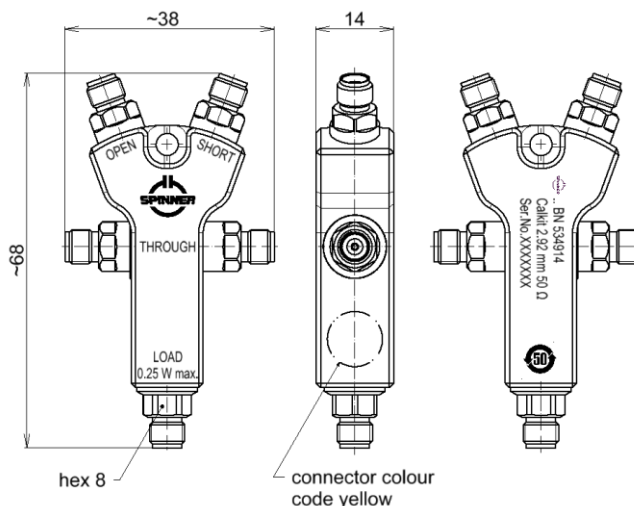


## OSLT Compact Calibration Kit (4-in-1) || BN 534914



all dimensions in millimeter

## Radio frequency characteristics

|                 |                       |                                                                                                                        |
|-----------------|-----------------------|------------------------------------------------------------------------------------------------------------------------|
| Interface type  |                       | 2.92 mm socket per IEEE Std 287, GPC <sup>1)</sup>                                                                     |
| Frequency range |                       | DC to 44 GHz                                                                                                           |
| THROUGH         | Return loss, min.     | 30 dB @ DC to 4 GHz<br>26 dB @ 4 to 26.5 GHz<br>21 dB @ 26.5 to 40 GHz<br>19 dB @ 40 to 44 GHz                         |
|                 | Insertion loss, max.  | $0.04 \text{ dB} \times \sqrt{f \text{ (GHz)}}$                                                                        |
| OPEN            | Phase deviation, max. | 1.5 deg. @ DC to 4 GHz<br>2.5 deg. @ 4 to 10 GHz<br>4.5 deg. @ 10 to 26.5 GHz<br>5.0 deg. @ 26.5 to 44 GHz             |
| SHORT           | Phase deviation, max. | 1.5 deg. @ DC to 4 GHz<br>2.0 deg. @ 4 to 10 GHz<br>3.5 deg. @ 10 to 26.5 GHz<br>4.5 deg. @ 26.5 to 44 GHz             |
| LOAD            | DC-resistance         | $50 \Omega \pm 0.5 \Omega$                                                                                             |
|                 | Return loss, min.     | 39 dB @ DC to 4 GHz<br>33 dB @ 4 to 10 GHz<br>28 dB @ 10 to 26.5 GHz<br>24 dB @ 26.5 to 40 GHz<br>22 dB @ 40 to 44 GHz |
|                 | Power rating, max.    | 0.25 W                                                                                                                 |

1) In preparation of the upcoming new version of the IEEE Std. 287, the standards in this kit are designed for a pin diameter of 0.927 mm. Usage with male connectors with a pin diameter of 0.914 mm results in an increase of the reflection factor magnitude of typically 0.01 for the load and every port of through and an increase of the phase deviation of open and short of typically 1°.



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## Calibration data

| Format      |                           | Keysight / Anritsu                       | Rohde & Schwarz                |
|-------------|---------------------------|------------------------------------------|--------------------------------|
| THROUGH     | Electrical delay / length | 116.28 ps                                | 34.86 mm                       |
| OPEN        | C0                        | $-5.847 \times 10^{-15} \text{ F}$       | -5.847 fF                      |
|             | C1                        | $720.656 \times 10^{-27} \text{ F/Hz}$   | 0.720656 fF/GHz                |
|             | C2                        | $-29.195 \times 10^{-36} \text{ F/Hz}^2$ | $-0.029195 \text{ fF/(GHz)}^2$ |
|             | C3                        | $0.377 \times 10^{-45} \text{ F/Hz}^3$   | $0.000377 \text{ fF/(GHz)}^3$  |
|             | Offset                    | 31.554 ps                                | 9.46 mm                        |
| SHORT       | L0                        | $12.513 \times 10^{-12} \text{ H}$       | 12.513 pH                      |
|             | L1                        | $-1299.154 \times 10^{-24} \text{ H/Hz}$ | -1.299154 pH/GHz               |
|             | L2                        | $54.693 \times 10^{-33} \text{ H/Hz}^2$  | $0.054693 \text{ pH/(GHz)}^2$  |
|             | L3                        | $-0.702 \times 10^{-42} \text{ H/Hz}^3$  | $-0.000702 \text{ pH/(GHz)}^3$ |
|             | Offset                    | 31.174 ps                                | 9.346 mm                       |
| Offset loss |                           | 2 GΩ/s                                   |                                |

## Mechanical characteristics

|                                            |                                  |
|--------------------------------------------|----------------------------------|
| Center conductor material / surface finish | CuBe age hardened / gold-plated  |
| Outer conductor material / surface finish  | CuBe, copper alloy / gold-plated |
| Insulation                                 | cross linked polystyrene, PS     |
| Other metallic parts / surface finish      | aluminium / anodised (blue)      |
| Weight, approx.                            | 0.05 kg                          |
| Marking                                    | laser engraving                  |

| Component Name | Toxic or Hazardous Substances and Elements |    |    |       |     |      |
|----------------|--------------------------------------------|----|----|-------|-----|------|
|                | Pb                                         | Hg | Cd | Cr 6+ | PBB | PBDE |
| Metal parts    | X                                          | O  | O  | O     | O   | O    |

The environmental protection use period of 50 years is valid, if the product is used as intended.

## Environmental conditions

|                           |                                                           |
|---------------------------|-----------------------------------------------------------|
| <b>Operation</b>          |                                                           |
| Ambient temperature range | +18 to +28°C                                              |
| <b>Storage</b>            |                                                           |
| Ambient temperature range | -40 to +70°C (in line with EN 60068-2-1 and EN 60068-2-2) |

## Scope of delivery and accessories

|                   |                                                                                                |
|-------------------|------------------------------------------------------------------------------------------------|
| Scope of delivery | certificate of calibration, protective caps, protective bag, data sheet, handling instructions |
|-------------------|------------------------------------------------------------------------------------------------|

