

# 14mm Between-Series Adapters

## 2406, 2407 and 2709 Series; EIA Model 2417B

### Description

Maury 14mm coaxial adapters utilize precision air dielectric connectors that are fully mating compatible with, and equivalent to, the GR900BT connector. These connectors are often used in highly critical laboratory applications at frequencies up to 8.5 GHz. They feature improved center conductor inner contacts (model 2481A) and outer connector bodies with a one-inch Hex/Knurl coupling nut for accurate tightening with a calibrated torque wrench. Coupled junctions that are properly tightened with a calibrated torque wrench offer greatly enhanced measurement repeatability and accuracy.

14mm Adapters are offered for precision 3.5mm, type N, 7-16, and 7/8 EIA rigid line connectors. The 3.5mm adapters can also be used for connection to SMA and 2.92mm (the frequency range is limited to 8.5 GHz by the 14mm connector). To adapt from 14mm to 7mm, please see model 2607A1 (see page 113).

In addition to coaxial adapters, Maury also offers a full line of components utilizing the 14mm precision interface. Many of these are direct replacements for the original GR models. Please contact our Sales Department for a cross reference to the original GR model numbers. Maury 14mm products also include VNA calibration kits, directional couplers and noise terminations.

### 14mm Connector Description

The precision 14mm connectors are instrument grade, air-interface connectors that are rated for operation from DC to 8.5 GHz. The connectors are normally made with stainless steel bodies with heat treated gold plated beryllium copper contacts. They are also known as GR900 (General Radio) connectors.



### Available Models

MODEL	ADAPTS		FREQUENCY RANGE (GHz) AND MAXIMUM VSWR	NOMINAL IMPEDANCE	INSERTION LENGTH	
	SIDE A	SIDE B			INCHES	(CM)
2407A1 <sup>1</sup>	14mm (GR900) <sup>3</sup>	3.5mm female <sup>4</sup>	DC — 8.5 ≤ 1.020 + 0.008f	50 ohm	2.01	(5.11)
2407B1 <sup>1</sup>	14mm (GR900) <sup>3</sup>	3.5mm male <sup>4</sup>	DC — 8.5 ≤ 1.020 + 0.008f	50 ohm	2.01	(5.11)
2406C1	14mm (GR900) <sup>3</sup>	Type N female <sup>5</sup>	DC — 8.5 ≤ 1.006 + 0.006f	50 ohm	1.95	(4.95)
2406D1	14mm (GR900) <sup>3</sup>	Type N male <sup>5</sup>	DC — 8.5 ≤ 1.006 + 0.006f	50 ohm	2.03	(5.16)
2709A <sup>2</sup>	14mm (GR900) <sup>3</sup>	7-16 female <sup>6</sup>	DC — 7.5 ≤ 1.006 + 0.006f	50 ohm	1.81	(4.60)
2709B <sup>2</sup>	14mm (GR900) <sup>3</sup>	7-16 male <sup>6</sup>	DC — 7.5 ≤ 1.006 + 0.006f	50 ohm	1.81	(4.60)
2417B	14mm (GR900) <sup>3</sup>	7/8 EIA	DC — 5.0 ≤ 1.012 + 0.008f	50 ohm	3.04	(7.72)

<sup>1</sup> 2407A1 and 2407B1 are phase matched for VNA applications.

<sup>2</sup> 2709A and 2709B are phase matched for VNA applications.

<sup>3</sup> Precision 14mm (GR900) per Maury data sheet 5E-068.

<sup>4</sup> Precision 3.5mm per Maury data sheet 5E-062.

<sup>5</sup> Precision type N per Maury data sheet 5E-049.

<sup>6</sup> Precision 7-16 per Maury data sheet 5E-066.

 Key Literature: Maury data sheet 2B-020.