

# INTER SERIES ADAPTERS

## INTRODUCTION & 2.4 MM, 2.9 MM INTER SERIES



Inter series coaxial adapters are some of the more common components used in RF, microwave and wireless applications. OEM's and manufacturing and engineering test facilities are continually required to provide temporary or permanent connections between the many coaxial series in use. This is particularly true today, where long-established connector series (N, TNC, BNC, 874, SMA, etc.) must be mated with less common or more recently introduced interfaces (3.5 mm, 2.9 mm, 2.4 mm, 7/16, SSMA, SSMB, SSMC, MCX, MMCX, 7 mm, etc).

Recognizing this need, COAXICOM maintains a large inventory of common and not-so-common inter and intra series adapters. This section covers the inter series, while the intra series are shown in the individual connector sections of this catalog. If you have a

requirement not shown in the catalog, please contact the factory for a prompt response.

The user should bear in mind that for best performance, the usable frequency range for a given adapter is established by the operating range of the lower frequency interface on the adapter. The recommended frequency range of each connector series is given on the specification sheet within each section. Most adapters are usable at higher frequencies within limitations.

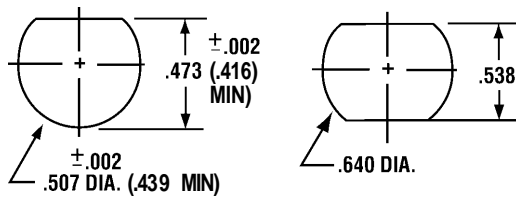
COAXICOM manufactures standard and precision adapters. Where applicable, standard adapters use an "A" suffix in the part number and are usable to frequencies less than 12 GHz for N and TNC, or up to the recommended frequency range for the other series. Most are nickel-plated brass.

Precision adapters feature stainless steel construction for a more precise interface, and an extended frequency range for the N and TNC series. In the case of precision N, TNC or SMA's interfaced with lower frequency series, the precise construction and stepped internal transition yields improved performance beyond the normal operating range of the lower frequency series.

**NOTES:**

1. 75 ohm SMB and SMC "type" do not mate with the 50 ohm series.
2. 50 and 75 ohm Type N do not mate with each other.
3. 50 and 75 ohm BNC mate without restriction.
4. 50 and 75 ohm TNC mate without restriction.
5. SMA, 3.5 mm and 2.9 mm mate without restriction.

**RECOMMENDED BULKHEAD MOUNTING HOLES**



**MOUNTING HOLE A**

**MOUNTING HOLE B**

DIMENSIONS IN BRACKETS ARE FOR MOUNTING HOLE C

| FREQ: DG - 18 GHz VSWR = 1.10 MAX |                     |
|-----------------------------------|---------------------|
| 022908-9                          | 021908-9            |
| 7 MM TO 2.9 MM JACK               | 7 MM TO 2.4 MM JACK |
|                                   |                     |
| 1.42                              | 1.42                |

| FREQ: DC - 40 GHz VSWR = 1.10 (18 GHz), 1.20 (26.5 GHz), 1.30 (40 GHz) |                            |                            |                            |
|--|----------------------------|----------------------------|----------------------------|
| 022100-9   | 022101-9                   | 022102-9                   | 022103-9                   |
| 2.9 MM JACK TO 2.4 MM PLUG   | 2.9 MM PLUG TO 2.4 MM JACK | 2.9 MM JACK TO 2.4 MM JACK | 2.9 MM PLUG TO 2.4 MM PLUG |
|  |                            |                            |                            |
| 1.00 max   | 1.00 max                   | 1.00 max                   | 1.00 max                   |

7 mm to 2.9 mm and 3.5 mm plugs and jacks are also available. Consult factory. See page 72 for additional choices. 2.4 mm, 2.9 mm and 3.5 mm intra series adapters are also available. Consult factory.