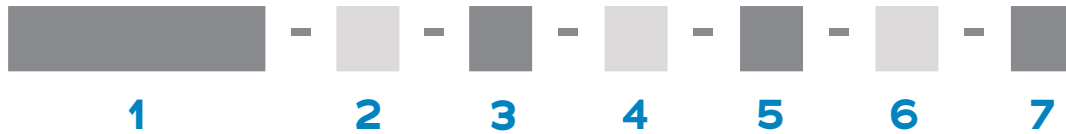
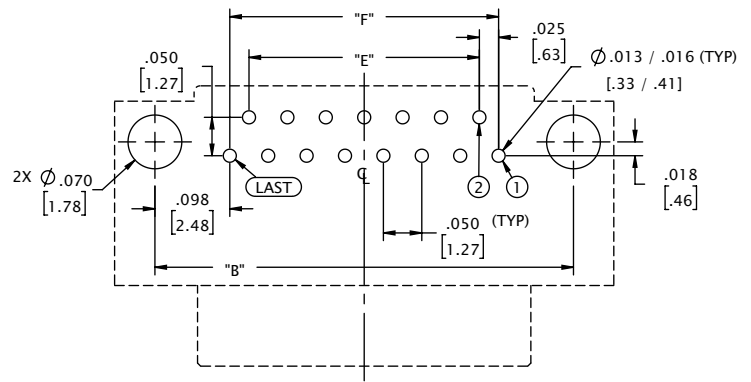
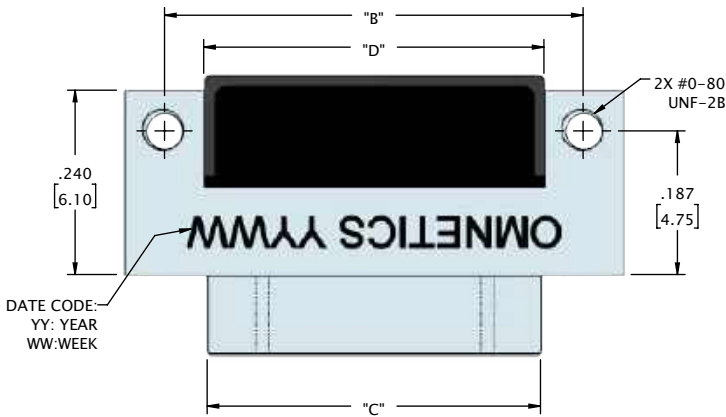
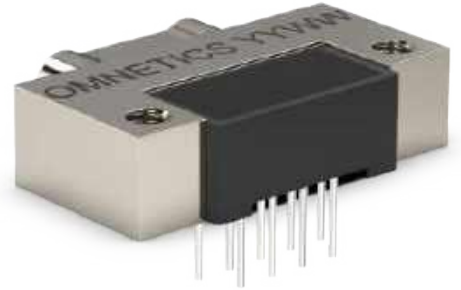


## ORDERING GUIDE

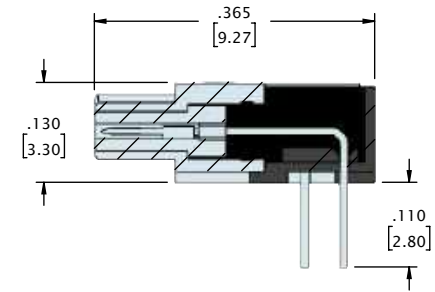
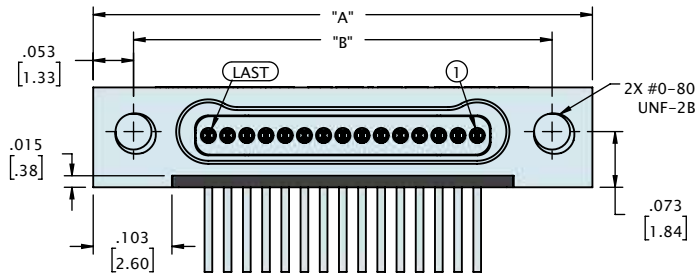


<b>1 Series</b>	<b>MBPS</b> Metal Bi-Lobe Pin Single-Row	<b>MBSS</b> Metal Bi-Lobe Socket Single-Row
<b>2 Number Of Contacts</b>	<b>05</b> <b>09</b> <b>15</b> <b>21</b> <b>25</b> <b>31</b> <b>37</b> <b>51</b>	
<b>3 Termination Type</b>	<b>H2</b> Horizontal Thru-Hole	
<b>4 Shell Material &amp; Finish</b>	<b>N</b> Aluminum Shell, Electroless Nickel Plated <b>B</b> Aluminium Shell, Black Anodized <b>T</b> Titanium Shell, Unplated	<b>CD</b> Aluminium shell, Cadmium Plated <b>S</b> Stainless steel Shell, Passivated
<b>5 Common Options</b>	<b>ETH</b> End Threaded Hole, #0-80 <b>NTH</b> Non-Threaded Holes For Mounting To The Board <b>YY</b> Non Standard Hardware (threaded holes, thumb screws, #2-56 screw) <b>HT</b> High Temp. Epoxy <b>CS</b> Customer Supplied Material	
<b>6 Mod Codes</b>	<b>M10</b> Keyed <b>M50</b> Space Grade Nano-D, SPT1	<b>M30</b> Ground Spring <b>M53</b> Space Grade Nano-D, SPT2
<b>7 Special Instructions</b>	<b>YYY</b> Describe anything that is not covered in standard options	

# SINGLE ROW HORIZONTAL THRU-HOLE (TYPE H2)



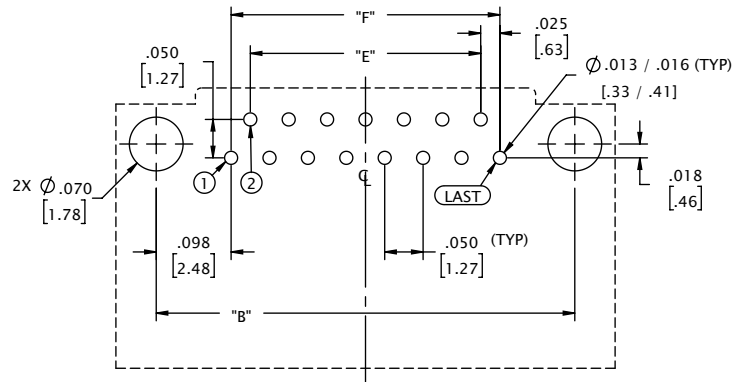
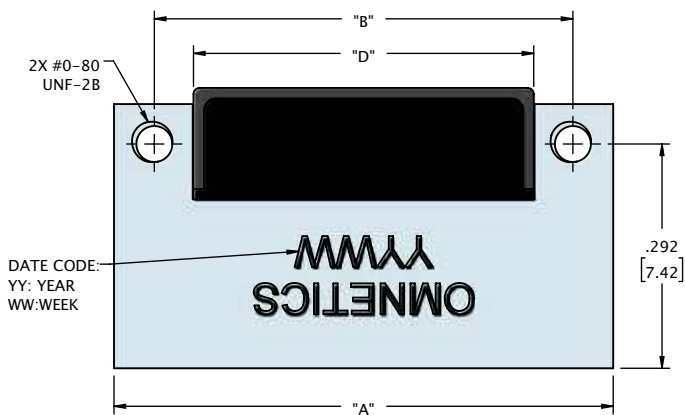
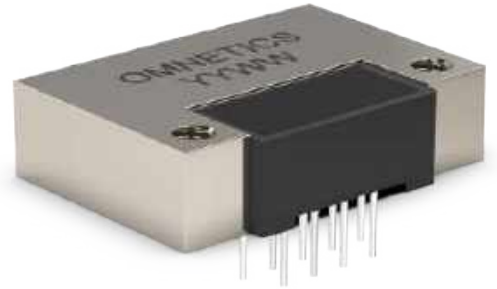
**SUGGESTED PAD LAYOUT  
(VIEW FROM MOUNTING SIDE OF BOARD)**



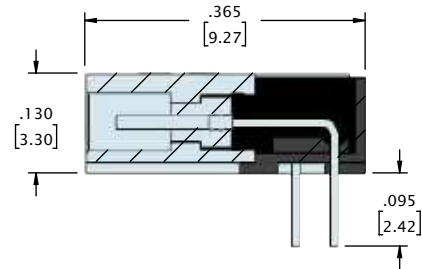
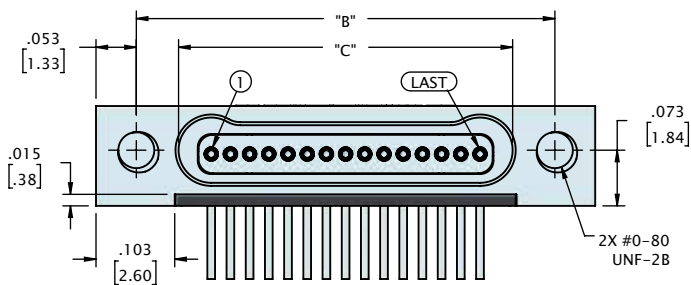
CONTACTS	"A"	"B"	"C"	"D"	"E"	"F"
05	.400 [10.16]	.295 [7.49]	.184 [4.67]	.193 [4.90]	.050 [1.27]	.100 [2.54]
09	.500 [12.70]	.395 [10.03]	.284 [7.21]	.293 [7.44]	.150 [3.81]	.200 [5.08]
15	.650 [16.51]	.545 [13.84]	.434 [11.02]	.443 [11.25]	.300 [7.62]	.350 [8.89]
21	.800 [20.32]	.695 [17.65]	.584 [14.83]	.593 [15.06]	.450 [11.43]	.500 [12.70]
25	.900 [22.86]	.795 [20.19]	.684 [17.37]	.693 [17.60]	.550 [13.97]	.600 [15.24]
31	1.050 [26.67]	.945 [24.00]	.834 [21.18]	.843 [21.41]	.700 [17.78]	.750 [19.05]
37	1.200 [30.48]	1.095 [27.81]	.984 [24.99]	.993 [25.22]	.850 [21.59]	.900 [22.86]
51	1.550 [39.37]	1.445 [36.70]	1.334 [33.88]	1.343 [34.11]	1.200 [30.48]	1.250 [31.75]

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

# SINGLE ROW HORIZONTAL THRU-HOLE (TYPE H2)



SUGGESTED PAD LAYOUT  
(VIEW FROM MOUNTING SIDE OF BOARD)



CONTACTS	"A"	"B"	"C"	"D"	"E"	"F"
05	.400 [10.16]	.295 [7.49]	.185 [4.70]	.193 [4.90]	.050 [1.27]	.100 [2.54]
09	.500 [12.70]	.395 [10.03]	.285 [7.24]	.293 [7.44]	.150 [3.81]	.200 [5.08]
15	.650 [16.51]	.545 [13.84]	.435 [11.05]	.443 [11.25]	.300 [7.62]	.350 [8.89]
21	.800 [20.32]	.695 [17.65]	.585 [14.86]	.593 [15.06]	.450 [11.43]	.500 [12.70]
25	.900 [22.86]	.795 [20.19]	.685 [17.40]	.693 [17.60]	.550 [13.97]	.600 [15.24]
31	1.050 [26.67]	.945 [24.00]	.835 [21.21]	.843 [21.41]	.700 [17.78]	.750 [19.05]
37	1.200 [30.48]	1.095 [27.81]	.985 [25.02]	.993 [25.22]	.850 [21.59]	.900 [22.86]
51	1.550 [39.37]	1.445 [36.70]	1.335 [33.91]	1.343 [34.11]	1.200 [30.48]	1.250 [31.75]

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

## SINGLE ROW HORIZONTAL THRU-HOLE (TYPE H2)

The **Single Row Bi-Lobe®** H2 nanos are suitable for high-reliability electronic devices in medical, military, and other demanding environments. They are a thru-hole mounted, low-mass ruggedized connector 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 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 5 to 51 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