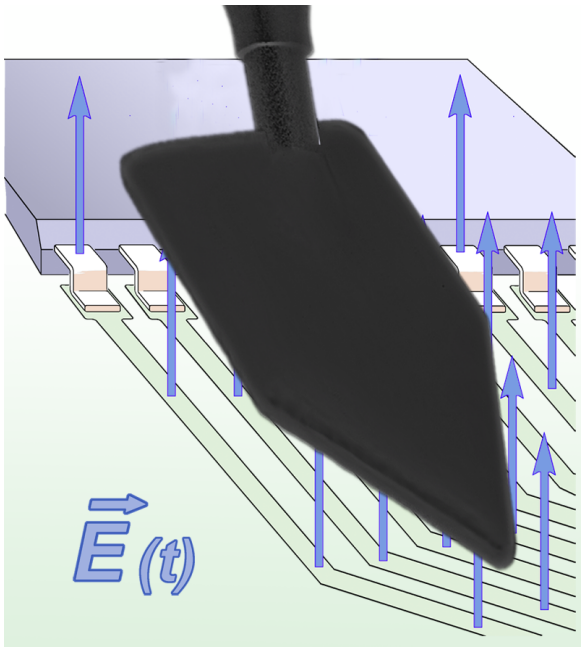
RF-E 02

E-Field Probe 30 MHz up to 1.5 GHz



Short description

The RF-E 02 near-field probe detects electrical fields that are decoupled from bus structures, larger components or supply surfaces. The electrode surface on the underside of the probe tip is approx. 2 cm x 5 cm. The probe functions best within distances of 1 cm - 2 cm from the component.

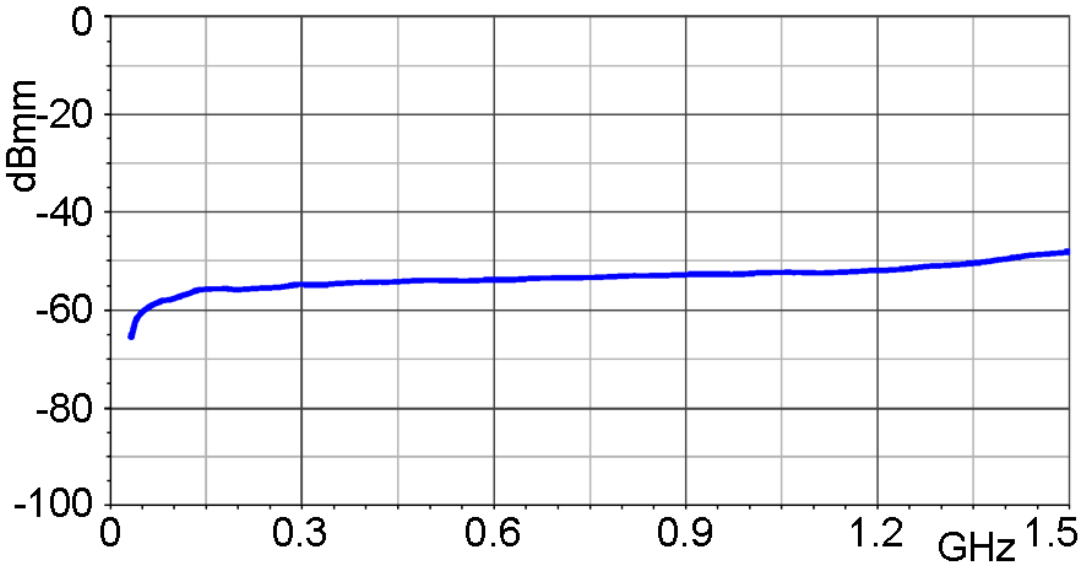
The RF-E 02 is a passive near-field probe. In principle it has the same structure as the RF-E 05 and RF-E 10 probes. When measuring, the bottom surface of the probe head is positioned close to the measured object. This allows the E-field emitted by an assembly to be detected. To achieve a higher resolution, only the tip of the probe head should be held toward the measured object. 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.

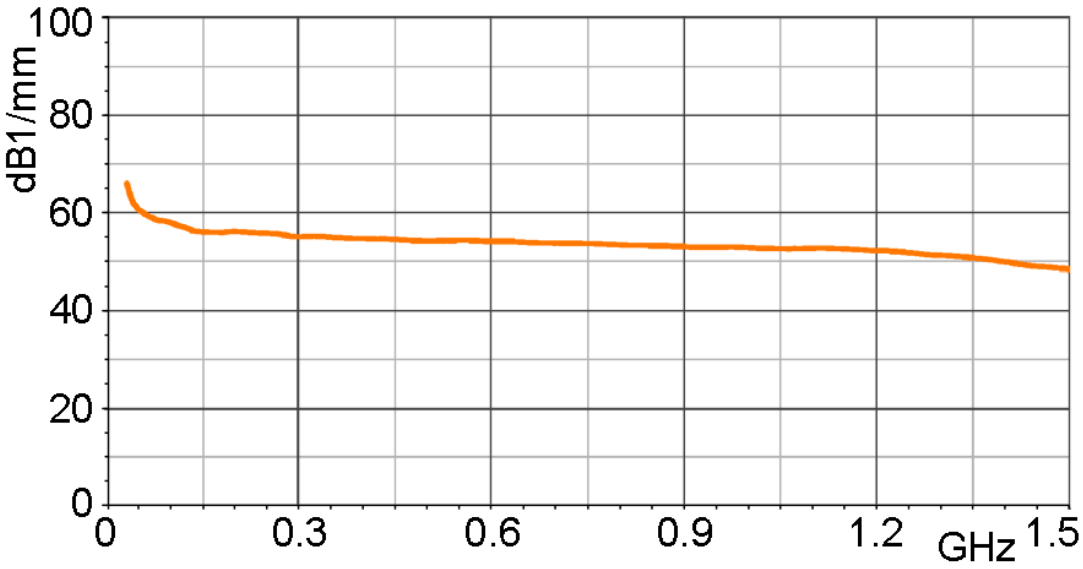
Technical parameters

Frequency range	30 MHz - 1.5 GHz
Probe head dimensions	≈ (23 x 53) mm
Connector - output	SMB, male, jack

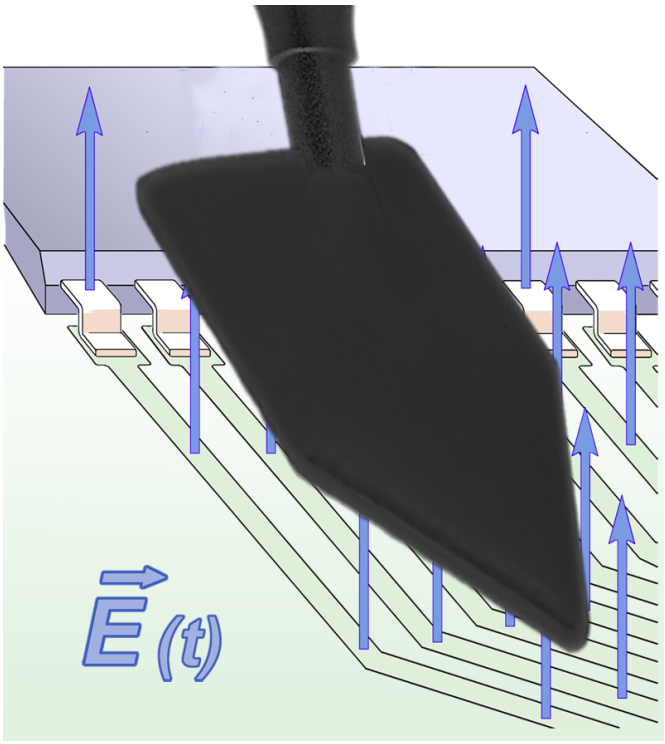
Frequency response [dBµV] / [dBµV/mm]



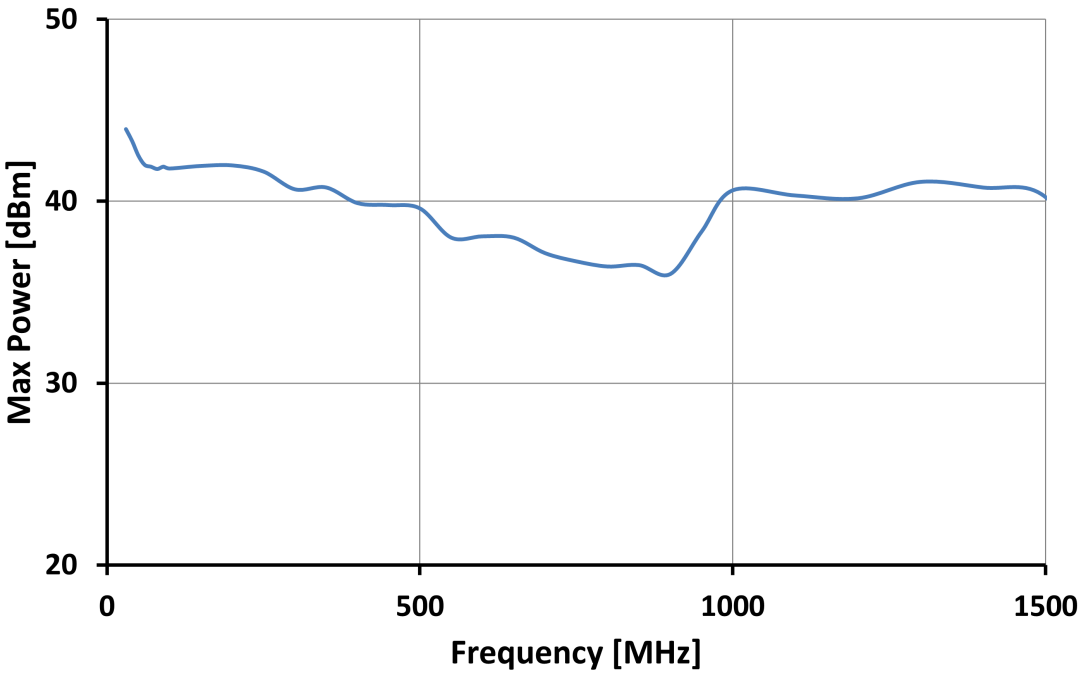
E- field correction curve [dBµV/mm] / [dBµV]



Measuring principles



Max. Forward Power [dBm]



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Probe head