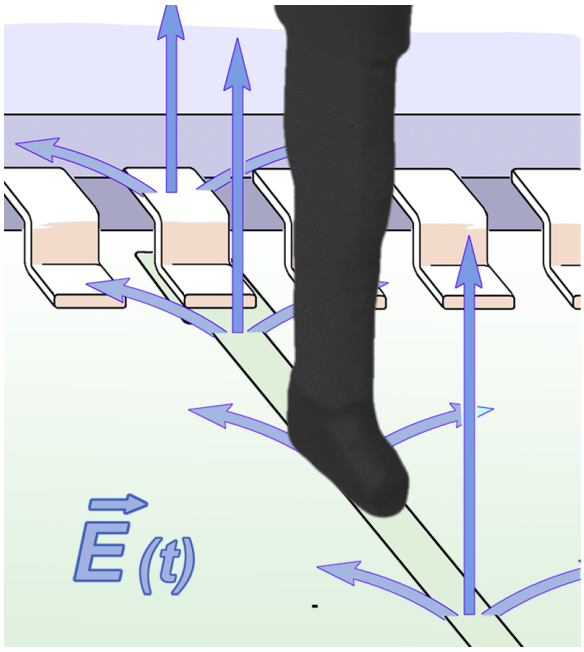
RF-E 05

E-Field Probe 30 MHz up to 3 GHz



Short description

The electrode at the underside of the probe head of the RF-E 05 has a width of approx. 0.5 mm. The E-fields of clocked lines, IC pins, and smaller components are precisely located. The RF-E 05 probe was developed for Langer scanner.

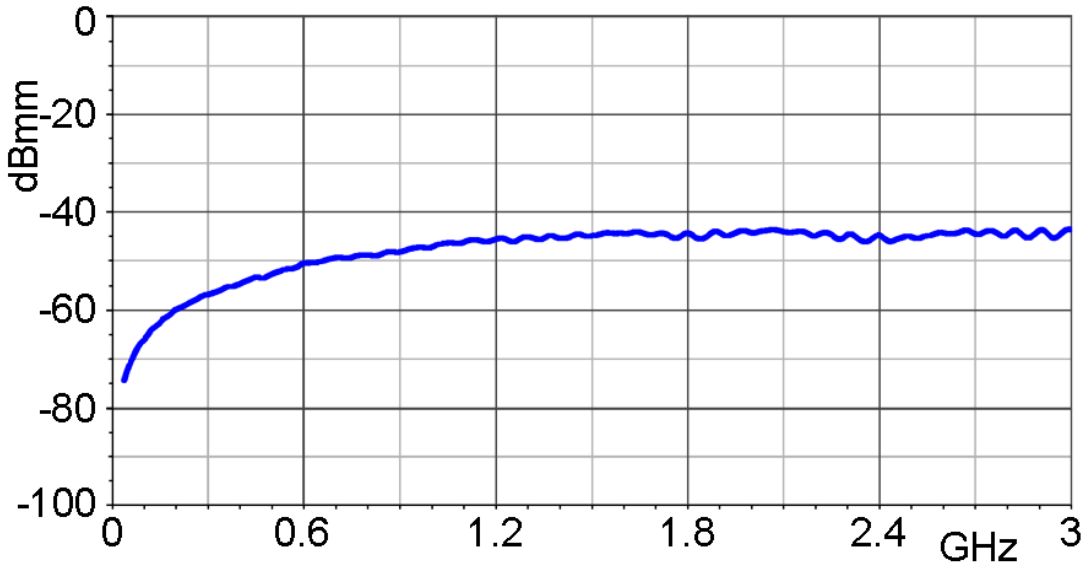
The RF-E 05 is a near-field probe. It has the same structure as the RF-E 02 and RF-E 10 probes, but detects E-fields from very small ranges. The RF-E 05 is designed to detect the specific cause of an electrical interference field. For measurements the E-field probe is positioned directly onto or held above the components or surfaces of printed circuit boards.The near-field probe is small and handy. It has a current attenuating sheath and, therefore, is electrically shielded. It can be connected to a spectrum analyzer or an oscilloscope with a 50 Ω input. The H-field probe does not have an internal terminating resistance of 50 Ω.

The near-field probe can be used for RF injection in the context of a surface scan in according to IEC 62132-9. The maximum forward power [dBm] for this application is shown in the diagram below. The curve for the probe factor used to calculate the decoupled fields strength is available from our sales department. Please note that the probe must not be held in the hand during coupling, and the user must ensure appropriate shielding from the surrounding environment. Langer EMV-Technik GmbH assumes no liability for damage to persons or equipment resulting from improper handling during coupling.

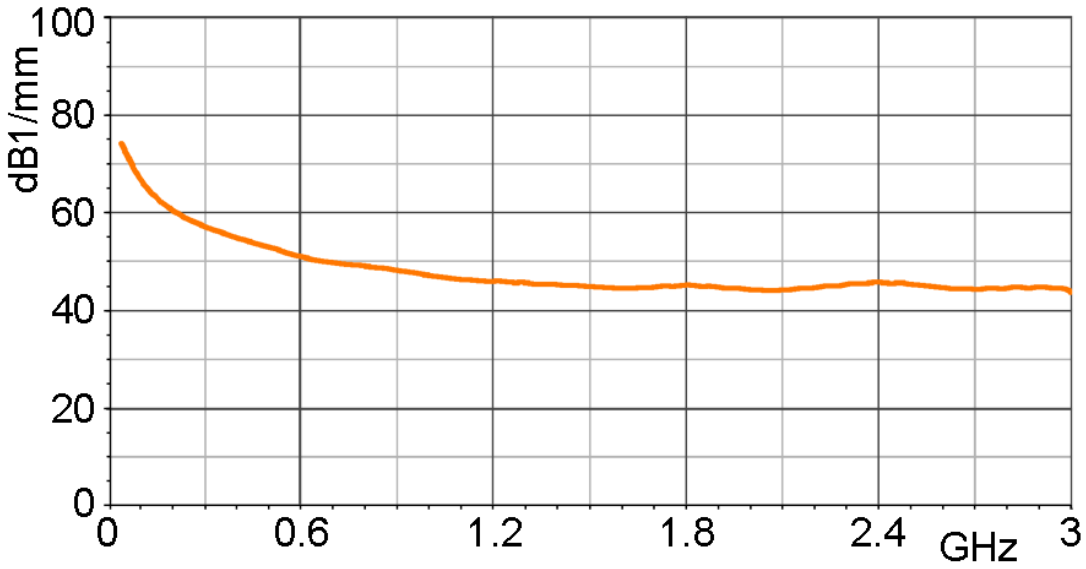
Technical parameters

Frequency range	30 MHz ... 3 GHz
Resolution	≈ 0.6 mm
Probe head dimensions	≈ (1 x 8) mm
Connector - output	SMB, male, jack

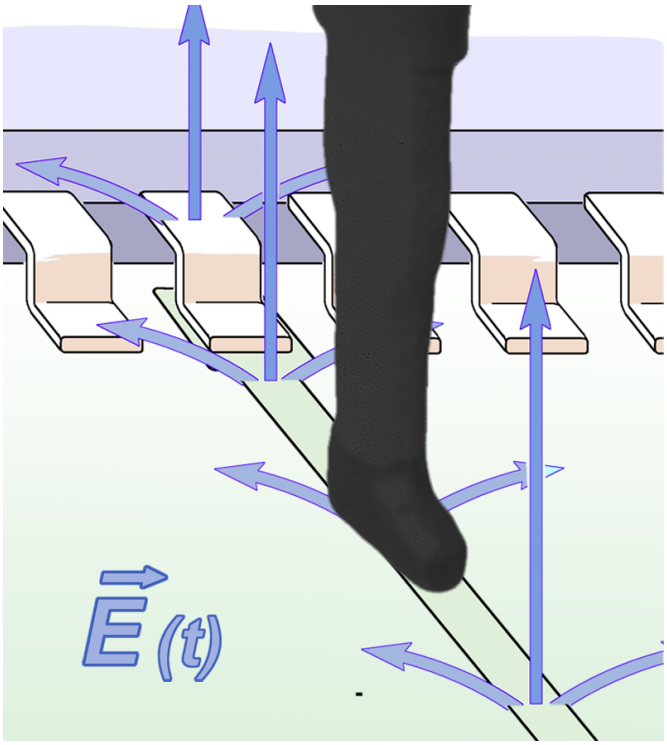
Frequency response [dBµV] / [dBµV/mm]



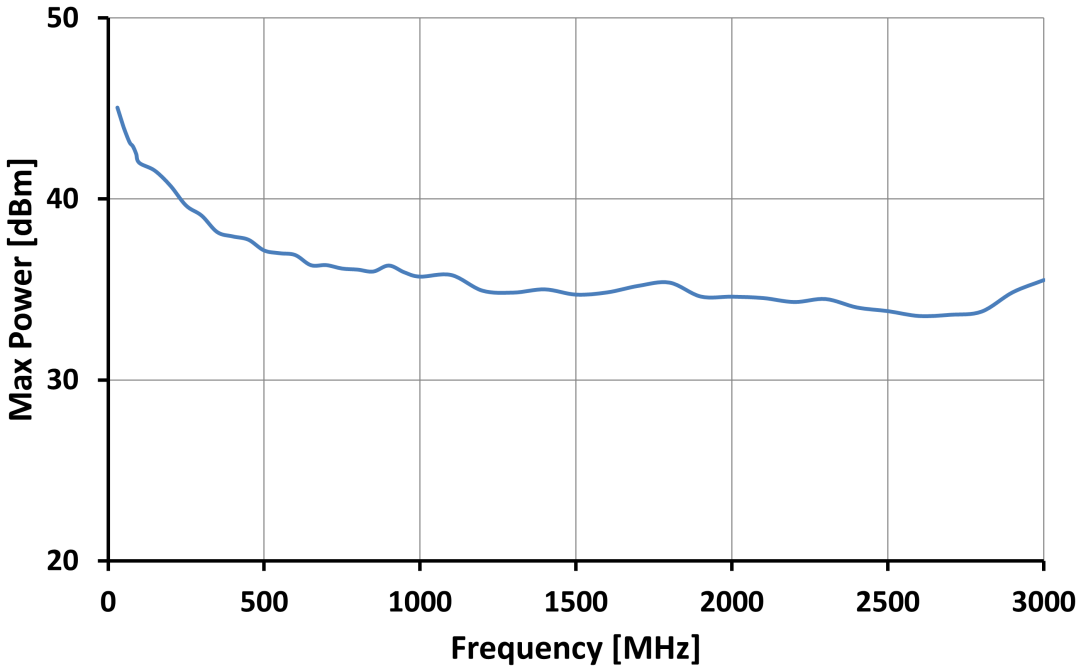
E- field correction curve [dBµV/mm] / [dBµV]



Measuring principles



Max. Forward Power [dBm]



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Probe head