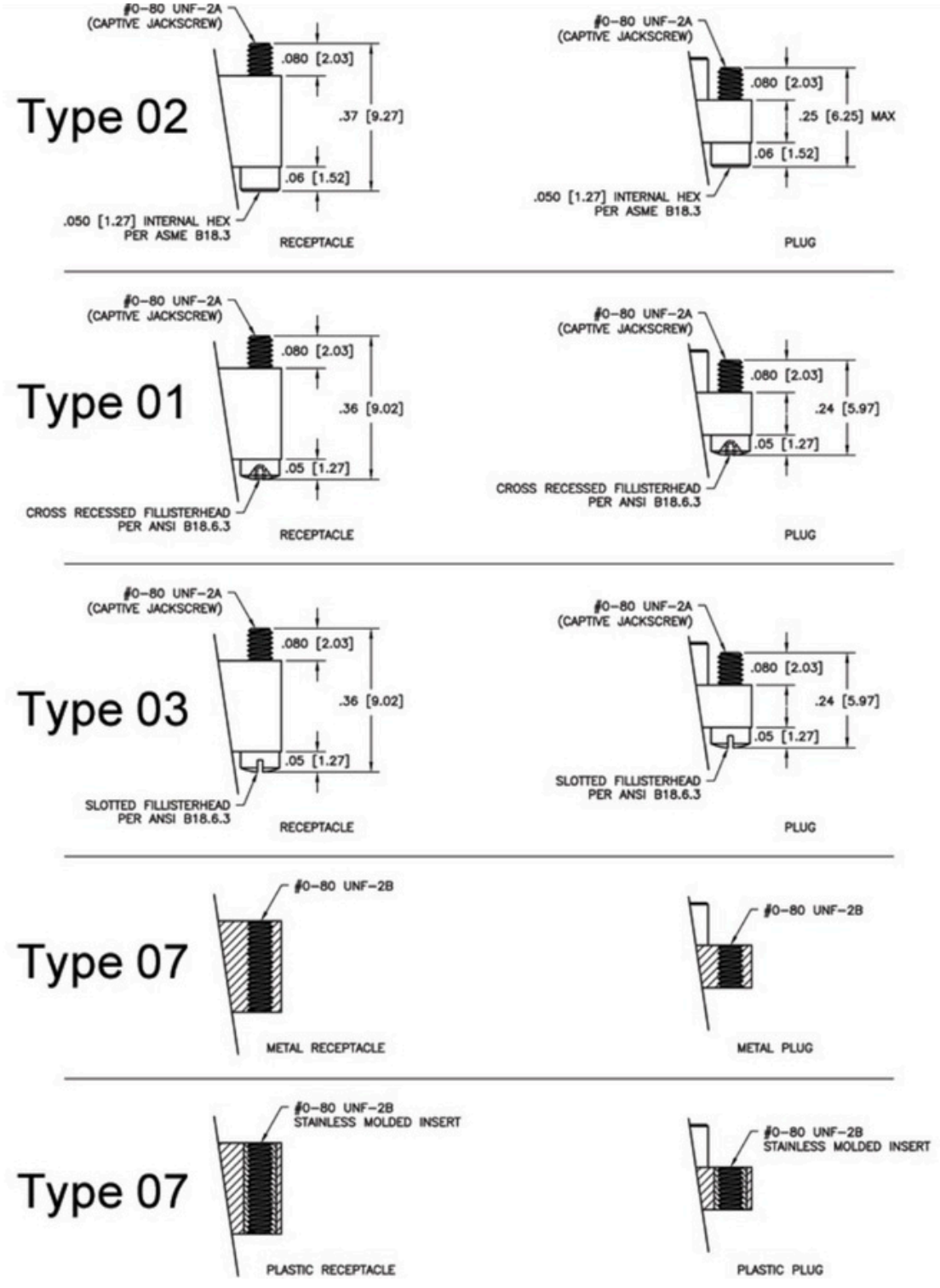
BOTH ARE SOLDER OR TIN DIP

PERFORMANCE

Electrical Properties	
Contact Resistance	33 milliohm max contact only and 87 milliohms max with 6" wire @ 1A
Current Rating	1A max.
Dielectric WithStanding Voltage	250 VAC at sea level, 100 VAC at 70,000 feet. 1mA leakage current max.
Insulation Resistance	100 VDC and 5000 Megohms min.

Mechanical Properties	
Engaging Force	5 oz max.
Separation Force	.4 oz min.
Mating/Unmating Force	7 oz x # of contacts max.
Vibration	EIA-364-28 Condition IV, 1 microsecond max discontinuity
Shock	EIA-364-27 Condition G, 1 microsecond max discontinuity
Durability	EIA-364-09, 200 matings, passes Mating Force, CR, Eng and Sep Forces
Salt Spray	EIA 364-26 Condition B-48 hours

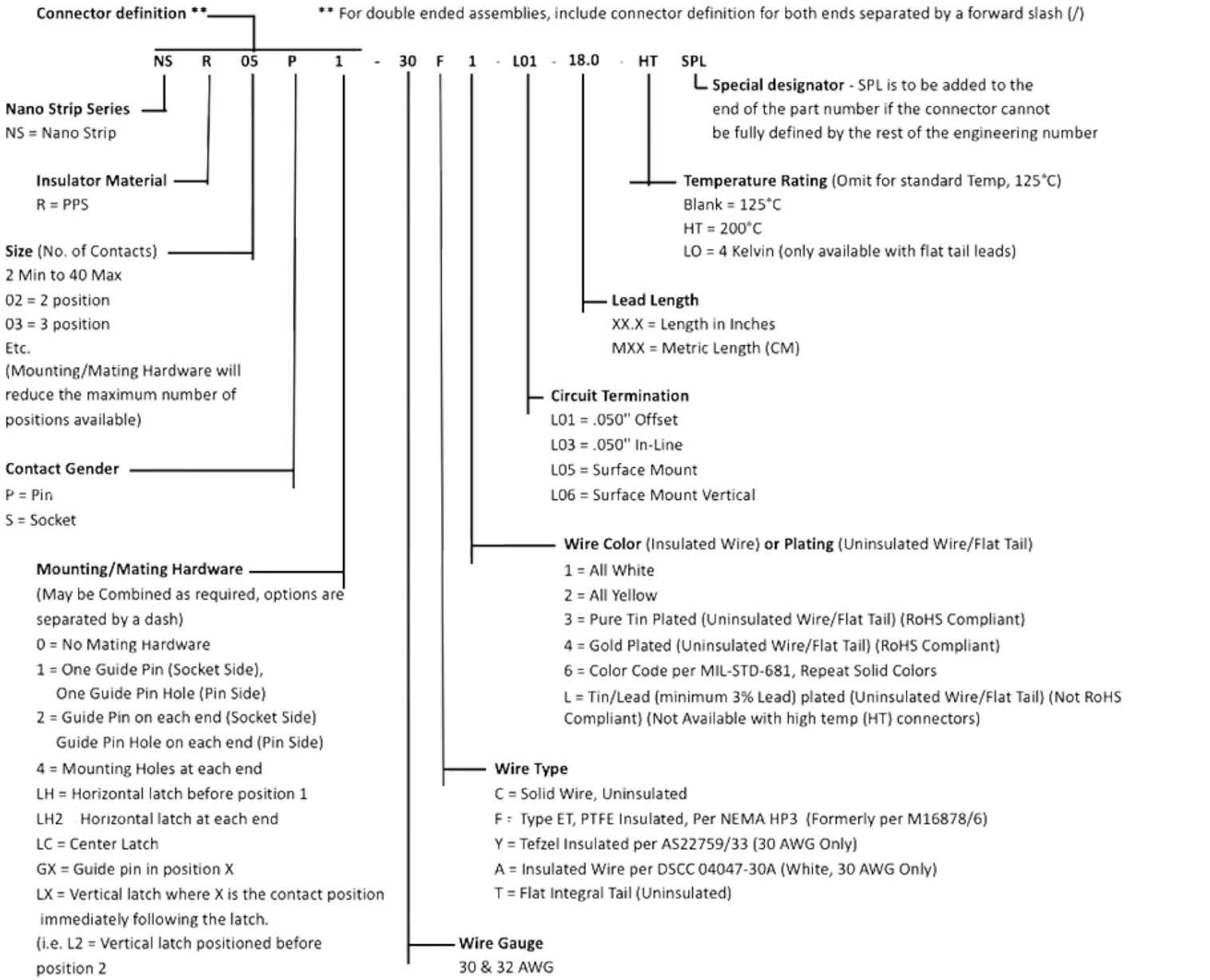
HARDWARE


Type 02
#0-80 UNF-2A (CAPTIVE JACKSCREW)
.080 [2.03]
.37 [9.27]
.06 [1.52]
.050 [1.27] INTERNAL HEX PER ASME B18.3
RECEPTACLE
#0-80 UNF-2A (CAPTIVE JACKSCREW)
.080 [2.03]
.25 [6.25] MAX
.06 [1.52]
.050 [1.27] INTERNAL HEX PER ASME B18.3
PLUG
Type 01
#0-80 UNF-2A (CAPTIVE JACKSCREW)
.080 [2.03]
.36 [9.02]
.05 [1.27]
CROSS RECESSED FILLISTERHEAD PER ANSI B18.6.3
RECEPTACLE
#0-80 UNF-2A (CAPTIVE JACKSCREW)
.080 [2.03]
.24 [5.97]
.05 [1.27]
CROSS RECESSED FILLISTERHEAD PER ANSI B18.6.3
PLUG
Type 03
#0-80 UNF-2A (CAPTIVE JACKSCREW)
.080 [2.03]
.36 [9.02]
.05 [1.27]
SLOTTED FILLISTERHEAD PER ANSI B18.6.3
RECEPTACLE
#0-80 UNF-2A (CAPTIVE JACKSCREW)
.080 [2.03]
.24 [5.97]
.05 [1.27]
SLOTTED FILLISTERHEAD PER ANSI B18.6.3
PLUG
Type 07
#0-80 UNF-2B
METAL RECEPTACLE
#0-80 UNF-2B
METAL PLUG
Type 07
#0-80 UNF-2B STAINLESS MOLDED INSERT
PLASTIC RECEPTACLE
#0-80 UNF-2B STAINLESS MOLDED INSERT
PLASTIC PLUG

MATERIALS

Materials and Finishes	
Signal Pin Contacts	C17410 Beryllium Copper per ASTM B768
Signal Socket Contacts	C17410 Beryllium Copper per ASTM B768
Contact Plating	Gold Plating per ASTM B488
PC Tails	C17410 Beryllium Copper per ASTM B768
PC Tail Plating	60/40 Tin/Lead plating per SAE-AMS-P-81728, or Gold plating per ASTM B488
Shell	LCP(Liquid Crystal Polymer) GLCP-30F or PPS per MIL-M-24519 GST-40F
Insulator Material	LCP(Liquid Crystal Polymer) GLCP-30F or PPS per MIL-M-24519 GST-40F
Hardware	300 Series Stainless Steel per ASTM A 582/A582 or ASTM A 581/A581M, Passivated per SAE AMS-2700

HOW TO ORDER



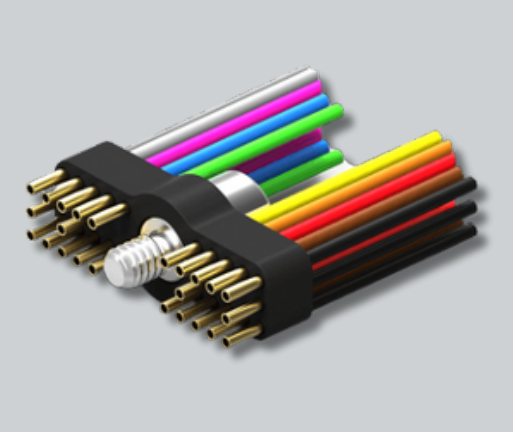
(i.e. L2 = Vertical latch positioned before position 2)

Ulti-Mate Connectors

Ulti-Mate Nano Strip

DualRowCenter Jackscrew Connectors

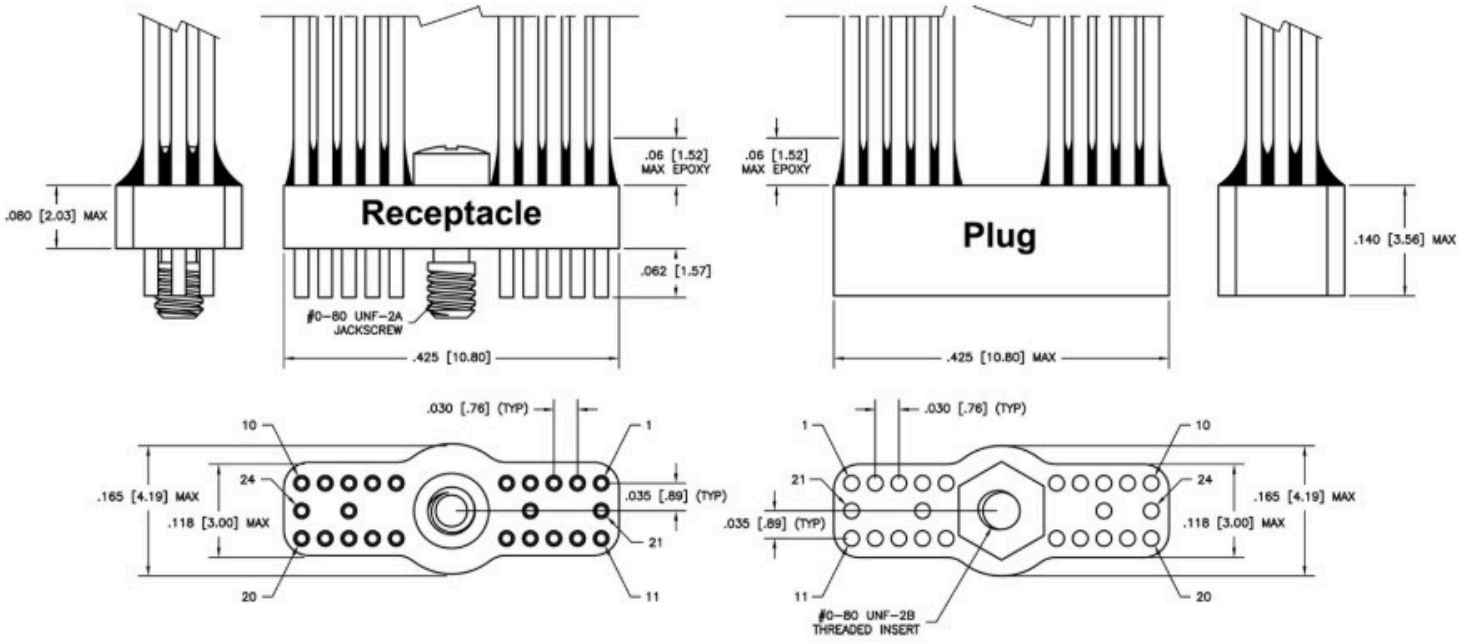
Winchester Interconnect Micro offers Nano Strip Dual Row Center Jackscrew Connectors, designed for compact, high-reliability applications requiring secure mechanical fastening. These connectors feature a dual-row JSB plastic strip with wire leads in a single-ended configuration. They operate from −55°C to 125°C, with high-temperature (HT) versions up to 200°C, and are QPL qualified to MIL-DTL-32139, ensuring proven performance and durability in demanding environments.



KEY FEATURES & BENEFITS

- Wide Temperature Range – Operates from −55°C to 125°C; HT versions rated up to 200°C.
- Consistent Electrical Performance – Contact resistance of 33 milliohms max (contact only) and 87 milliohms max (with 6" wire at 1A).
- Current Rating – Supports up to 1A maximum.
- High Dielectric Strength – Withstands 250 VAC at sea level and 100 VAC at 70,000 feet.
- Excellent Insulation Resistance – 100 VDC and 5000 Megohms minimum.
- Secure Connection Options – Available with optional guide posts and threaded hardware.
- Dual-Row Compact Design – 24 contacts for higher density in limited spaces.
- QPL Qualified – Meets MIL-DTL-32139 standards for nano connector reliability.

DIMENSIONAL



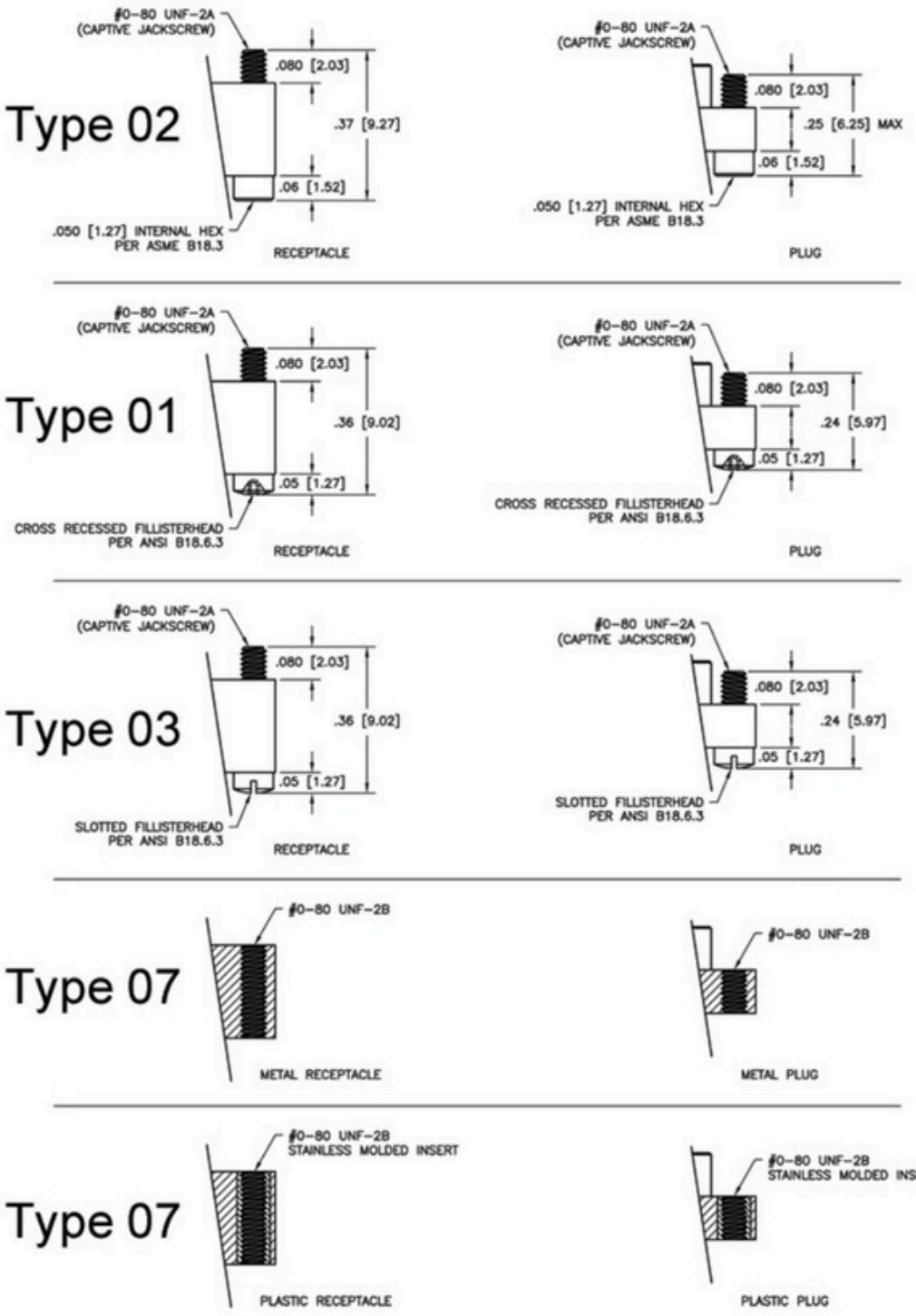
Winchester Interconnect

PERFORMANCE

Electrical Properties	
Contact Resistance	33 milliohm max contact only and 87 milliohms max with 6" wire @ 1A
Current Rating	1A max.
Dielectric WithStanding Voltage	250 VAC at sea level, 100 VAC at 70,000 feet. 1mA leakage current max.
Insulation Resistance	100 VDC and 5000 Megohms min.

Mechanical Properties	
Engaging Force	5 oz max.
Separation Force	.4 oz min.
Mating/Unmating Force	7 oz x # of contacts max.
Vibration	EIA-364-28 Condition IV, 1 microsecond max discontinuity
Shock	EIA-364-27 Condition G, 1 microsecond max discontinuity
Durability	EIA-364-09, 200 matings, passes Mating Force, CR, Eng and Sep Forces
Salt Spray	EIA 364-26 Condition B-48 hours

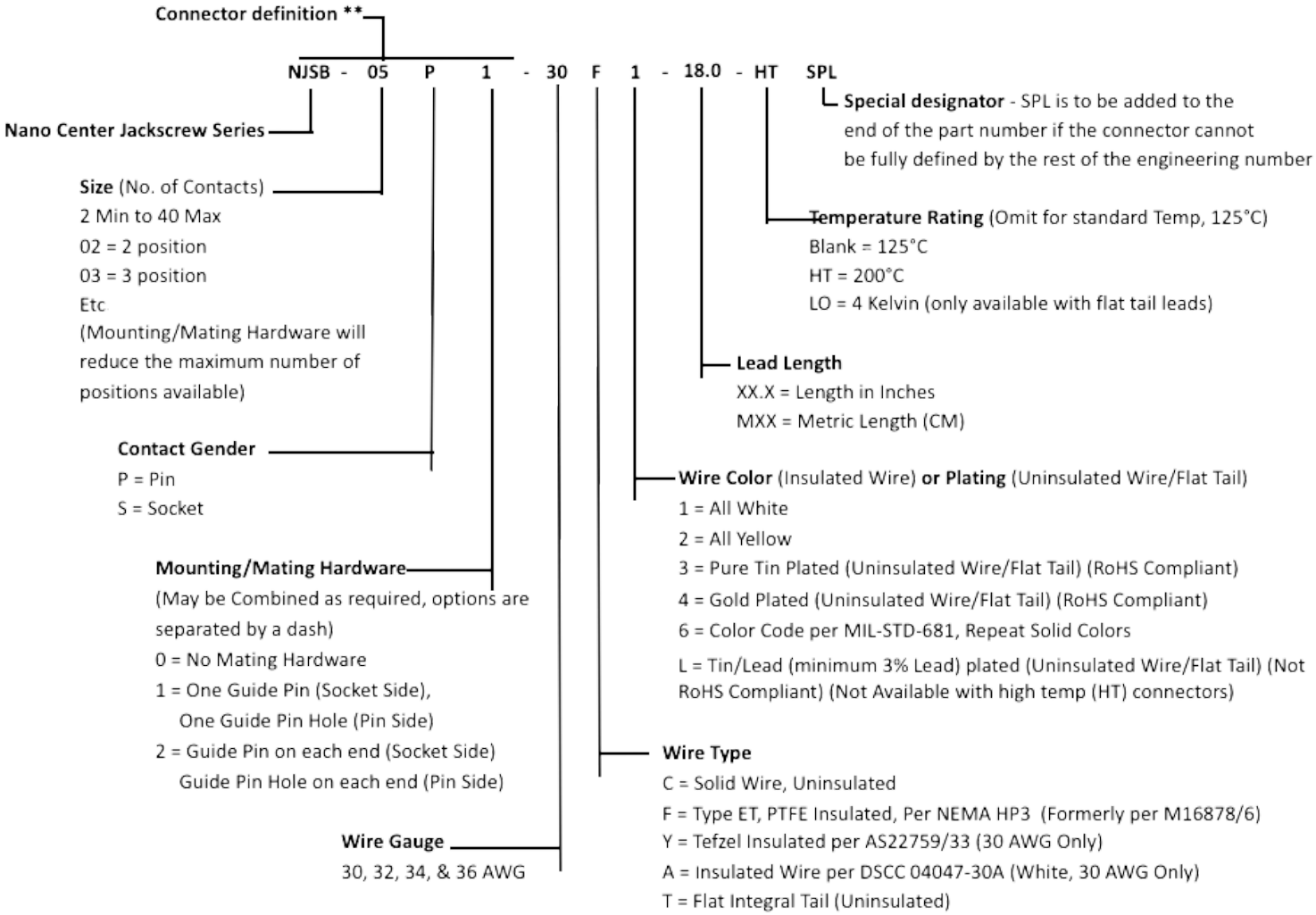
HARDWARE


Type 02
#0-80 UNF-2A (CAPTIVE JACKSCREW)
.080 [2.03]
.37 [9.27]
.06 [1.52]
.050 [1.27] INTERNAL HEX PER ASME B18.3
RECEPTACLE
#0-80 UNF-2A (CAPTIVE JACKSCREW)
.080 [2.03]
.25 [6.25] MAX
.06 [1.52]
.050 [1.27] INTERNAL HEX PER ASME B18.3
PLUG
Type 01
#0-80 UNF-2A (CAPTIVE JACKSCREW)
.080 [2.03]
.36 [9.02]
.05 [1.27]
CROSS RECESSED FILLISTERHEAD PER ANSI B18.6.3
RECEPTACLE
#0-80 UNF-2A (CAPTIVE JACKSCREW)
.080 [2.03]
.24 [5.97]
.05 [1.27]
CROSS RECESSED FILLISTERHEAD PER ANSI B18.6.3
PLUG
Type 03
#0-80 UNF-2A (CAPTIVE JACKSCREW)
.080 [2.03]
.36 [9.02]
.05 [1.27]
SLOTTED FILLISTERHEAD PER ANSI B18.6.3
RECEPTACLE
#0-80 UNF-2A (CAPTIVE JACKSCREW)
.080 [2.03]
.24 [5.97]
.05 [1.27]
SLOTTED FILLISTERHEAD PER ANSI B18.6.3
PLUG
Type 07
#0-80 UNF-2B
METAL RECEPTACLE
#0-80 UNF-2B
METAL PLUG
Type 07
#0-80 UNF-2B STAINLESS MOLDED INSERT
PLASTIC RECEPTACLE
#0-80 UNF-2B STAINLESS MOLDED INSER
PLASTIC PLUG

MATERIALS

Materials and Finishes	
Signal Pin Contacts	C17200 Beryllium Copper per ASTM B194 or C17410 Beryllium Copper per ASTM B768
Signal Socket Contacts	C26000 Brass Alloy per ASTM B135 or C17410 Beryllium Copper per ASTM B768
Contact Plating	Gold Plating per ASTM B488
PC Tails	Copper Wire per A-A-59551 Type S or C17410 Beryllium Copper per ASTM B768
PC Tail Plating	Tin plating per ASTM B545, or 60/40 Tin/Lead plating per SAE-AMS-P-81728, or Gold plating per ASTM B488
Insulator Material	LCP(Liquid Crystal Polymer) GLCP-30F or PPS per MIL-M-24519 GST-40F
Hardware	300 Series Stainless Steel per ASTM A 582/A582 or ASTM A 581/A581M, Passivated per SAE AMS-2700

HOW TO ORDER



** For double ended assemblies, include connector definition for both ends separated by a forward slash (/)



About Winchester Interconnect

Winchester Interconnect is a US-based manufacturer of high-precision connectors, cable assemblies, and cable. Our products are ideal for military and aerospace, industrial, medical, and space applications where expertise and reliability are critical to your success.

Our 30,000+ connectivity solutions include standard and custom RF and microwave interconnects, hermetic connectors and packaging, micro-miniature connectors and assemblies, fiber optic connectors, industrial cable, and undersea cable

We work in the toughest industries where failure is not an option.For connectivity applications requiring high performance in harsh environments, life-saving systems, and the latest connected technologies, our industry-leading knowledge and engineering capabilities will ensure reliable, cutting-edge interconnect solutions that won't fail when it matters most.

Our Industries & Market Solutions

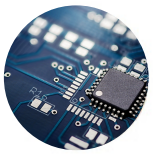

Industrial Automation

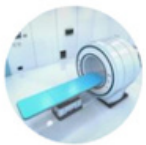

Space


Oil & Gas


Marine Subsea


Aerospace & Defense


Semiconductor


Medical


Custom

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