

N1802 Calibration Kit

Electrical Data

Impedance	50Ω
Frequency range	DC to 18 GHz
Connector type	N-type

Mating cycles	≥ 500
Maximum torque	1.70 Nm
Recommended torque	1.10 Nm
Gauge	5.28 mm to 5.32 mm

Open	Phase Error ¹
DC - 6 GHz	≤ 2°
6 GHz - 9 GHz	≤ 3°
9 GHz - 18 GHz	≤ 4°

Short	Phase Error ²
DC - 6 GHz	≤ 1.5°
6 GHz - 9 GHz	≤ 2°
9 GHz - 18 GHz	≤ 2.5°

Load	
Resistance	50Ω ± 0.5Ω
Return Loss	
DC - 6 GHz	≥ 42 dB
6 GHz - 9 GHz	≥ 36 dB
9 GHz - 18 GHz	≥ 30 dB
Power Handling	≤ 1.0 W, derate by 0.01 W/K

Thru	
Return loss	
DC - 6 GHz	≥ 40 dB
6 GHz - 9 GHz	≥ 36 dB
9 GHz - 18 GHz	≥ 32 dB

Mechanical Data

Mating cycles	≥ 500
Maximum torque	1.70 Nm
Recommended torque	1.10 Nm
Gauge	5.28 mm to 5.32 mm

Environmental Data

Operating temperature ³	20°C to 26°C
Storage temperature	-40°C to +85°C



Coefficients

Open	$C_0 = -14.2000 \times 10^{-15} \text{ F}$	-14.2000 fF
	$C_1 = 400.000 \times 10^{-27} \text{ F/Hz}$	0.40000 fF/GHz
	$C_2 = -16.0000 \times 10^{-36} \text{ F/Hz}^2$	-0.01600 fF/GHz ²
	$C_3 = 1.00000 \times 10^{-45} \text{ F/Hz}^3$	0.00100 fF/GHz ³
Short	Electrical (Offset) delay	73.384 ps
	Electrical (Offset) loss	0.80 GΩ/s
	$L_0 = -27.0000 \times 10^{-12} \text{ H}$	-27.0000 pH
	$L_1 = 7200.00 \times 10^{-24} \text{ H/Hz}$	7.20000 pH/GHz
Load	$L_2 = -800 \times 10^{-33} \text{ H/Hz}^2$	-0.80000 pH/GHz ²
	$L_3 = 26.0000 \times 10^{-42} \text{ H/Hz}^3$	0.02600 pH/GHz ³
	Electrical (Offset) delay	73.384 ps
	Electrical (Offset) loss	0.80 GΩ/s
Thru	Electrical (Offset) delay	0.0 ps
	Electrical (Offset) loss	0.0 GΩ/s
Thru	Electrical (Offset) delay	212.814 ps
	Electrical (Offset) loss	2.20 GΩ/s

¹ The nominal phase is defined by the Offset Delay, the Offset Loss, and the Fringing Capacitances

² The nominal phase is defined by the Offset Delay, the Offset Loss, and the Short Inductant

³ Temperature range over which these specifications are valid

