

Calibration kit; OSLT; boxed 1.35 mm | BN 534936





all dimensions in millimeter

Radio frequency characteristics

Interface type		1.35 mm plug and socket per IEEE Std 287					
Frequency range		DC to 90 GHz					
Characteristic impedance		50 Ω					
THROUGH	Return loss, min.	27 dB @ DC to 10 GHz					
		24 dB @ 10 to 26.5 GHz					
		21 dB @ 26.5 to 50 GHz					
		18 dB @ 50 to 70 GHz					
		15 dB @ 70 to 90 GHz					
	Insertion loss, max.	0.07 dB x √f (GHz)					
OPEN	Defined by:	determination of S-parameters					
SHORT	Defined by:	determination of S-parameters					
LOAD	DC-resistance	50 Ω ± 0.5 Ω					
	Return loss, min.	31 dB @ DC to 10 GHz					
		25 dB @ 10 to 26.5 GHz					
		20 dB @ 26.5 to 50 GHz					
		14 dB @ 50 to 70 GHz					
		10 dB @ 70 to 90 GHz					
	Defined by:	determination of S-parameters					
	Power rating, max.	0.1 W					



Mechanical characteristics

Inner conductor material / surface coating	CuBe age hardened / gold-plated		
Outer conductor material / surface coating	CuBe / gold-plated		
Dielectric material	PS		
Other parts material / surface coating	copper alloy / gold plated CuBe / CuSnZn-plated stainless steel		
Weight, approx.	1.1 kg		
Marking	laser engraving		

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

Environmental conditions

Operation					
Ambient temperature range	+18 to +28°C ¹⁾				
Relative humidity, max.	95% (non-condensing)				
Storage					
Ambient temperature range	-40 to +70°C (in line with EN 60068-2-1 and EN 60068-2-2)				
Relative humidity, max.	95% (non-condensing)				

¹⁾ Temperature range within all components maintain conformance to their specification.

Scope of delivery

Description	Qty per kit	Part No	Calibration Option		
1.35 mm Open circuit plug	1	BN 534931R000	Factory calibration		
1.35 mm Open circuit socket	1	BN 534932R000	Factory calibration		
1.35 mm Short circuit plug	1	BN 534929R000	Factory calibration		
1.35 mm Short circuit socket	1	BN 534930R000	Factory calibration		
1.35 mm Load plug	1	BN 534927R000	Factory calibration		
1.35 mm Load socket	1	BN 534928R000	Factory calibration		
1.35 mm Through plug / plug	1	BN 534933R000	Factory calibration		
1.35 mm Through socket / socket	1	BN 534934R000	Factory calibration		
Torque Wrench 8 mm / 90 N·cm	1	BN 154141R000	Factory calibration		
Certificate of calibration incl. calibration data					
USB flash drive including					
certificate of calibration					
determined S-parameter-files for OPEN, SHORT, LOAD					
data sheet					
product manual calibration kit		M36515			
Handling instruction torque wrench		M31071			
Aluminium storage case					





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Accessories

1.35 mm Through plug / socket	BN 534935R000
1.35 mm Gauge male conductor	BN 534940
1.35 mm Gauge female conductor	BN 534941

Calibration data

Calibration data includes determined S-parameters for OPEN, SHORT and LOAD standards to achieve best possible performance.

Re-calibration

The suggested initial interval for recalibration is 12 months or 500 matings, whichever comes first. The actual need for recalibration depends on the use and the maintenance of the kit. The recalibration interval should begin with the day of initial use after recalibration.

Pin depth limits

Pin depth is the distance between outer conductor mating plane and inner conductor mating plane. Positive values stand for protrusion of the inner conductor, negative values for recession.

Connector Type	Typical Pin Depth	Measurement Uncertainty	Ranges of measurement ²⁾
1.35 mm	-0.003 to -0.02 mm	0.003 mm	0 to -0.023 mm

²⁾ Ranges of measurement is the limit that could be measured with a suitable gauge due to the measurement uncertainty. These values could still be within the specification. The measurement uncertainty is based on the measurement with SPINNER gauges and the specified operating temperature. Deviation from these conditions may cause higher measurement uncertainty.