

## Specifications for "N" Connectors

N Series connectors are medium sized, and weatherproof. The coupling method utilizes a screw system designed for use at frequencies up to microwave. These connectors are particularly useful where precision performance is necessary such as in test equipment, satellite communications, MATV, computer LAN systems, and other high-tech electronic equipment. Because of the quality manufacturing tolerances these connectors ensure excellent performance throughout 0-18GHz.

| MATERIALS                        |                                     |                               |  |  |
|----------------------------------|-------------------------------------|-------------------------------|--|--|
| Connector Parts                  | Material                            | Equivalent Standard †         |  |  |
| Connector Body and Parts         | Brass                               | ISOCuZn38Pb2 Body<br>Part     |  |  |
| Male Contact Pin                 | Brass                               | QQ-B-626                      |  |  |
| Outer Contact                    | Brass                               | QQ-B-750                      |  |  |
| Socket Contact                   | Beryllium Copper<br>Phosphor Bronze | QQ-C-530/MIL-H-<br>7199 CuBe2 |  |  |
| Crimp Ferrule                    | Annealed Copper                     | QQ-C-576                      |  |  |
| Insulators, Standard<br>Versions | Teflon Delrin                       | L-P403/BS4271<br>Grade B      |  |  |
| Rubber Gaskets                   | Silicone Rubber                     | ASTM-E1418PSI                 |  |  |
| Plating                          | Nickel (Silver<br>Optional)         | MIL-G-45204                   |  |  |

Contact Resistance

| Requirement                    | Performance            | Test †<br>Specification |  |
|--------------------------------|------------------------|-------------------------|--|
| Impedance                      | 50 Ω 75Ω               |                         |  |
| Frequency Range                | 0-18 GHz 0-1 GHz       |                         |  |
| VSWR                           | 1.30 Max.              | MIL- C-39012            |  |
| RF Insertion Loss              | 0.2 db Max. at 3 GHz   | MIL- C-39012            |  |
| RF Leakage                     | -90 db Min. at 2-3 GHz | MIL- C-39012            |  |
| Test Voltage (At Sea Level)    | 2500V rms              | MIL-STD-202             |  |
| Working Voltage (At Sea level) | 1000V rms              | MIL-STD-202             |  |
| Insulation Resistance          | 5000 Megohm Min.       | MIL-STD-202             |  |

3 Megohm Max.

**ELECTRICAL** 

| Requirement | Performance                       | Test †<br>Specification |
|-------------|-----------------------------------|-------------------------|
| Durability  | 500 Insertions & Extractions Min. | MIL-C-39012             |
| Shock       | 100 G                             | MIL-STD-202             |
| Vibration   | 20 G from 80-2000 Hz              | MIL-STD-202             |

**MECHANICAL & ENVIRONMENTAL** 

MIL-C-39012

| Cable Retention (Cable Types) | 60 lbs. Minimum Pull Test                     | MIL-C-39012 |
|-------------------------------|---|-------------|
| Coupling Nut                  | 100 lbs. Maximum                              | MIL-C-39012 |
| Temperature Range             | Teflon: -55 to +199 C<br>Delrin: -40 to +85 C |             |
| Moisture Resistance           | Continuous Test                               | MIL-STD-202 |
| Salt Spray                    | 48 Hours                                      | MIL-STD-202 |

FOR TECHNICAL SUPPORT: PHONE 973-347-4040 / FAX 973-347-2111 Back to

18

Index

- Page 19 -

"'N" Connectors

## **Cable Plugs**

"N" cable plugs are available in solder/clamp, solder/crimp, and twist-on versions to satisfy the installer's preference. Standard cable sizes are facilitated with these connectors for applications from satellite TV to Ethernet LAN installations.

| Part<br>Number | POAT      | Description       | RG/U<br>Cable | Fig.<br>No. |
|----------------|-----------|-------------------|---------------|-------------|
| 110A108A       | 2         | Solder/Clamp Plug | 6A            | 88          |
| 110A108B       | <b>2</b>  | Solder/Clamp Plug | 8, 213        | 88          |
| 110A108F       | <b>2</b>  | Solder/Clamp Plug | 58            | 88          |
| 110A108G       | <b>2</b>  | Solder/Clamp Plug | 59, 62        | 88          |
| 110A205A       | <b>2</b>  | Solder/Crimp Plug | 6A            | 89          |
| 110A205B       | <b>2</b>  | Solder/Crimp Plug | 8, 213        | 89          |
| 110A205F       | $\square$ | Solder/Crimp Plug | 58            | 89          |

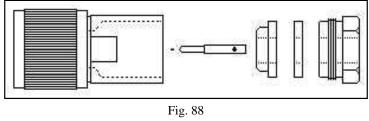


Fig. 89

 $<sup>\</sup>dagger$ Products are made to conform to the Mil standard but are for commercial applications and not QPL