

# LF-R 3

H-Field Probe 100 kHz up to 50 MHz



## Short description

The LF-R 3 near-field probe detects high resolution RF magnetic fields directly on assemblies, for example, in the area around IC pins and IC cases, conducting paths, decoupling capacitor, and EMC components.

The LF-R 3 probe is a passive near-field probe. It has the same basic construction as the LF-R 50 and LF-R 400 probes. Of these three probes, the LF-R 3 has the highest resolution. This probe is suitable for measurements close to the components in the high magnetic field strength range, but should not be used for measurements from a distance.

This can be done using LF-R 400 and LF-R 50.

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  $\Omega$  input. The H-field probe does not have an internal terminating resistance of 50  $\Omega$ .

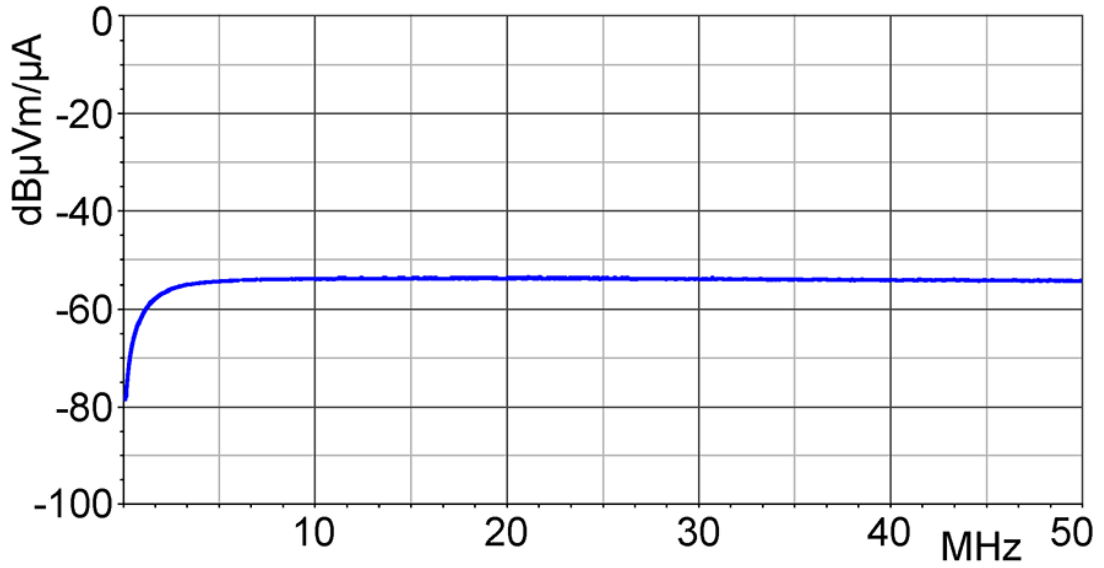
## Technical parameters

|                       |                            |
|-----------------------|----------------------------|
| Frequency range       | 100 kHz ... 50 MHz         |
| Resolution            | $\approx 1$ mm             |
| Probe head dimensions | $\varnothing \approx 3$ mm |
| Connector - output    | SMB, male, jack            |

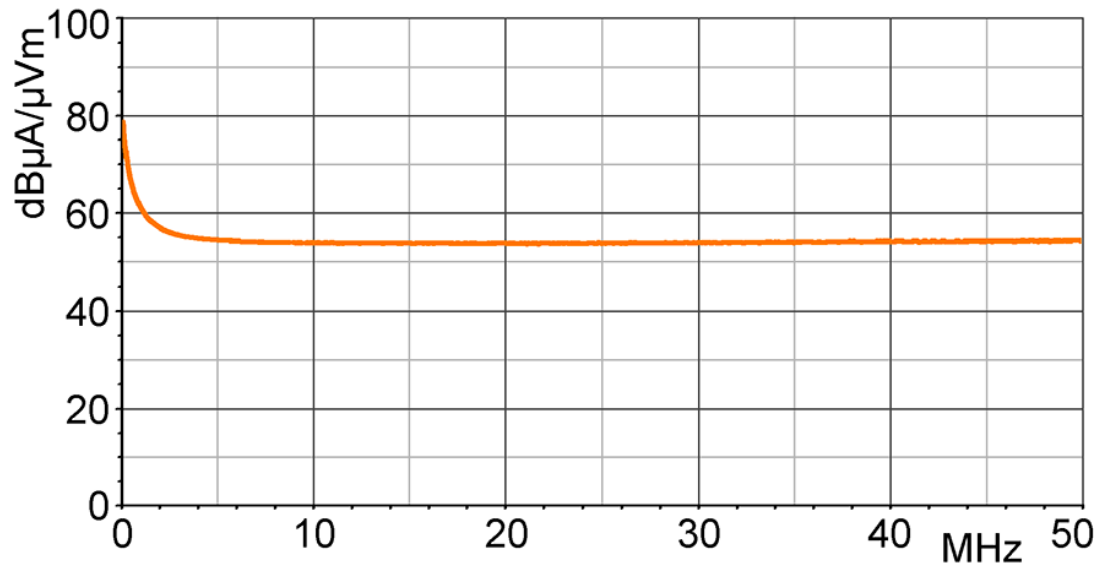
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Frequency response [dB $\mu$ V] / [dB $\mu$ A/m]



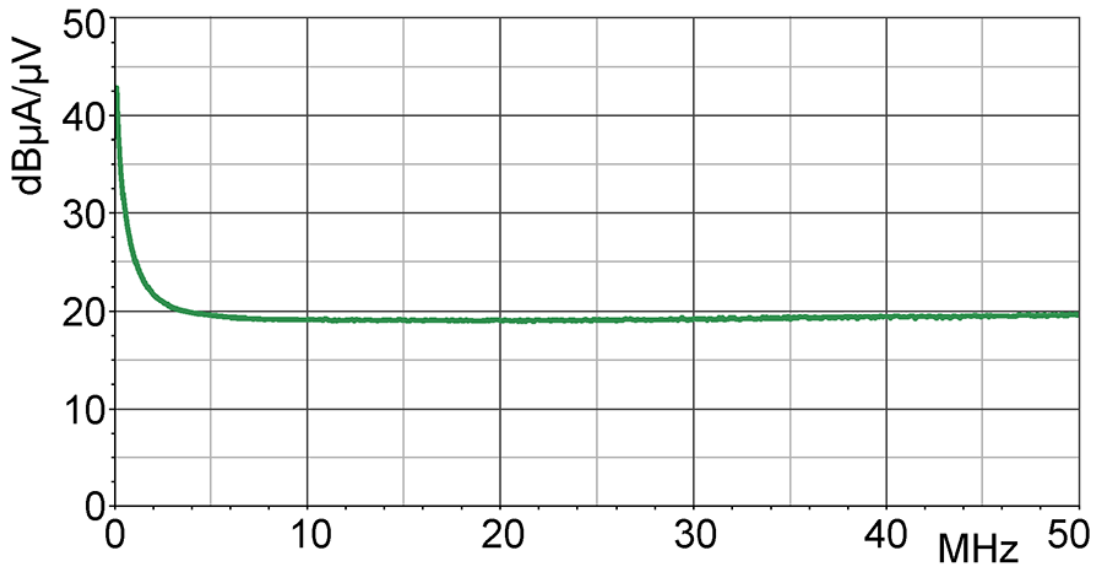
H-field correction curve [dB $\mu$ A/m] / [dB $\mu$ V]



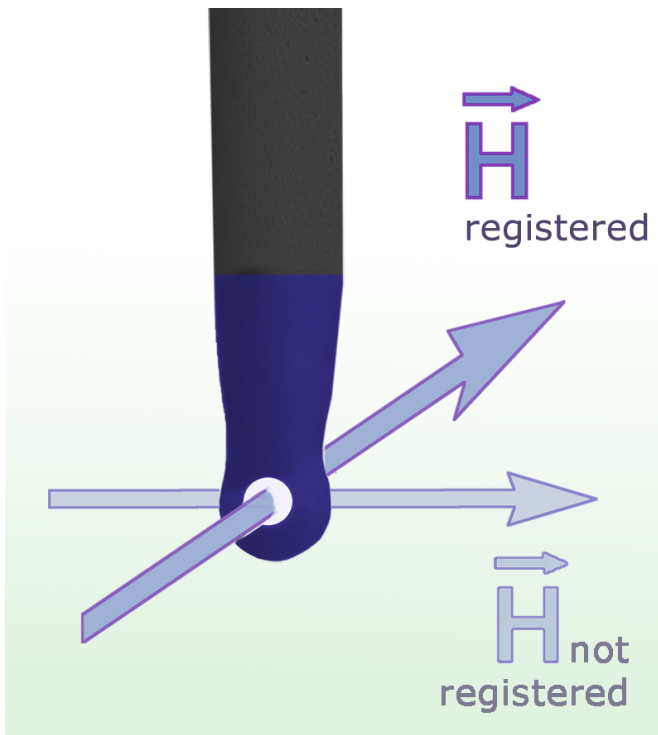
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Current correction curve [dB $\mu$ A] / [dB $\mu$ V]



Measuring principles



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Probe head

