

MIL-DTL-32139 NANOMINIATURE Single and Dual Row Rectangular Connectors



M32139/05 and /06 Plug and Receptacle, Single Row, Vertical Mount Thru-Hole PCB Connectors

M32139 SINGLE AND DUAL ROW RECTANGULAR CONNECTORS



M32139/05 and /06 Single Row Connectors feature gold alloy TwistPin contacts. Contacts are precision-crimped to 30 AWG copper wire PC tails with gold over nickel plating. These nanominiature connectors offer premium performance and reliability for demanding applications and are in accordance with MIL-DTL-32139. Contact spacing is .025 inches. 1 amp current rating, DWV rating 250 volts AC.

TwistPin Contact System assures premium performance in demanding environments. The gold alloy contacts will stand up to years of exposure without corrosion.

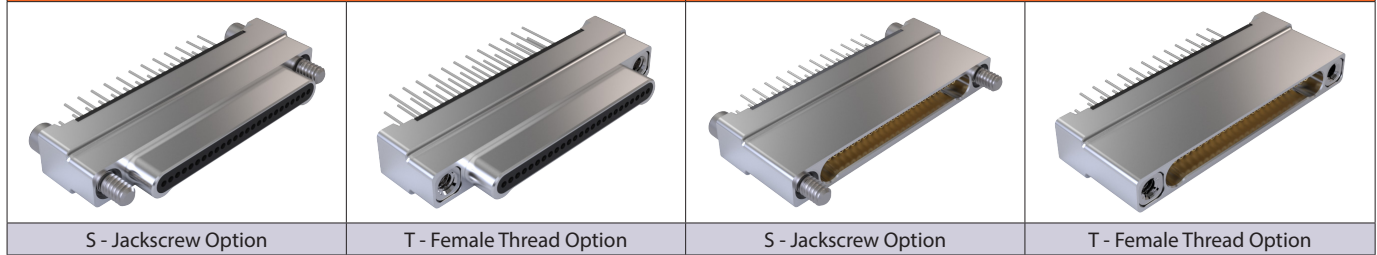
Typical Applications include UAVs, satellites, missile systems and geophysical instruments.

HOW TO ORDER

Sample Part Number	M32139/05	-D	01	S	N	S
Series	M32139/05 = Plug, Pin Contacts, Single Row, Nanominiature M32139/06 = Receptacle, Socket Contacts, Single Row, Nanominiature					
Insert Arrangements	A = 9 contacts B = 15 contacts C = 21 contacts D = 25 contacts E = 31 contacts F = 37 contacts G = 51 contacts					
PC Tail Finish	01 = Tin/Lead (Sn63Pb37 or Sn60Pb40) 02 = Gold					
Hardware	S = Jackscrew T = Threaded Hole					
Shell Material and Finish	C = Aluminum, Cadmium Finish (Not for Space) N = Aluminum, Electroless Nickel Finish F = Aluminum, Nickel PTFE Finish T = Titanium (Unplated) S = Stainless Steel, Passivated Finish Z = Aluminum, Zinc Nickel (Black) Finish					
Space Class	(Omit) = Non-space applications S = Space Grade					

PLUG HARDWARE

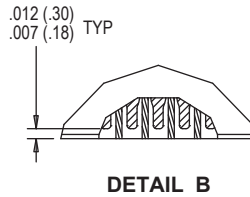
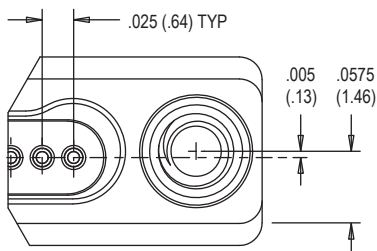
RECEPTACLE HARDWARE



DETAIL A

DETAIL B

NOTES



- Material and finish:
 - Shell: see part number breakdown
 - Insulator: LCP/N/A
 - Contacts: gold alloy/unplated
 - PC tails: 30 AWG copper wire with gold over nickel plating
 - Hardware: stainless steel, passivated
- Inspect and Test IAW MIL-DTL-32139
- Interface dimensions per MIL-DTL-32139/5 & MIL-DTL-32139/6

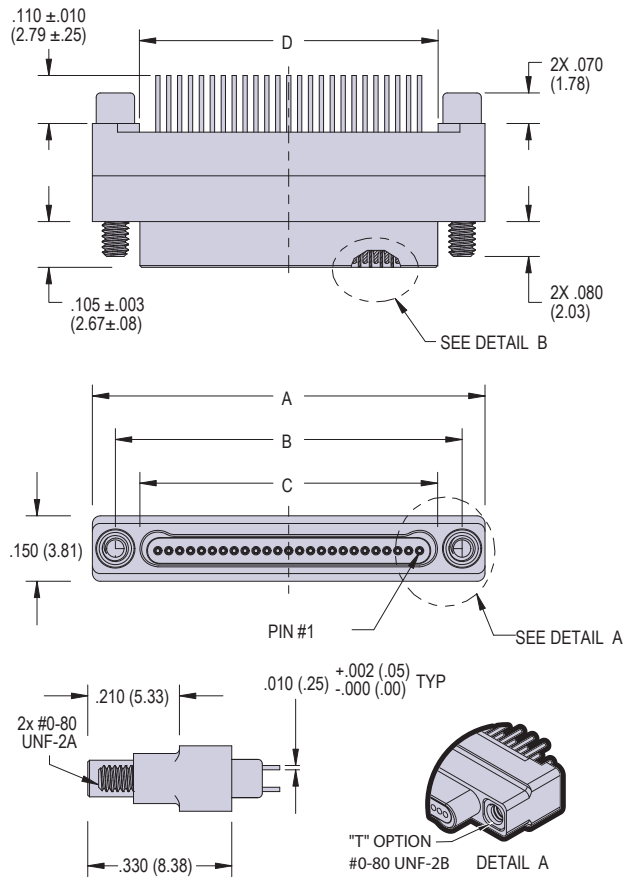
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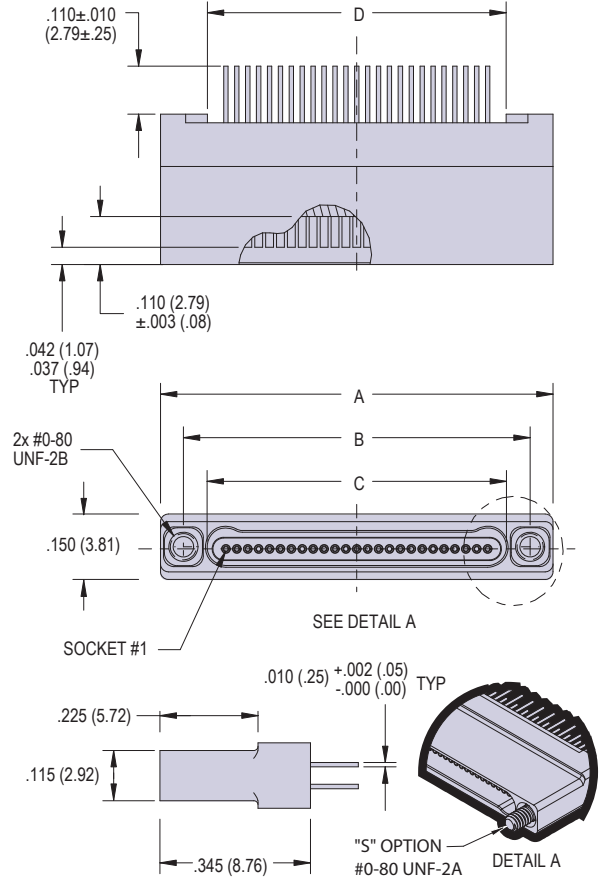
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DUAL ROW INSULATED WIRE DIMENSIONS

32139/05 Plug (Pin) Connectors



32139/06 Receptacle (Socket) Connectors



Layout	A	B BSC.	C BSC.	D Max
9P	.500 (12.70)	.395 (10.03)	.284 (7.21)	.295 (7.49)
9S	.500 (12.70)	.395 (10.03)	.285 (7.24)	.295 (7.49)
15P	.650 (16.51)	.545 (13.84)	.434 (11.02)	.445 (11.30)
15S	.650 (16.51)	.545 (13.84)	.435 (11.05)	.445 (11.30)
21P	.800 (20.32)	.695 (17.65)	.584 (14.83)	.595 (15.11)
21S	.800 (20.32)	.695 (17.65)	.585 (14.86)	.595 (15.11)
25P	.900 (22.86)	.795 (20.19)	.684 (17.37)	.695 (17.65)
25S	.900 (22.86)	.795 (20.19)	.685 (17.40)	.695 (17.65)
31P	1.050 (26.67)	.945 (24.00)	.834 (21.18)	.845 (21.46)
31S	1.050 (26.67)	.945 (24.00)	.835 (21.21)	.845 (21.46)
37P	1.200 (30.48)	1.095 (27.81)	.984 (24.99)	.995 (25.27)
37S	1.200 (30.48)	1.095 (27.81)	.985 (25.02)	.995 (25.27)
51P	1.550 (39.37)	1.445 (36.70)	1.334 (33.88)	1.345 (34.16)
51S	1.550 (39.37)	1.445 (36.70)	1.335 (33.91)	1.345 (34.16)

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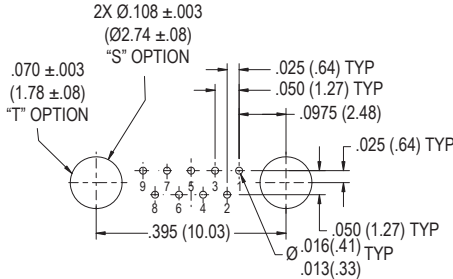
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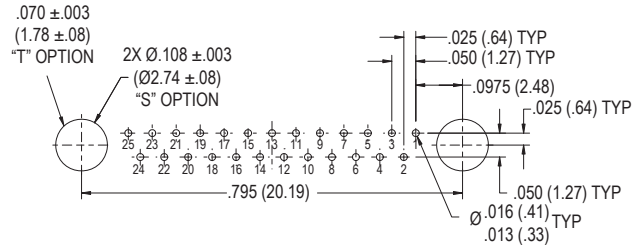
M32139/05 Plug Single Row PCB Footprint

PCB layout patterns shown are for the connector mounting side of PC board

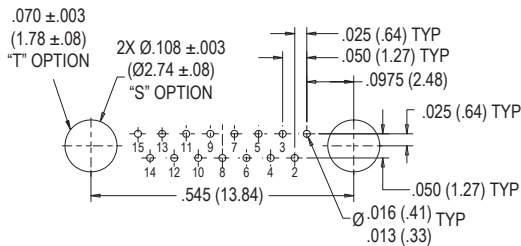
M32139 SINGLE AND DUAL ROW RECTANGULAR CONNECTORS



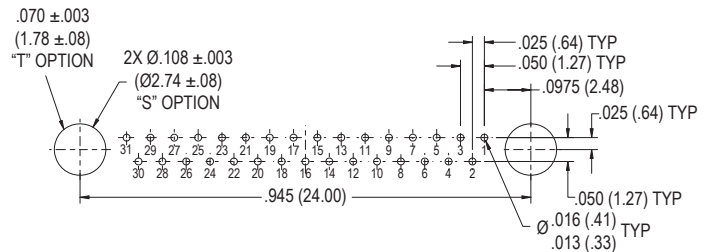
9 Contacts



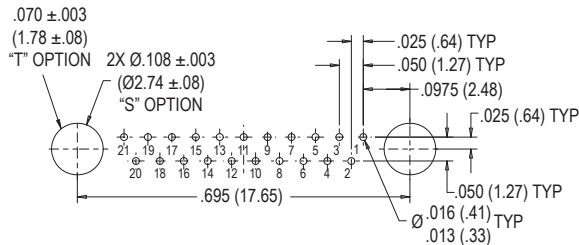
25 Contacts



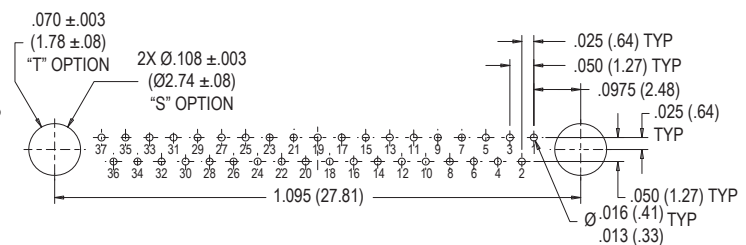
15 Contacts



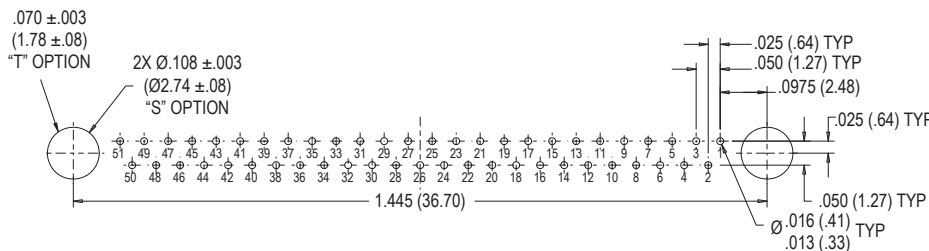
31 Contacts



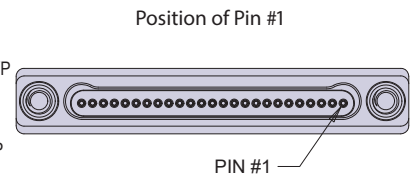
21 Contacts



37 Contacts



51 Contacts

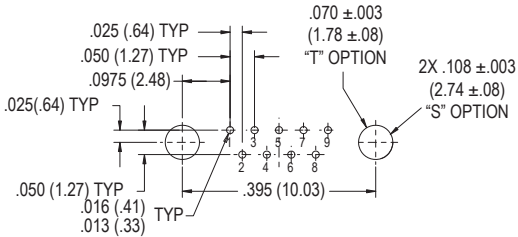


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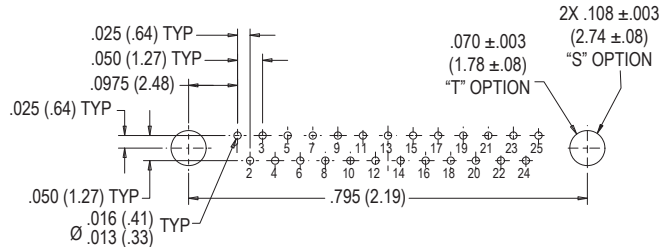


M32139/06 Receptacle Single Row PCB Footprint

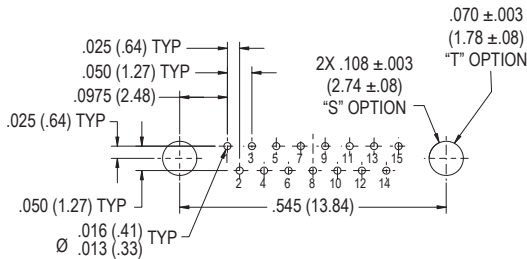
PCB layout patterns shown are for the connector mounting side of PC board



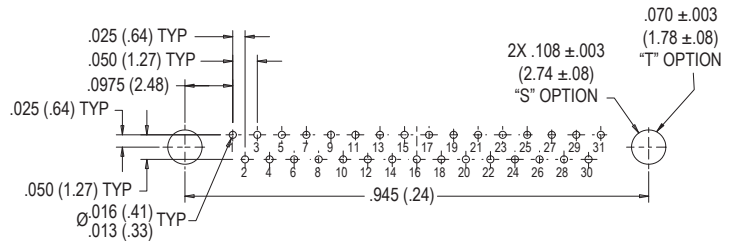
9 Contacts



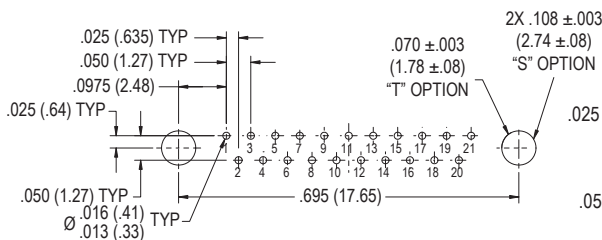
25 Contacts



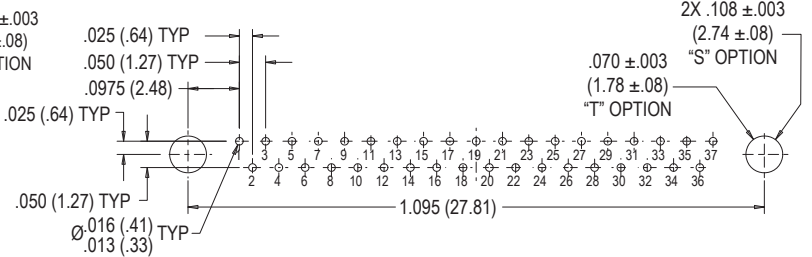
15 Contacts



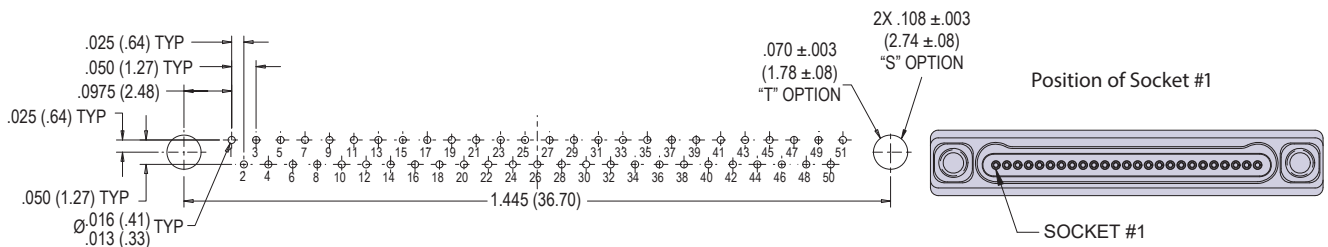
31 Contacts



21 Contacts



37 Contacts



51 Contacts

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