

Your calibration kit has been designed to withstand a moderate amount of physical stress. However, to retain its high precision performance you should treat it with care and prevent any mechanical shock.

It can be damaged if excessive force is applied to the connectors. Such a damage is considered as an abuse of the cal kit and will void the warranty when verified by our service professionals. When the kit is not in use, mount protective caps on the connectors such as the ones which came with the kit.

Store the kit in a shock-resistant environment.

Type N connectors may be connected finger tight. If a torque wrench is used, 12 lb-inch (136 N-cm) is recommended. For information on service and recertification go to

| | | |
|---------------------------------|-----------------------------|--|
| Temperature loading | operating temperature range | +5 °C to +40 °C |
| | storage temperature range | -40 °C to +70 °C, in line with EN 60068-2-1 and EN 60068-2-2 |
| Recommended inspection interval | | 1 year |



85514-90001



Data Sheet

85514A

Cal Kit

Type-N(m) 50 Ω

DC to 9 GHz

| | |
|----------------|------------------|
| Standard | Electrical Delay |
| Through | |
| male-male | 241.167 ps |

| | |
|-------------|--------------|
| Standard | Offset Delay |
| Open | |
| male | 53.882 ps |

| | |
|--------------|--------------|
| Standard | Offset Delay |
| Short | |
| male | 53.385 ps |

| | |
|-------------|--------------------------------|
| Standard | DC-Resistance |
| Load | |
| male | 50 Ω \pm 0.5 Ω |

| | | | |
|----------------|-----------------------|--------------|--------------|
| Standard | Return Loss (typical) | | |
| Through | DC to 4 GHz | 4 to 8 GHz | 8 to 9 GHz |
| male-male | ≥ 36 dB | ≥ 31 dB | ≥ 28 dB |

| | | | | |
|-------------|----------------------|-------------------------|---------------------------|---------------------------|
| Standard | $\frac{C_0}{E-15 F}$ | $\frac{C_1}{E-27 F/Hz}$ | $\frac{C_2}{E-36 F/Hz^2}$ | $\frac{C_3}{E-45 F/Hz^3}$ |
| Open | | | | |
| male | -8.927 | -105.823 | 585.235 | -53.08 |

| | | | | |
|--------------|----------------------|-------------------------|---------------------------|---------------------------|
| Standard | $\frac{L_0}{E-12 H}$ | $\frac{L_1}{E-24 H/Hz}$ | $\frac{L_2}{E-33 H/Hz^2}$ | $\frac{L_3}{E-42 H/Hz^3}$ |
| Short | | | | |
| male | 20.225 | -1479.262 | -591.4 | 63.326 |

| | | |
|-------------|--------------------|--------------|
| Standard | Return Loss (spec) | |
| Load | DC to 6 GHz | 6 to 9 GHz |
| male | ≥ 42 dB | ≥ 35 dB |

| | | |
|----------------|--------------------------|---------------|
| Standard | Insertion Loss (typical) | |
| Through | DC to 4 GHz | 4 to 9 GHz |
| male-male | ≤ 0.05 dB | ≤ 0.1 dB |

| | | |
|-------------|-------------------------------------|------------------|
| Standard | Deviation from Nominal Phase (spec) | |
| Open | DC to 4 GHz | 4 to 9 GHz |
| male | $\leq 2.0^\circ$ | $\leq 3.0^\circ$ |

| | | |
|--------------|-------------------------------------|--|
| Standard | Deviation from Nominal Phase (spec) | |
| Short | DC to 9 GHz | |
| male | $\leq 1.25^\circ$ | |

| | |
|-------------|------------|
| Standard | Max. Power |
| Load | |
| male | 0.5 W |