

RF-B 3-2

H-Field Probe 30 MHz up to 3 GHz



Short description

The measurement coil of the RF-B 3-2 H-field probe is set at a 90° angle to the probe shaft. By positioning the probe head vertically, the measurement coil touches the surface of the printed circuit board directly. This allows for use at places on the surface of printed circuit boards, which are typically hard to access, e.g. between large components of switching controllers.

The RF-B 3-2 is a passive near-field probe which detects magnetic field lines emitted from the measured object at 90°. Magnetic field lines which enter the probe laterally are not detected.

In contrast to the RF-R 3-2 H-field probe, its coil is positioned in the probe tip at a 90° angle. 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	≈ 2 mm
Probe head dimensions	Ø ≈ 4 mm
Connector - output	SMB, male, jack
Weight	15 g

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Frequency response [dB μ V] / [dB μ A/m]



H-field correction curve [dB μ A/m] / [dB μ V]



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Current correction curve [dB μ A] / [dB μ V]



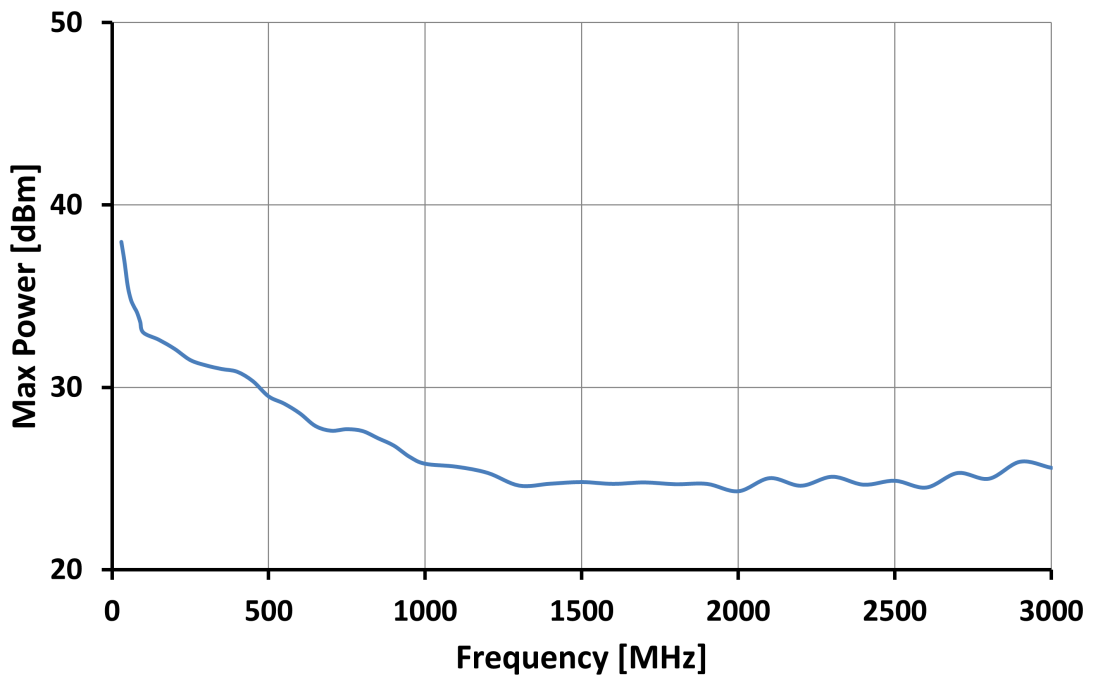
Measuring principles



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Max. Forward Power [dBm]



Probe head

