

LPC/OSP™ Between-Series Adapters

8787 Series

Description

The LPC/OSP™ 1 adapters are designed to provide a precisely repeatable mated interface for calibration purposes and for test of production components which use the standard OSP™ 2 series blind-mate connectors.

Interface dimensions of the connectors are tightly controlled. A hexagonal coupling nut on the male connector, allows torquing to 8 in/lb with a calibrated torque wrench to further improve the repeatability of a mated pair. Both the female and male connectors are fully mating compatible with the standard OSP™ series and with Dynamate™ series 3 blind-mate connectors.

Most adapters in the same series are phase matched and may be interchanged for VNA measurement of non-insertable devices.

3.5mm Connector Description

The Maury precision 3.5mm connectors on these adapters are miniature, instrument grade, air-interface connectors that are rated for operation from DC to 34 GHz. They comply with IEEE standard 287 for instrument grade general precision connectors (GPC3.5).

7mm Connector Description

Maury precision 7mm connectors are 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 (GPC7). They are normally made with gold-plated beryllium copper bodies and have a six-slot heat treated gold-plated beryllium copper center conductor contact for improved repeatability and durability. See Maury data sheet 5E-060 for interface dimensions.

Type N 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 meet most applicable interface requirements of MIL-C-

Available Models

MODEL	ADAPTS		FREQUENCY RANGE (GHz) AND MAXIMUM VSWR	NOMINAL IMPEDANCE	INSERTION LENGTH	
	SIDE A	SIDE B			INCHES	(CM)
8787Q	LPC/OSP™ female ¹	3.5mm female ⁴		50 ohm	1.50	(3.81)
8787R	LPC/OSP™ female ¹	3.5mm male ⁴	DC — 4.0 ≤ 1.04	50 ohm	1.50	(3.81)
8787S	LPC/OSP™ male ¹	3.5mm female ⁴	4.0 — 18.0 ≤ 1.08	50 ohm	1.50	(3.81)
8787T	LPC/OSP™ male ¹	3.5mm male ⁴		50 ohm	1.50	(3.81)
8787G	LPC/OSP™ female ¹	7mm ⁵	DC — 4.0 ≤ 1.04	50 ohm	2.10	(5.32)
8787H	LPC/OSP™ male ¹	7mm ⁵	4.0 — 18.0 ≤ 1.08	50 ohm	2.10	(5.32)
8787J	LPC/OSP™ female ¹	Type N male ⁶	DC — 4.0 ≤ 1.065	50 ohm	2.40	(6.08)
8787K	LPC/OSP™ male ¹	Type N male ⁶	4.0 — 18.0 ≤ 1.13	50 ohm	2.40	(6.08)

¹ Precision LPC/OSP™ per Maury data sheet 5E-065.

² OSP™ is a trademark of M/A-Com, Inc.

³ Dynamate™ is a trademark of Dynamwave, Inc.

⁴ Precision 3.5mm per Maury data sheet 5E-062.

⁵ Precision 7mm per Maury data sheet 5E-060.

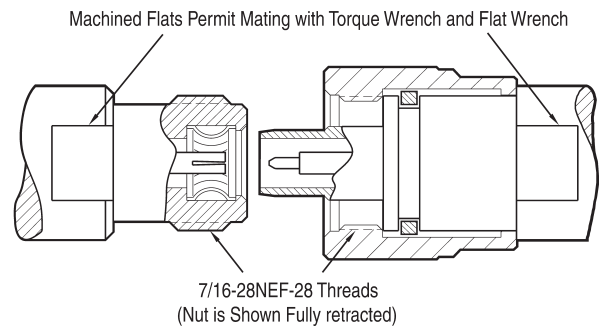
⁶ Precision type N per Maury data sheet 5E-049.

⁷ This dimension is .210 minimum on MIL-C-39012/1.

Key Literature: Maury data sheets 2B-022C, 2B-017A and 2B-034B.



Maury Improved LCP/OSP™ Interface



39012/1 (see Note 7, below) and they meet all applicable interface requirements of MIL-C-39012/2. The connectors 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.