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Keysight 11857B 75Ω Type-N Test Port Return Cable Set

User's and Service Guide

KEYSIGHT TECHNOLOGIES

NOTICE: This document contains references to Agilent Technologies. Agilent's former Test and Measurement business has become Keysight Technologies. For more information, go to **www.keysight.com.**



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Safety Note

The following safety note is used throughout this document. Familiarize yourself with this note and its meaning before performing any of the procedures in this document.

CAUTION	Caution denotes a hazard. It calls attention to a procedure that, if not correctly performed or adhered to, could result in damage to or destruction of the instrument. Do not proceed beyond a caution note until the indicated conditions are fully understood and met.

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Assistance with test and measurements needs and information on finding a local Keysight office are available on the Web at:
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NOTE In any correspondence or telephone conversation, refer to the Keysight product by its model number and full serial number. With this information, the Keysight representative can determine whether your product is still within its warranty period.

General Information

To obtain optimum performance from this cable set, observe these simple precautions:

- Flex and straighten the cables as little and seldom as possible.
- Make connections carefully to avoid misalignment and connector damage or inaccurate measurements.
- Keep the connectors free of dirt and metallic particles.
- If you must clean the connectors, try clean compressed air first. Do not use abrasives. With a plastic swab, apply *only* liquid Freon (trichlorotrifluoroethane) as a solvent.
- Type-N (f) center conductor protrusion: 0.207 inch maximum.
- Type-N (m) center conductor shoulder or dielectric recession: 0.208 inch minimum.

Description

The 11857B RF cable set consists of two type-N 75Ω cables, specified from 300 kHz to 2 GHz. This set provides shielded RF connections to extend the test ports of S-parameter test sets such as the 85046B. The cables can be ordered as either phase-matched or unmatched.

Model	Description	Number of Cables in Set	Replacement Cable Part Number
11857B Standard	Phase matched type-N 75Ω cables male-male connectors male-female connectors	 1 1	 Cables available as a matched pair only
11857B Option B24	Unmatched type-N 75Ω cables male-male connectors male-female connectors	 1 1	 11857-60005 11857-60007

Figure 1. Model 1857B Cables, Option B24



Operating Characteristics

	11857B Standard	11857B Option B24
Impedance	75Ω (nominal)	75Ω (nominal)
Connectors	Type-N, male-male Type-N, male-female	Type-N, male-male Type-N, male-female
Phase Match	≤ 4° (at 2 GHz)	n/a
Return Loss	≥ 24 dB (300 kHz to 2 GHz)	≥ 24 dB (300 kHz to 2 GHz)

CAUTION Mating a 75Ω (f) connector with a 50Ω (m) connector will *destroy* the 75Ω (f) connector.

CAUTION When mating a 75Ω (f)/(m) connector with an adaptor, do *not* rotate the adaptor body. Rotate only the hexagon nut of the adaptor to tighten or loosen the connection. Damage to the center conductor can occur if the adaptor body is rotated. Recommended adaptors are Keysight part numbers 00909-60019 (m) and 00909-60020 (f).

Physical Characteristics

	11857B Standard	11857B Option B24
Length	61 cm (24 inches)	61 cm (24 inches)
Weight (both cables):		
Net	0.91 kg (2 lbs)	0.91 kg (2 lbs)
Shipping	1.36 kg (2 lbs)	1.36 kg (2 lbs)

This information is subject to change without notice.
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