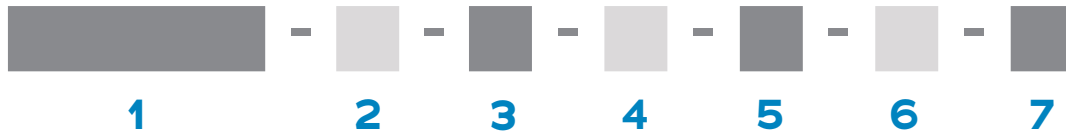


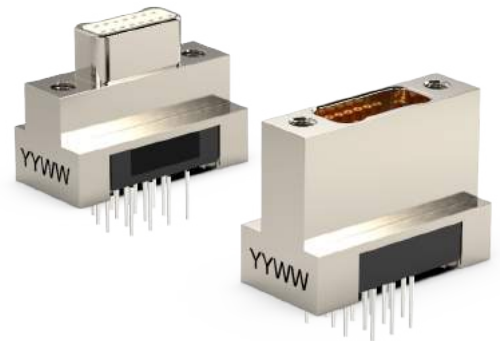
ORDERING GUIDE



1 Series	MNPO Metal Nano Pin Offset	MNSO Metal Nano Socket Offset							
2 Number Of Contacts	09	15	21	25	31	37	51	65	85
3 Termination Type	V4 Vertical Thru-Hole								
4 Shell Material & Finish	N Aluminum Shell, Electroless Nickel Plated			CD Aluminium shell, Cadmium Plated					
	B Aluminium Shell, Black Anodized			S Stainless Steel Shell, Passivated					
	T Titanium Shell, Unplated								
5 Common Options	ETH End Threaded Hole, #0-80			EJS End Jack Screw					
	NTH Non-Threaded Holes For Mounting To The Board								
	YY Non Standard Hardware (threaded holes, thumb screws, #2-56 screw)								
	HT High Temp. Epoxy			RH RoHS Compliant					
	CS Customer Supplied Material								
6 Mod Codes	M10 Keyed			M30 Ground Spring					
	M50 Space Grade Nano-D, SPT1			M53 Space Grade Nano-D, SPT2					
7 Special Instructions	YYY Describe anything that is not covered in standard options								

DUAL ROW VERTICAL THRU-HOLE (TYPE V4)

Applications that experience frequent high vibration and shock are served well by Omnetics' **Dual Row Bi-Lobe® V4** nanos. This low-mass vertical thru-hole mounted connector has contacts arranged on .025" (.64 mm) centerlines. The thru-hole tails are spread onto a mounting pattern on .050 (1.27 mm) with space for annular rings and routing traces. They feature Omnetics' gold-plated Flex Pin contact system. These durable, lightweight connectors serve the most demanding applications and intermate with Omnetics QPL versions of MIL-DTL-32139. They are available with retention screws for a positive lock and come in standard sizes ranging from 9 to 65 positions. Custom configurations are also available.



Electro-Mechanical Specifications

TYPE	PERFORMANCE
Durability	> 2000 Mating Cycles min
Temperature	-55°C to +125 °C (200 °C w/HTE)
Current rating	1 Amp per contact
Voltage Rating (DWV)	250 VAC RMS Sea Level
Insulation Resistance	5,000 Megohms @ 100 VDC
Shock	100 g's discontinuity < 10 nanoseconds
Vibration	20 g's discontinuity < 10 nanoseconds
Thermal Vacuum Outgassing	1.0% max TML, 0.1% VCM
Contact Resistance	87 milliohms (87 mV) max @ 1 Amp
Mating/Unmating Force	2.5 oz. (.71g) typical per contact

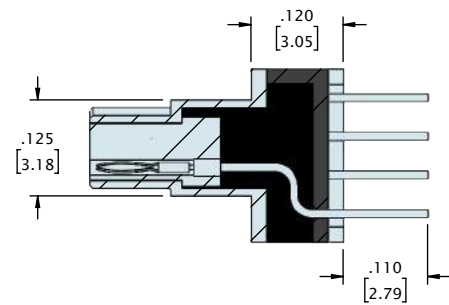
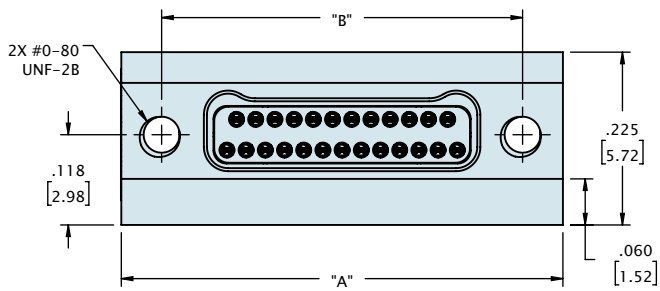
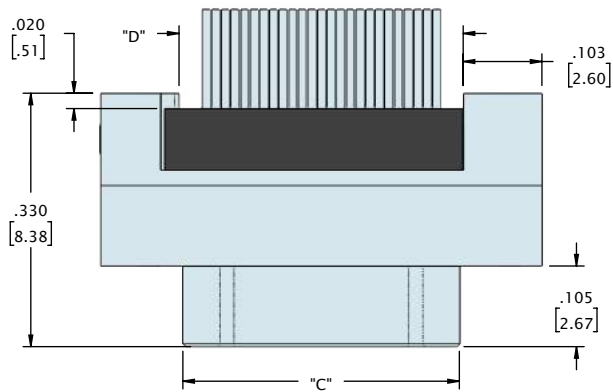
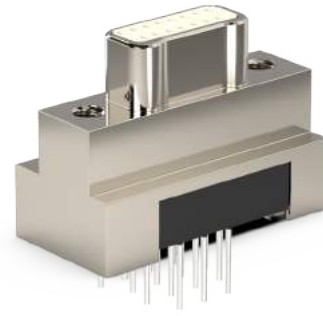
Material Specifications

TYPE	PERFORMANCE
Contact	Copper Alloy Per MIL-DTL-32139
Contact Finish	Gold per ASTM B488, Type II, Class 1.27, Code C Over Nickel Underplate
Insulator	Thermoplastic per MIL-M-24519
Encapsulant	Epoxy

Shell Options

TYPE	PERFORMANCE
Aluminum 6061	Electroless Nickel per SAE-AMS-2404
Stainless Steel, 300 Series	Passivated per SAE-AMS-2700

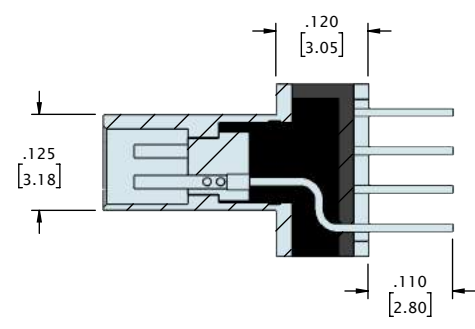
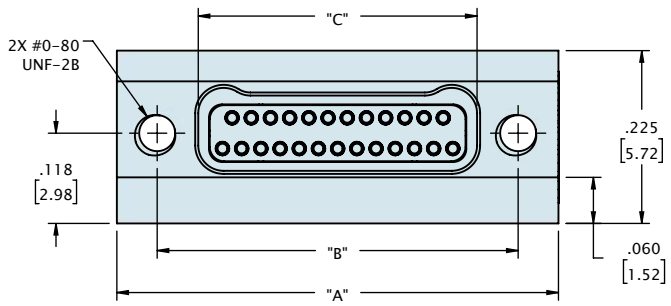
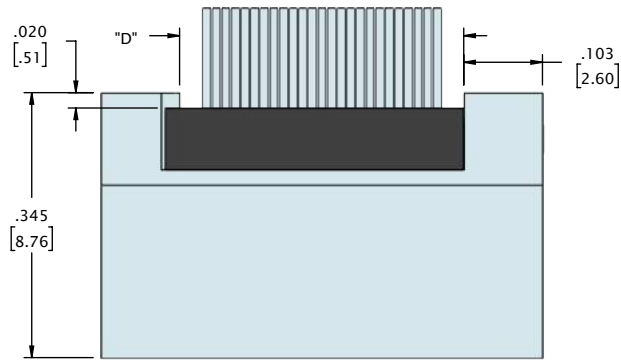
DUAL ROW VERTICAL THRU-HOLE (TYPE V4)



CONTACTS	"A"	"B"	"C"	"D"
09	.375 [9.53]	.270 [6.86]	.160 [4.06]	.170 [4.32]
15	.450 [11.43]	.345 [8.76]	.235 [5.97]	.245 [6.22]
21	.525 [13.34]	.420 [10.67]	.310 [7.87]	.320 [8.13]
25	.575 [14.61]	.470 [11.94]	.360 [9.14]	.370 [9.40]
31	.650 [16.51]	.545 [13.84]	.435 [11.05]	.445 [11.30]
37	.725 [18.42]	.620 [15.75]	.510 [12.95]	.520 [13.21]
51	.900 [22.86]	.795 [20.19]	.685 [17.40]	.695 [17.65]
65	1.075 [27.31]	.970 [24.64]	.860 [21.84]	.870 [22.10]
85	1.325 [33.66]	1.220 [30.99]	1.110 [28.19]	1.120 [28.45]

DIMENSIONS IN [] ARE IN MILLIMETERS AND ARE FOR REFERENCE ONLY

DUAL ROW VERTICAL THRU-HOLE (TYPE V4)

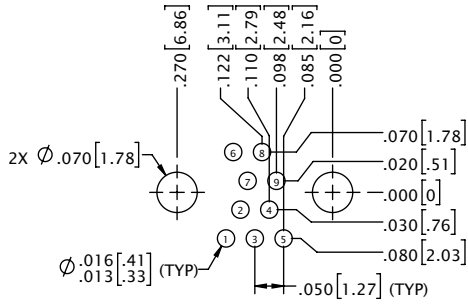


CONTACTS	"A"	"B"	"C"	"D"
09	.375 [9.53]	.270 [6.86]	.163 [4.14]	.170 [4.32]
15	.450 [11.43]	.345 [8.76]	.238 [6.05]	.245 [6.22]
21	.525 [13.34]	.420 [10.67]	.313 [7.95]	.320 [8.13]
25	.575 [14.61]	.470 [11.94]	.363 [9.22]	.370 [9.40]
31	.650 [16.51]	.545 [13.84]	.438 [11.13]	.445 [11.30]
37	.725 [18.42]	.620 [15.75]	.513 [13.03]	.520 [13.21]
51	.900 [22.86]	.795 [20.19]	.688 [17.48]	.695 [17.65]
65	1.075 [27.31]	.970 [24.64]	.863 [21.92]	.870 [22.10]
85	1.325 [33.66]	1.220 [30.99]	1.113 [28.27]	1.120 [28.45]

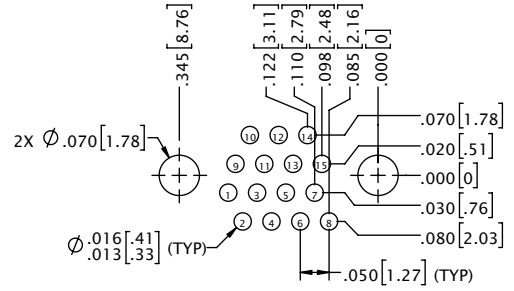
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DUAL ROW VERTICAL THRU-HOLE (TYPE V4)

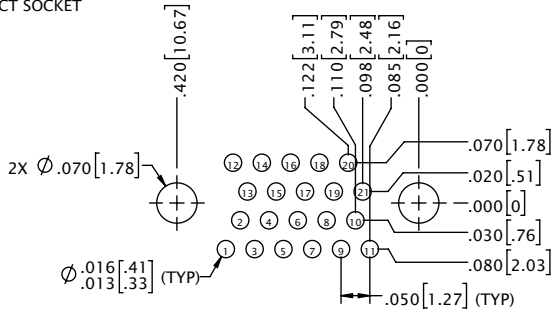
9 CONTACT SOCKET



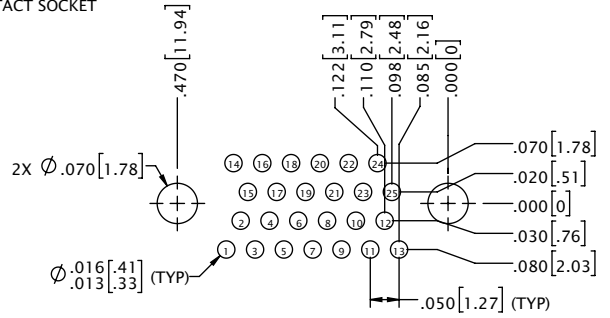
15 CONTACT SOCKET



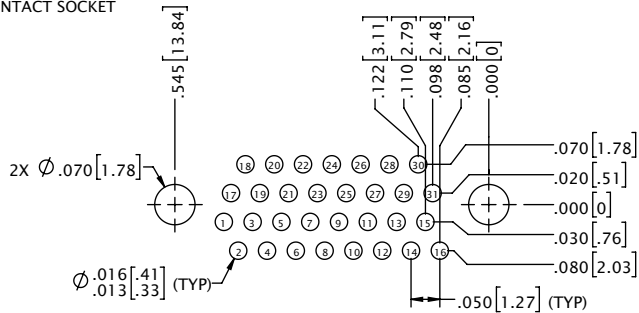
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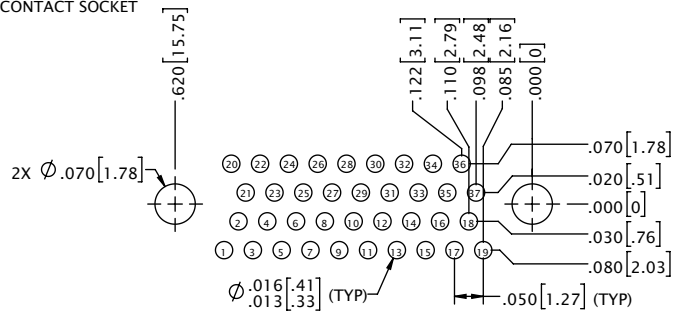
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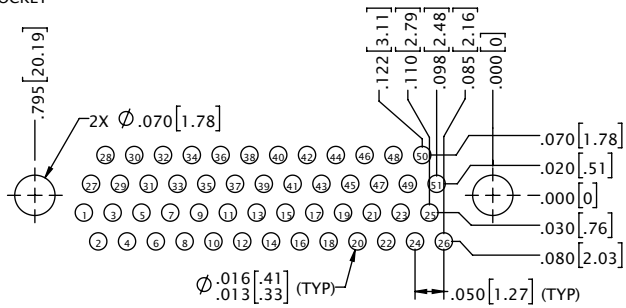
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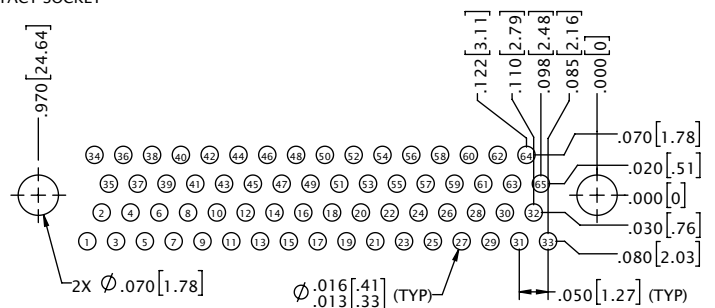
37 CONTACT SOCKET



51 CONTACT SOCKET



65 CONTACT SOCKET



85 CONTACT SOCKET

