

Test port return cable specifications

	Connector Ttpe (Test port to device)	Frequency (GHz)	Length ² cm (inch)	Return loss	Insertion loss (dB) (f in GHz)	Stability ^{1,2} ±magnitude	±Phase (degrees)
Single cables for 8719 and 8720 (3.5 mm)							
85131C semi-rigid cable	3.5 mm ³ to PSC-3.5 mm (f)	DC to 26.5	81 (32)	≥17 dB	0.43 √f +0.3 (2.5 dB at f _{max})	<0.06 dB	0.16 (f) +0.5
85131E flexible cable	3.5 mm ³ to PSC 3.5 mm (f)	DC to 26.5	96.5 (38)	≥16 dB	0.35 √f +0.3 (2.1 dB at f _{max})	<0.22 dB	0.16 (f) +0.8
85132C semi-rigid cable	3.5 mm ³ to 7 mm	DC to 18	81 (32)	≥17 dB	0.35 √f +0.3 (1.8 dB at f _{max})	<0.06 dB	0.16 (f) +0.5
85132E flexible cable	3.5 mm ³ to 7 mm	DC to 18	97.2 (38.25)	≥17 dB	0.35 √f +0.3 (1.8 dB at f _{max})	<0.22 dB	0.16 (f) +0.8
Cable sets for 8719 and 8720 (3.5 mm)							
85131D semi-rigid cable set	3.5mm ³ to PSC-3.5 mm (f) or 3.5 mm (m)	DC to 26.5	53 (21)	≥16 dB	0.30 √f +0.2 (1.8 dB at f _{max})	<0.06 dB	0.16 (f) +0.5
85131F flexible cable set	3.5 mm ³ to PSC-3.5 mm (f) or 3.5 mm (m)	DC to 26.5	53 (21)	≥16 dB	0.25 √f +0.2 (1.5 dB at f _{max})	<0.12 dB	0.13 (f) +0.5
85132D semi-rigid cable set	3.5 mm ³ to 7 mm	DC to 18	53 (21)	≥17 dB	0.25 √f +0.2 (1.3 dB at f _{max})	<0.06 dB	0.16 (f) +0.5
85132F flexible cable set	3.5 mm ³ to 7 mm	DC to 18	53 (21)	≥17 dB	0.25 √f +0.2 (1.3 dB at f _{max})	<0.12 dB	0.13 (f) +0.5
Single cables for 8722 (2.4 mm)							
85133C semi-rigid cable	2.4 mm ³ to PSC-2.4 mm (f)	DC to 50	81 (32)	≥15 dB	0.84 √f +0.3 (5.6 dB at f _{max})	<0.06 dB	0.18 (f)
85133E flexible cable	2.4 mm ³ to PSC-2.4 mm (f)	DC to 50	113 (44)	≥12.5 dB	0.58 √f +0.35 (4.45 dB at f _{max})	<0.25 dB	0.8 +0.16 (f)
85134C semi-rigid cable	2.4 mm ³ to PSC-3.5 mm (f)	DC to 26.5	81 (32)	≥16 dB	0.46 √f +0.3 (2.7 dB at f _{max})	<0.06 dB	0.18 (f)
85134E flexible cable	2.4 mm ³ to PSC-3.5 mm (f)	DC to 26.5	97.2 (38.25)	≥16 dB	0.46 √f +0.3 (2.7 dB at f _{max})	<0.22 dB	0.16 (f) +0.8
85135C semi-rigid cable	2.4 mm ³ to 7 mm	DC to 18	81 (32)	≥17 dB	0.46 √f +0.3 (2.25 dB at f _{max})	<0.06 dB	0.18 (f)
85135E flexible cable	2.4 mm ³ to 7 mm	DC to 18	97.2 (38.25)	≥17 dB	0.46 √f +0.3 (2.25 dB at f _{max})	<0.22 dB	0.16 (f) +0.8
Cable sets for 8722D (2.4 mm)							
85133D semi-rigid cable set	2.4 mm ³ to PSC-2.4 mm (f) or 2.4 mm (m)	DC to 50	53 (21)	≥15 dB	0.55 √f +0.2 (3.7 dB at f _{max})	<0.06 dB	0.16 (f)
85133F flexible cable set	2.4 mm ³ to PSC-2.4 mm (f) or 2.4 mm (m)	DC to 50	72 (28)	≥12.5 dB	0.48 √f +0.25 (3.64 dB at f _{max})	<0.17 dB	0.8 + 0.16 (f)
85134D semi-rigid cable set	2.4 mm ³ to PSC-3.5 mm (f) or 3.5 mm (m)	DC to 26.5	53 (21)	≥16 dB	0.31 √f +0.2 (1.8 dB at f _{max})	<0.06 dB	0.18 (f)
85134F flexible cable set	2.4 mm ³ to PSC-3.5 mm (f) or 3.5 mm (m)	DC to 26.5	53 (21)	≥16 dB	0.31 √f +0.2 (1.8 dB at f _{max})	<0.12 dB	0.13 (f) +0.5
85135D semi-rigid cable set	2.4 mm ³ to 7mm	DC to 18	53 (21)	≥17 dB	0.31 √f +0.2 (1.5 dB at f _{max})	<0.06 dB	0.18 (f)
85135F flexible cable set	2.4 mm ³ to 7 mm	DC to 18	62.9 (24.75)	≥17 dB	0.31 √f +0.2 (1.5 dB at f _{max})	<0.12 dB	0.13 (f) +0.5

1. Phase stability of semi-rigid/flexible cables is specified with a 90-degree bend and a 4"/3" radius.

2. Cable length and stability are supplemental characteristics.

3. Special rugged female connector specifically for connecting to the network analyzer test port. Does not mate with a standard male connector.