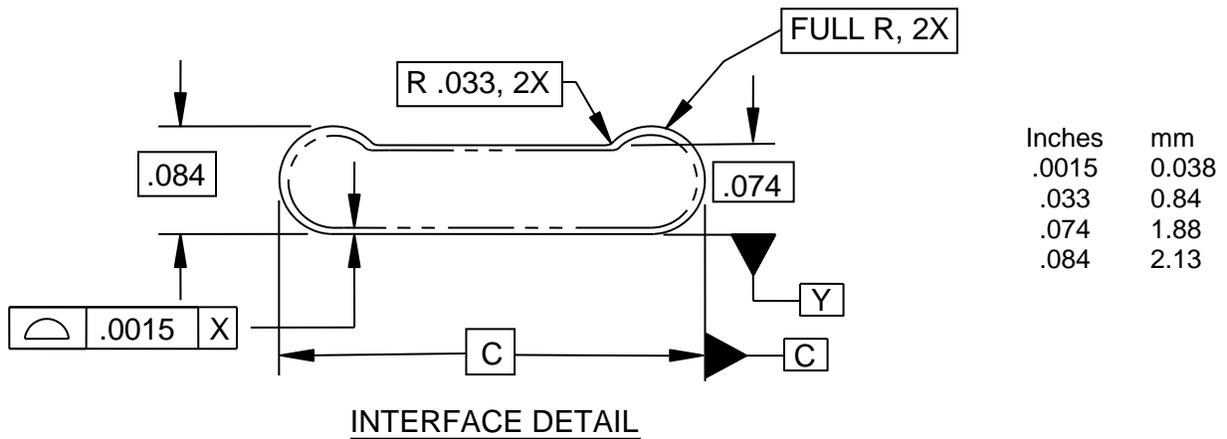


Insert arrangement	A	B BSC	C BSC	D MAX	Inches	mm
					.001	0.03
9	.500	.395	.284	.295	.003	0.08
	(12.70)	(10.03)	(7.21)	(7.49)	.004	0.10
	.650	.545	.434	.445	.005	0.13
15	(16.51)	(13.84)	11.02)	(11.30)	.007	0.18
	.800	.695	.584	.595	.010	0.25
	(20.32)	(17.65)	14.83)	(15.11)	.012	0.30
25	.900	.795	.684	.695	.018	0.46
	(22.86)	(20.19)	17.37)	(17.65)	.020	0.51
	1.050	.945	.834	.845	.025	0.64
31	(26.67)	(24.00)	21.18)	(21.46)	.050	1.27
	1.200	1.095	.984	.995	.0575	1.46
	(30.48)	(27.81)	24.99)	(25.27)	.080	2.03
51	1.550	1.445	1.334	1.345	.105	2.67
	(39.37)	(36.70)	33.88)	(34.16)	.11	2.8
					.115	2.92
				.150	3.81	
				.330	8.38	

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Unless otherwise specified tolerances are $\pm .005$ inch (0.13 mm) angular tolerance $\pm 2^\circ$.
4. Surface from which the lead length is measured.
5. Shell shall be flush to insulator within $\pm .004$ inch (0.10 mm).
6. Tail finish is tin/lead or gold.

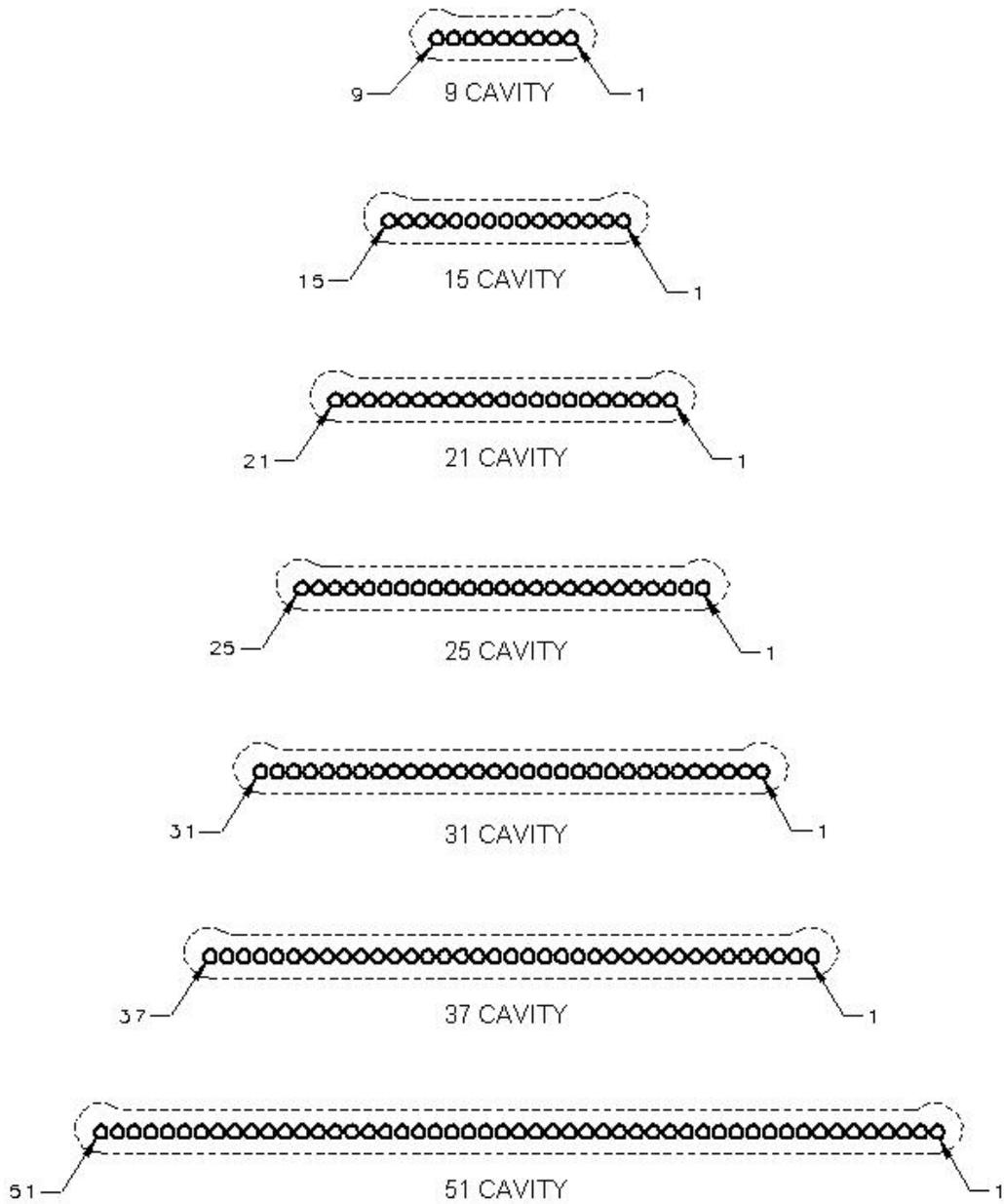
FIGURE 1. Nano connector dimensions and configurations – Continued.



NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Unless otherwise specified tolerances are $\pm .005$ inch (.13 mm).

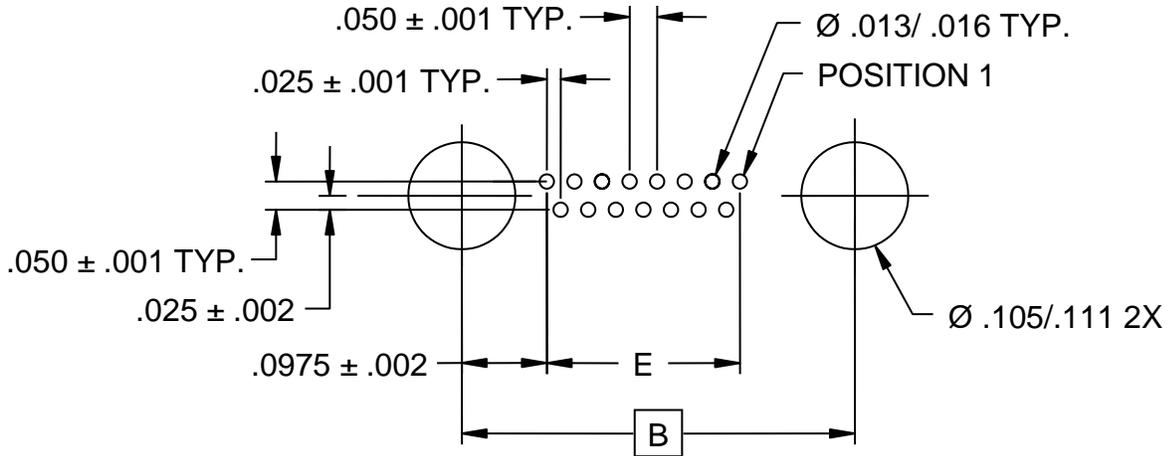
FIGURE 2. Nano connector interface.



NOTES:

1. Engaging face of insert shown.
2. Cavity identification numbers are for reference only and do not appear on the part.

FIGURE 3. Nano connector insert arrangement.



Inches	mm
.001	0.03
.002	0.05
.013	0.33
.016	0.41
.025	0.64
.050	1.27
.0975	2.477
.105	2.67
.111	2.82

Insert arrangement	B BSC	E
9	.395 (10.03)	.200 (5.08)
15	.545 (13.84)	.350 (8.89)
21	.695 (17.65)	.500 (12.70)
25	.795 (20.19)	.600 (15.24)
31	.945 (24.00)	.750 (19.05)
37	1.095 (27.81)	.900 (22.86)
51	1.445 (36.70)	1.250 (31.75)

NOTES:

1. Suggested hole pattern shown facing board from connector insertion side specified on figure 3.
2. Dimensions are in inches.
3. Metric equivalents are given for information only.
4. Unless otherwise specified tolerances are $\pm .005$ inch (.13 mm) angular tolerance $\pm 2^\circ$.

FIGURE 4. Nano connector suggested PCB hole pattern

REQUIREMENTS

Dimensions and configuration see figures 1, 2, and 3.

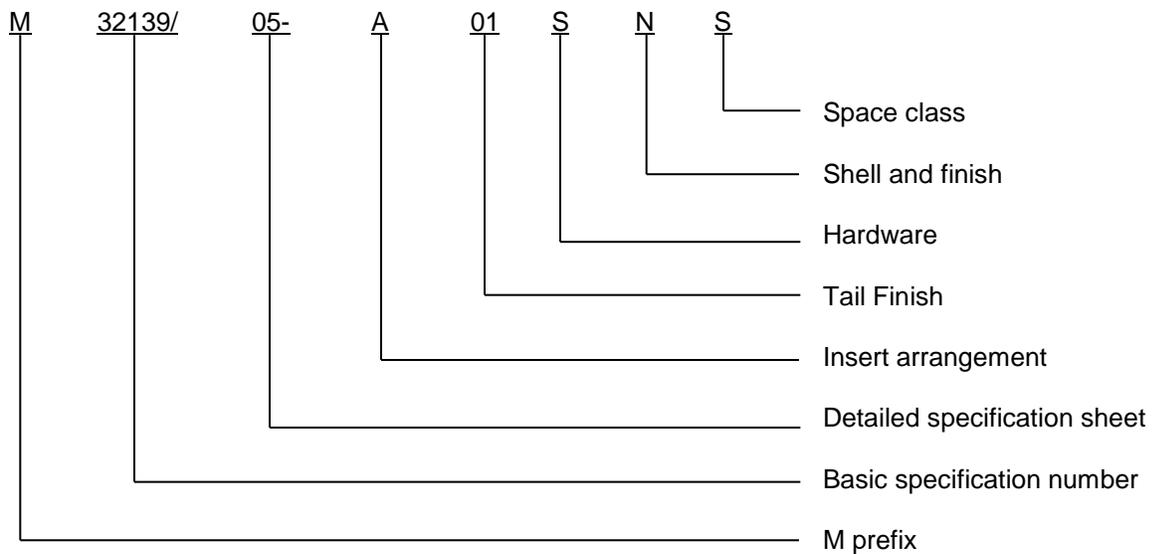
This specification sheet describes the pin side of a rectangular connector. This connector uses reverse gender contacts, i.e., the live pin is recessed in the insulator with the static socket protruding from a shrouded interface.

Contact connection: The pin contact, which is recessed in the insulator, is normally connected to the live side of the circuit.

Pins are terminated to a printed circuit board (PCB) as specified on figure 4.

Mating receptacle: Shall be in accordance with MIL-DTL-32139/6

Part or Identifying Number (PIN):



Insert Arrangement

A = 9
 B = 15
 C = 21
 D = 25
 E = 31
 F = 37
 G = 51

Tail Finish

01 = Tin/Lead
 02 = Gold

Hardware ^{1/}

S = Jackscrew captivated

Shell and Finish

C = Aluminum shell, cadmium finish
 N = Aluminum shell, electroless nickel finish ^{2/}
 S = Passivated stainless steel shell
 T = Titanium shell
 A = Pure Electrodeposited Aluminum
 Z = Zinc Nickel
 F = Nickel Fluorocarbon Polymer

Space class

Blank for non-space applications
 S = Space class

^{1/} Supplied installed.

^{2/} When aluminum shells are required for space applications, electroless nickel shall be used. Cadmium finish is not acceptable (see MIL-DTL-32139).

Alternate shell finishes:

Pure Electrodeposited Aluminum. Pure dense electrodeposited aluminum shall be in accordance with MIL-DTL-83488, type II shall withstand 48 hour salt spray. Color shall be non-reflective and shall meet the requirements as specified herein.

Nickel Fluorocarbon Polymer. High phosphate nickel with fluorocarbon polymer additive over a suitable underplate shall be able shall withstand 48 hour salt spray. Color shall be non-reflective and shall meet the requirements as specified herein.

Zinc Nickel. Zinc Nickel Alloy shall be in accordance with ASTM B841, over a suitable underplate shall withstand 48 hour salt spray. Color shall be non-reflective and shall meet the requirements as specified herein.

Referenced documents. In addition to MIL-DTL-32139, this document references the following:

MIL-DTL-32139/6
MIL-DTL-83488
ASME B18.3
ASTM B841

CONCLUDING MATERIAL

Custodians:

Army - CR
Navy - EC
Air Force - 85
DLA - CC

Preparing activity:
DLA - CC

(Project 5935-2010-200)

Review activities:

Army - AV, MI
Air Force - 99

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <https://assist.dla.mil>.