

Type N In-Series Adapters (50 ohm)

8801 and 8803 Series

Description

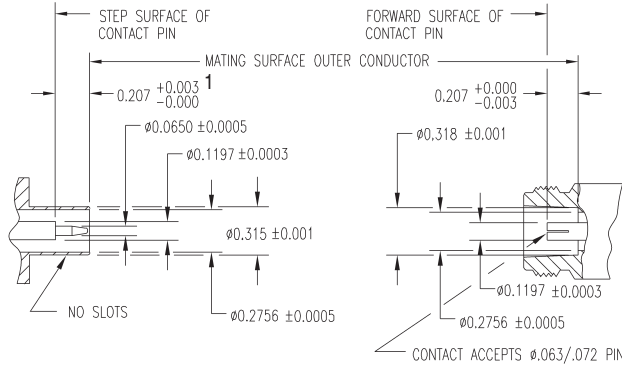
The 8801 beadless (air dielectric) adapters, and the 8803 bead-supported adapters both have precision type N connectors that exhibit low VSWR and low insertion loss from DC to 18 GHz. They are useful in a variety of VNA measurement applications or in general laboratory use. Two kits are available; the 8801K and 8801L; each including a selection of these adapters in a wood instrument case. (See “Available Models” below for kit contents.)

Connector Description

The Maury type N connectors on these adapters are precision, miniature, instrument grade, air-interface connectors, rated for operation from DC to 18 GHz. They comply with IEEE standard 287 for instrument grade general precision connectors (GPC Type N), and most applicable interface requirements of MIL-C-39012/1 (see footnote 1, in Figure 1 below). They also meet all applicable interface requirements of MIL-C-39012/2, and will mate properly with MIL-C-71, MIL-C-39012, MIL-T-81490 and most other semi-precision type N connectors. The male connectors are provided with a 3/4-inch hex coupling nut so they can be properly torqued to 12 in. lbs. The connectors have stainless steel bodies with heat treated gold-plated beryllium copper contacts.

Dimensions – Inches

Figure 1 – Contact Pin Location



¹ This dimension is .210 minimum on MIL-C-39012/1.

Available Models

MODEL	ADAPTS		FREQUENCY RANGE (GHz) AND MAXIMUM VSWR	NOMINAL IMPEDANCE	INSERTION LENGTH	
	SIDE A	SIDE B			INCHES	(CM)
8801A	Type N female ²	Type N female ²	DC — 4.0 ≤ 1.03	50 ohm	0.657	(1.67)
8801B	Type N male ²	Type N male ²	4.0 — 10.0 ≤ 1.08	50 ohm	1.302	(3.31)
8801C	Type N female ²	Type N male ²	10.0 — 18.0 ≤ 1.10	50 ohm	1.237	(3.14)
8803A	Type N female ²	Type N female ²	DC — 4.0 ≤ 1.05 (<1.03 typ)	50 ohm	0.836	(2.12)
8803B	Type N male ²	Type N male ²	4.0 — 10.0 ≤ 1.08 (<1.05 typ)	50 ohm	1.729	(4.39)
8803C	Type N female ²	Type N male ²	10.0 — 18.0 ≤ 1.12 (<1.08 typ)	50 ohm	1.282	(3.25)
8803D ³	Type N female ²	Type N female ²		50 ohm	0.836	(2.12)
8801K	Kit consisting of one each 8801A, 8801B, 8803A and 8803B.					
8801L	Kit consisting of one each of all models listed above, except the 8803D.					

² Precision type N per Maury data sheet 5E-049.

³ This is a precision pressurized bulkhead feedthru adapter similar to UG30/U. Outline drawing available on request.

Key Literature: Maury data sheet 2B-010.



Specifications

Frequency Range	DC – 18 GHz
Maximum Insertion Loss:	
DC – 4.0 GHz	8801 ≤ 0.07 dB; 8803 ≤ 0.1 dB
4.0 – 10.0 GHz	8801 ≤ 0.10 dB; 8803 ≤ 0.15 dB
10.0 – 18.0 GHz	8801 ≤ 0.15 dB; 8803 ≤ 0.25 dB
Dielectric	8801 – Beadless; 8803 – Teflon Bead

Dimensions – Inches

Figure 2 – 8801A/8803A

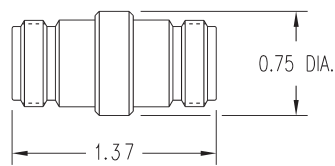


Figure 3 – 8801B/8803B

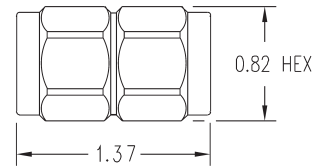


Figure 4 – 8801C/8803C

