

# N CG

Type N



**Aliner Industries, Inc.**

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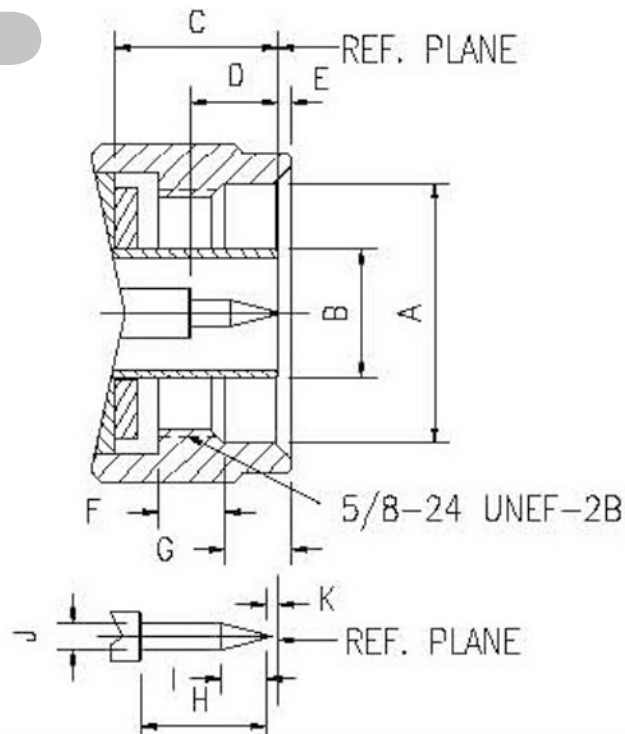
Fax : +886-2-2203-8052 / 2205-5628  
<http://www.aliner.com.tw>

# Type N - Description

Aliner N connectors are available with 50Ω and 75Ω impedance operating to 11GHz on semi-rigid cable. N connectors have variety of clamp and solder types.

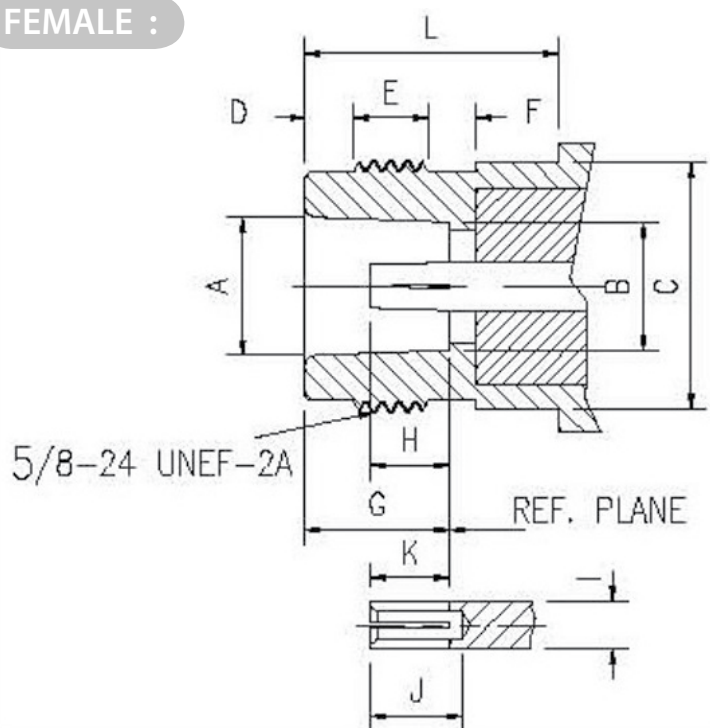
## Interface Mating Dimensions

### MALE :



| LTR. | Millimeters / Inches         |        |         |        |
|------|------------------------------|--------|---------|--------|
|      | MINIMUM                      |        | MAXIMUM |        |
| A -  | Ø 16.0                       | Ø .630 |         |        |
| B -  |                              |        | Ø 8.38  | Ø .330 |
| C -  | 10.11                        | .398   | 10.46   | .412   |
| D -  | 5.33                         | .210   | 5.84    | .230   |
| E -  | 0.41                         | .016   | 1.52    | .060   |
| F -  | 4.50 / .177 full thread min. |        |         |        |
| G -  | 4.01                         | .158   | 4.27    | .168   |
| H -  | 5.33                         | .210   |         |        |
| I -  | 2.80                         | .110   | 3.56    | .140   |
| J -  | Ø 1.60                       | Ø .063 | Ø 1.68  | Ø .066 |
| K -  | 0.08                         | .003   |         |        |

### FEMALE :



| LTR. | Millimeters / Inches |        |         |        |
|------|----------------------|--------|---------|--------|
|      | MINIMUM              |        | MAXIMUM |        |
| A -  | Ø 8.53               | Ø .336 | Ø 8.74  | Ø .344 |
| B -  | Ø 8.03               | Ø .316 | Ø 8.13  | Ø .320 |
| C -  |                      |        | Ø 15.93 | Ø .627 |
| D -  | 1.19                 | .047   | 1.96    | .077   |
| E -  | 4.37                 | .172   | 5.13    | .202   |
| F -  | 1.19                 | .047   | 1.96    | .077   |
| G -  | 9.04                 | .356   | 9.19    | .363   |
| H -  | 4.75                 | .187   | 5.26    | .207   |
| I -  | Ø 3.00               | Ø .118 | Ø 3.15  | Ø .124 |
| J -  | 5.33                 | .210   |         |        |
| K -  | 4.75                 | .187   | 5.26    | .207   |
| L -  | 10.72                | .422   |         |        |



## Technical Data

### Material / Finish :

|                       | Material                                                                                         | Finish                      |
|-----------------------|--------------------------------------------------------------------------------------------------|-----------------------------|
| Connector body        | Brass per ( QQ-B-626 or JIS-C3604B )                                                             | Nickel or Tri-alloy plating |
| Center contact male   | Brass per ( QQ-B-626 or JIS-C3604B )                                                             | Gold plating                |
| Center contact female | Beryllium copper per ( QQ-C-530 or JIS-C1730 ) or Phosphor bronze per ( QQ-B-750 or JIS-C5441B ) | Gold plating                |
| Insulator             | PTFE                                                                                             | None                        |
| Crimp ferrule         | Annealed copper                                                                                  | Same as body                |
| Gasket                | Silicone rubber                                                                                  | None                        |

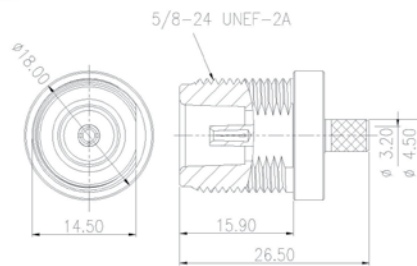
### Electrical :

|                                 |                                                                   |
|---------------------------------|-------------------------------------------------------------------|
| Nominal impedance               | 50 $\Omega$                                                       |
| Frequency up to                 | 11 GHz                                                            |
| VSWR                            | $1.15 + 0.02f \times \text{GHz}$ max.                             |
| Working voltage                 | 500 Volts rms.                                                    |
| Dielectric withstanding voltage | 2500 Volts rms.                                                   |
| Insulation resistance           | 5000 M $\Omega$ min.                                              |
| Contact resistance              | center conductor 1.5 m $\Omega$<br>outer conductor 1.5 m $\Omega$ |

### Mechanical & Environmental :

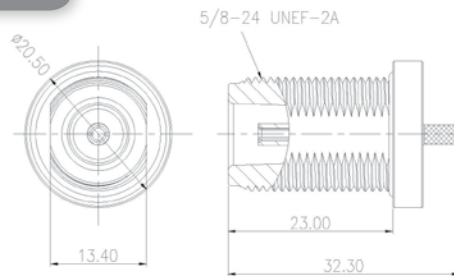
|                        |                                             |
|------------------------|---------------------------------------------|
| Mating                 | 5/8"-24 UNEF thread coupling                |
| Cable retention        | 10 kgf typical                              |
| Durability             | $\geq 500$ cycles                           |
| Coupling nut retention | 20 kgf min.                                 |
| Temperature range      | -55 °C to 155°C                             |
| Vibration              | Per MIL-STD-202 Method 204 Test Condition D |
| Corrosion              | Per MIL-STD-202 Method 101 Test Condition B |

## Straight Bulkhead Jack(female)



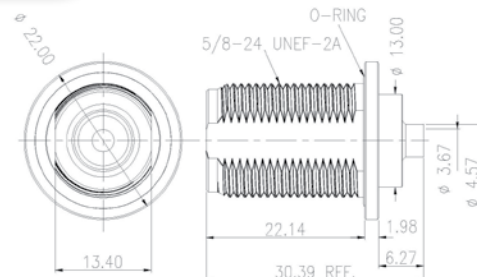
| Aliner P/N | Impedance | Plating | Packaging | Cable Type                   | Note     |
|------------|-----------|---------|-----------|------------------------------|----------|
| 18-234A0-B | 50        | Nickel  | Bulk      | Belden H155                  | Standard |
| 18-233B0-B | 50        | Nickel  | Bulk      | LMR-400                      | Standard |
| 18-233A0-B | 50        | Nickel  | Bulk      | RG-174/U;RG-188 A/U;RG-316/U | Standard |
| 18-234B0-B | 50        | Nickel  | Bulk      | RG-178 B/U;RG-196 A/U        | Standard |
| 18-231A0-B | 50        | Nickel  | Bulk      | RG-58 C/U;RG-303/U           | Standard |

## Straight Bulkhead Jack(female)



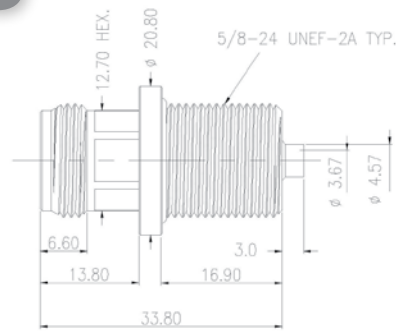
| Aliner P/N | Impedance | Plating | Packaging | Cable Type                   | Note     |
|------------|-----------|---------|-----------|------------------------------|----------|
| 18-234F0-B | 50        | Nickel  | Bulk      | 1.13 mini coaxial            | Standard |
| 18-234GL-B | 50        | Nickel  | Bulk      | LMR-240                      | Standard |
| 18-234D0-B | 50        | Nickel  | Bulk      | RG-174/U;RG-188 A/U;RG-316/U | Standard |
| 18-234C2-B | 50        | Nickel  | Bulk      | RG-58 C/U;RG-303/U           | Standard |

## Straight Bulkhead Jack(female)



| Aliner P/N | Impedance | Plating | Packaging | Cable Type                   | Note     |
|------------|-----------|---------|-----------|------------------------------|----------|
| 18-234H0-B | 50        | Nickel  | Bulk      | .085 semi-rigid              | Standard |
| 18-234G0-B | 50        | Nickel  | Bulk      | .141 semi-rigid              | Standard |
| 18-234GD-B | 50        | Nickel  | Bulk      | 1.37 mini coaxial            | Standard |
| 18-234GG-B | 50        | Nickel  | Bulk      | RG-174/U;RG-188 A/U;RG-316/U | Standard |
| 18-234G1-B | 50        | Nickel  | Bulk      | RG-178 B/U;RG-196 A/U        | Standard |

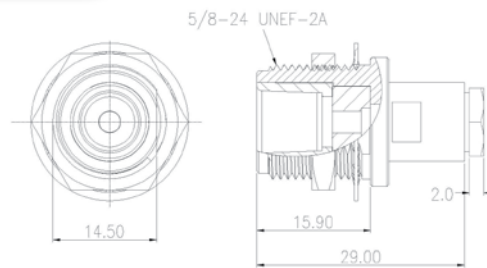
## Straight Bulkhead Jack(female)



| Aliner P/N | Impedance | Plating | Packaging | Cable Type                   | Note     |
|------------|-----------|---------|-----------|------------------------------|----------|
| 18-234GJ-V | 50        | Nickel  | Single    | .085 semi-rigid              | Standard |
| 18-234GK-T | 50        | Nickel  | Tray      | 1.32 mini coaxial            | Standard |
| 18-234GH-V | 50        | Nickel  | Single    | RG-174/U;RG-188 A/U;RG-316/U | Standard |

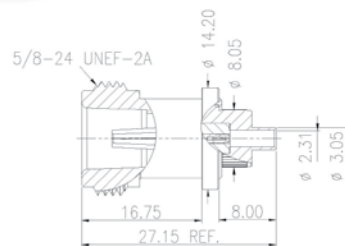
## Straight Jack(female)

CLAMP TYPE



| Aliner P/N | Impedance | Plating | Packaging | Cable Type                   | Note     |
|------------|-----------|---------|-----------|------------------------------|----------|
| 18-104A0-B | 50        | Nickel  | Bulk      | Filotex 296769               | Standard |
| 18-104D0-B | 50        | Nickel  | Bulk      | RG-174/U;RG-188 A/U;RG-316/U | Standard |
| 18-104AB-B | 50        | Nickel  | Bulk      | RG-178 B/U;RG-196 A/U        | Standard |

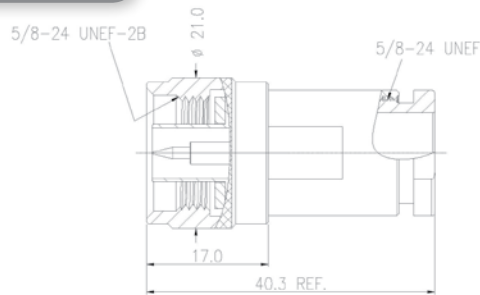
## Straight Jack(female)



| Aliner P/N | Impedance | Plating | Packaging | Cable Type      | Note     |
|------------|-----------|---------|-----------|-----------------|----------|
| 18-105VA-B | 50        | Silver  | Bulk      | .085 semi-rigid | Standard |
| 18-105VD-B | 50        | Nickel  | Bulk      | .085 semi-rigid | Standard |
| 18-105VB-B | 50        | Nickel  | Bulk      | .141 semi-rigid | Standard |

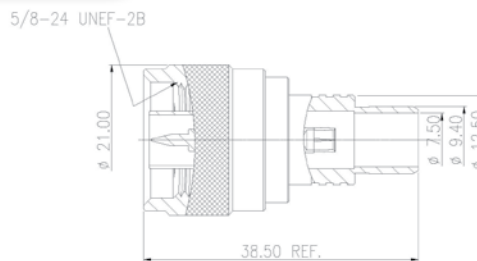
**Straight Plug(male)**

CLAMP TYPE



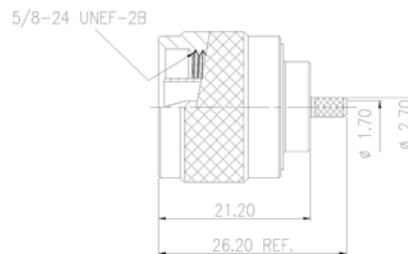
| Aliner P/N | Impedance | Plating | Packaging | Cable Type     | Note     |
|------------|-----------|---------|-----------|----------------|----------|
| 18-101B0-B | 50        | Nickel  | Bulk      | Filotex 296769 | Standard |
| 18-101A0-B | 50        | Nickel  | Bulk      | RG-8/D         | Standard |

**Straight Plug(male)**



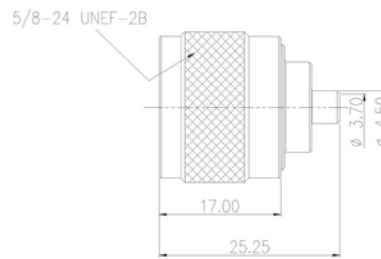
| Aliner P/N | Impedance | Plating | Packaging | Cable Type | Note     |
|------------|-----------|---------|-----------|------------|----------|
| 18-130CF-B | 50        | Nickel  | Bulk      | LMR-400    | Standard |

**Straight Plug(male)**



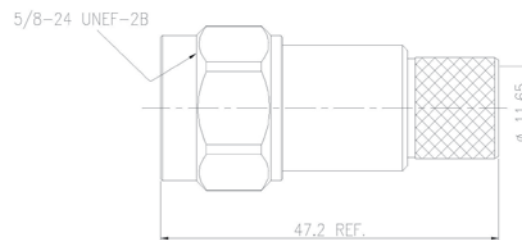
| Aliner P/N | Impedance | Plating | Packaging | Cable Type                   | Note     |
|------------|-----------|---------|-----------|------------------------------|----------|
| 18-130CB-B | 50        | Nickel  | Bulk      | Belden H1001                 | Standard |
| 18-130BH-B | 50        | Nickel  | Bulk      | Belden H155                  | Standard |
| 18-130A0-B | 50        | Nickel  | Bulk      | Filotex 296769               | Standard |
| 18-131BC-B | 50        | Nickel  | Bulk      | LMR-100A                     | Standard |
| 18-130BA-B | 50        | Nickel  | Bulk      | LMR-240                      | Standard |
| 18-130CD-B | 50        | Nickel  | Bulk      | LMR-400                      | Standard |
| 18-131BA-B | 50        | Nickel  | Bulk      | RG-142 B/U;RG-223/U;RG-400/U | Standard |
| 18-131BB-B | 50        | Nickel  | Bulk      | RG-174/U;RG-188 A/U;RG-316/U | Standard |
| 18-131B0-B | 50        | Nickel  | Bulk      | RG-58 C/U;RG-303/U           | Standard |

## Straight Plug(male)



| Aliner P/N | Impedance | Plating | Packaging | Cable Type            | Note     |
|------------|-----------|---------|-----------|-----------------------|----------|
| 18-130GA-B | 50        | Nickel  | Bulk      | .141 semi-rigid       | Standard |
| 18-130GD-B | 50        | Nickel  | Bulk      | 1.37 mini coaxial     | Standard |
| 18-130GO-B | 50        | Nickel  | Bulk      | RG-178 B/U;RG-196 A/U | Standard |

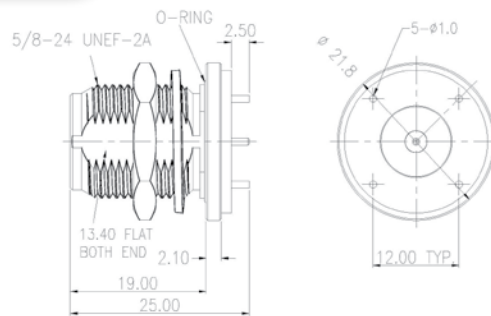
## Straight Plug(male)



| Aliner P/N | Impedance | Plating   | Packaging | Cable Type | Note     |
|------------|-----------|-----------|-----------|------------|----------|
| 18-132A0-B | 50        | Tri-alloy | Bulk      | LMR-600    | Standard |
| 18-132AA-V | 50        | Silver    | Single    | LMR-600    | Standard |

### Bulkhead Jack(female)

PCB MOUNT



**Aliner P/N**

**18-002AA-T**

**Impedance**

50

**Plating**

Tri-alloy

**Packaging**

Tray

**Mounting Pattern**

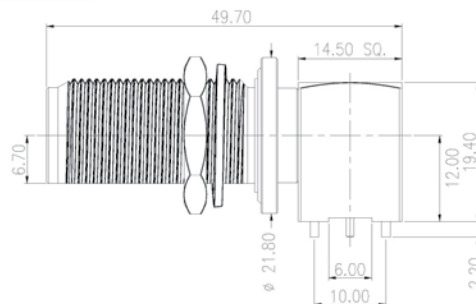
B04

**Note**

Standard

### Right Angle Bulkhead Jack(female)

PCB MOUNT



**Aliner P/N**

**18-108A0-T**

**Impedance**

50

**Plating**

Nickel

**Packaging**

Tray

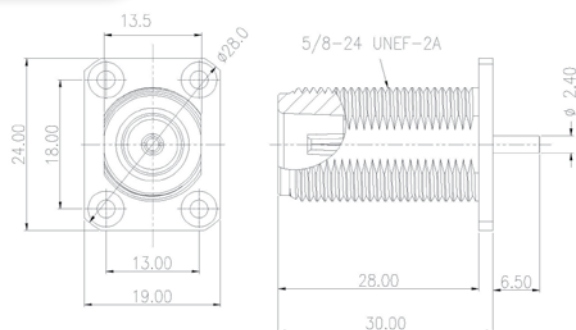
**Mounting Pattern**

B05

**Note**

Standard

### Straight Bulkhead Jack(female)



**A liner P/N**

**18-002BA-T**

**Impedance**

50

**Plating**

Nickel

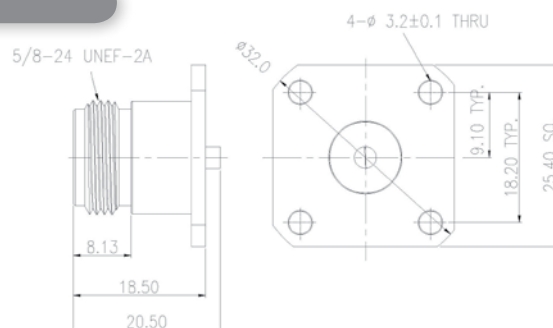
**Packaging**

Tray

**Note**

Standard

### Straight Jack(female)



**A liner P/N**

**18-102F0-T**

**Impedance**

50

**Plating**

Nickel

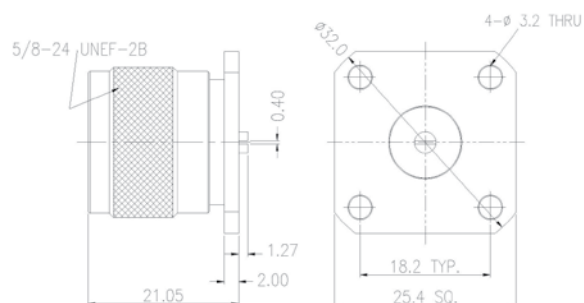
**Packaging**

Tray

**Note**

Standard

### Straight Plug(male)



**A liner P/N**

**18-104B0-B**

**Impedance**

50

**Plating**

Nickel

**Packaging**

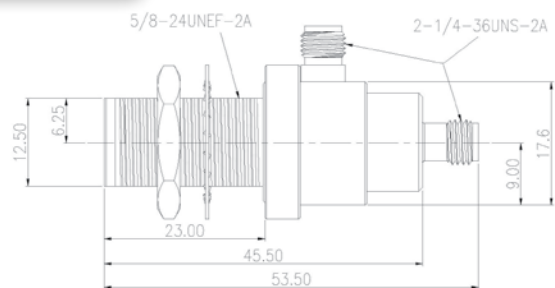
Bulk

**Note**

Standard

**Bulkhead Jack(female)**

SWITCH WITH SMA PORT



**Aliner P/N**  
**18-501AA-V**

**Impedance**  
50

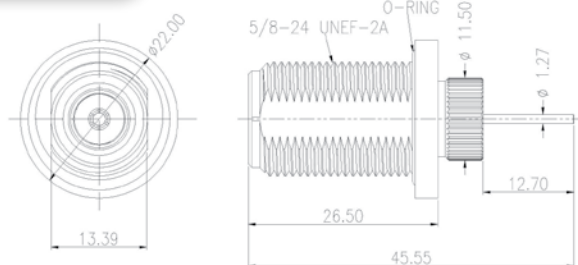
**Plating**  
Nickel

**Packaging**  
Single

**Note**  
Standard

**Type N PRESS FIT**

**Straight Bulkhead Jack(female)**



**Aliner P/N**  
**18-015B0-B**

**Impedance**  
50

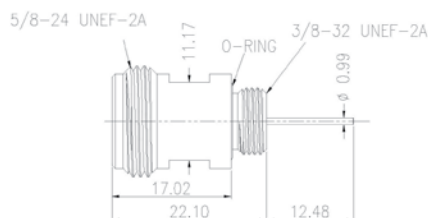
**Plating**  
Nickel

**Packaging**  
Bulk

**Note**  
Standard

**Type N FEED THROUGH**

**Straight Jack(female)**



**Aliner P/N**  
**18-015A0-B**

**Impedance**  
50

**Plating**  
Nickel

**Packaging**  
Bulk

**Note**  
Standard

