

3.5mm Between-Series Adapters

8022, 8023, 8025, 8682, 8672 & 8028 Series



Description

These precision adapters are used to connect 3.5mm devices to cables or devices with 7mm, type N, TNC, AFTNC, TNCA or BNC connectors. Low VSWR, low insertion loss and high repeatability, make these rugged, highly durable adapters ideal for use wherever frequent connect/disconnect cycles occur. Adapters in each model series are phase matched for VNA applications.

3.5mm Connector Description

Rated from DC to 34 GHz, the precision 3.5mm miniature, air-interface connectors on these adapters comply with IEEE standard 287 for instrument grade general precision connectors (GPC3.5). See Maury data sheet 5E-062 for interface dimensions.

7mm Connector Description

Rated from DC to 18 GHz, these precision miniature, air-interface connectors comply with IEEE standard 287 for instrument grade general precision connectors (GPC7). See page 113 for details. See Maury data sheet 5E-060 for interface dimensions.

Type N Connector Description

Rated from DC to 18 GHz, these precision miniature, air-interface connectors comply with IEEE standard 287 for instrument grade general precision connectors (GPC Type N). See page 115 for details. Maury data sheet 5E-049 for interface dimensions.

BNC Connector Description

Rated from DC to 10 GHz, Maury BNC series connectors conform to MIL-C-39012. The two-stud bayonet coupling connectors are normally made with stainless steel bodies with heat treated gold plated beryllium copper contacts.

TNC Connector Descriptions

Maury offers three precision TNC connector designs:

MPC/TNC - Precision TNC connectors that mate with most TNC connectors; specifically with MIL-C-39012/26/27 test connectors or MIL-T-81490 connectors. See page 119 for details. See also Maury data sheet 5E-053 for interface dimensions.

AFTNC - Fully compliant with MIL-C-87104/2 "AFTNC". Tightly controlled mating dimensions ensure that mated connectors exhibit low VSWR from DC to 19 GHz. See page 119 for details. See also Maury data sheet 5E-056 for interface dimensions.

TNCA - Fully compliant with MIL-STD 348A with low VSWR from DC to 20 GHz. See page 119 for details. See also Maury data sheet 5E-058 for interface dimensions.

Available Models

MODEL	ADAPTS		FREQUENCY RANGE (GHz) AND MAXIMUM VSWR	NOMINAL IMPEDANCE	INSERTION LENGTH	
	SIDE A	SIDE B			INCHES	(CM)
8022A1	3.5mm female ¹	7mm	DC — 4.0 ≤ 1.04	50 ohm	1.67	(4.24)
8022B1	3.5mm male ¹	7mm		50 ohm	1.67	(4.24)
8022A2	3.5mm female ¹	7mm ²	4.0 — 18.0 ≤ 1.08	50 ohm	1.67	(4.24)
8022B2	3.5mm male ¹	7mm ²		50 ohm	1.67	(4.24)
8023A	3.5mm female ¹	Type N female	DC — 4.0 ≤ 1.065	50 ohm	1.62	(4.11)
8023B1	3.5mm female ¹	Type N male		50 ohm	1.97	(5.00)
8023C	3.5mm male ¹	Type N female	4.0 — 18.0 ≤ 1.13	50 ohm	1.62	(4.11)
8023D1	3.5mm male ¹	Type N male		50 ohm	1.97	(5.00)
8025A1	3.5mm female ¹	TNC female	DC — 4.0 ≤ 1.06 (<1.03 typ)	50 ohm	1.61	(4.10)
8025B1	3.5mm female ¹	TNC male		50 ohm	1.61	(4.10)
8025C1	3.5mm male ¹	TNC female	4.0 — 8.0 ≤ 1.14 (<1.07 typ)	50 ohm	1.61	(4.10)
8025D1	3.5mm male ¹	TNC male		50 ohm	1.61	(4.10)
8682A	3.5mm female ¹	AFTNC female	DC — 4.0 ≤ 1.04	50 ohm	1.34	(3.40)
8682B	3.5mm female ¹	AFTNC male		50 ohm	1.29	(3.28)
8682C	3.5mm male ¹	AFTNC female	4.0 — 12.0 ≤ 1.06	50 ohm	1.34	(3.40)
8682D	3.5mm male ¹	AFTNC male		50 ohm	1.29	(3.28)
8672A	3.5mm female ¹	TNCA female	DC — 4.0 ≤ 1.04	50 ohm	1.34	(3.40)
8672B	3.5mm female ¹	TNCA male		50 ohm	1.29	(3.28)
8672C	3.5mm male ¹	TNCA female	4.0 — 12.0 ≤ 1.06	50 ohm	1.34	(3.40)
8672D	3.5mm male ¹	TNCA male		50 ohm	1.29	(3.28)
8028A	3.5mm female ¹	BNC female	DC — 4.0 ≤ 1.10	50 ohm	2.00	(5.08)
8028B	3.5mm female ¹	BNC male		50 ohm	1.91	(4.85)
8028C	3.5mm male ¹	BNC female	4.0 — 10.0 ≤ 1.20	50 ohm	2.00	(5.08)
8028D	3.5mm male ¹	BNC male		50 ohm	1.91	(4.85)

¹ Precision 3.5mm per Maury data sheet 5E-062. These 3.5mm connectors are mating compatible with SMA or 2.92mm (K) connectors.

² High Precision 7mm test port interface with enhanced performance in VNA applications.

Key Literature: Maury data sheets 2B-022, 2B-022D, 2B-017, 2B-017A, 2B-025, and 2B-028.