

T4311 Calibration Kit

Electrical Data

Impedance	50Ω
Frequency range	DC to 43 GHz
Connector type	2.92 mm female

Mating cycles	≥ 500
Maximum torque	1.70 Nm
Recommended torque	0.90 Nm
Gauge	0.00 mm to 0.08 mm

Short	Phase Error ²
DC - 4 GHz	≤ 1.5°
4 GHz - 26.5 GHz	≤ 4°
26.5 GHz - 43 GHz	≤ 5°

Load	
Resistance	50Ω ± 0.5Ω
Return Loss	
DC - 4 GHz	≥ 40 dB
4 GHz - 26.5 GHz	≥ 28 dB
26.5 GHz - 43 GHz	≥ 25 dB
Power Handling	≤ 0.5 W

Thru	
Electrical (Offset) delay	65.712 ps
Return loss	
DC - 4 GHz	≥ 32 dB
4 GHz - 26.5 GHz	≥ 30 dB
26.5 GHz - 43 GHz	≥ 28 dB

Mechanical Data

Mating cycles	≥ 500
Maximum torque	1.70 Nm
Recommended torque	0.90 Nm
Gauge	0.00 mm to 0.08 mm

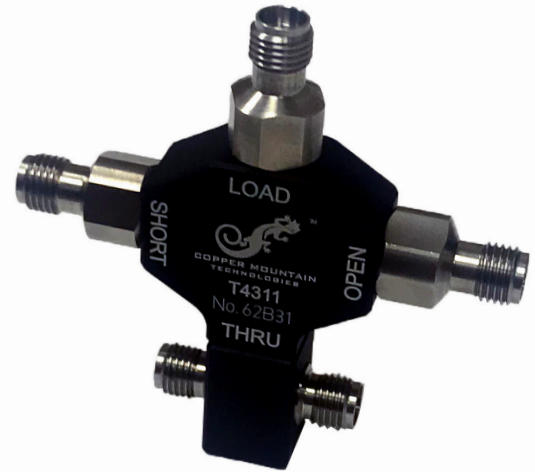
Environmental Data

Operating temperature³	20°C to 26°C
Storage temperature	-40°C to +85°C

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

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



Coefficients

Open	$C_0 = 4.3 \times 10^{-15} \text{ F}$	
	$C_1 = 431 \times 10^{-27} \text{ F/Hz}$	
	$C_2 = -11.5 \times 10^{-36} \text{ F/Hz}^2$	
	$C_3 = 0.12 \times 10^{-45} \text{ F/Hz}^3$	
	Electrical (Offset) delay	28.353 ps
	Electrical (Offset) loss	2.4 GΩ/s
Short	$L_0 = 0 \times 10^{-12} \text{ H}$	
	$L_1 = 0 \times 10^{-24} \text{ H/Hz}$	
	$L_2 = 0 \times 10^{-33} \text{ H/Hz}^2$	
	$L_3 = 0 \times 10^{-42} \text{ H/Hz}^3$	
	Electrical (Offset) delay	28.353 ps
	Electrical (Offset) loss	2.4 GΩ/s
Load	Electrical (Offset) delay	0.0 ps
	Electrical (Offset) loss	0.0 GΩ/s
Thru	Electrical (Offset) delay	65.712 ps
	Electrical (Offset) loss	2.7 GΩ/s

