

# P503

DPI Coupling Network up to 1 GHz, 50 V



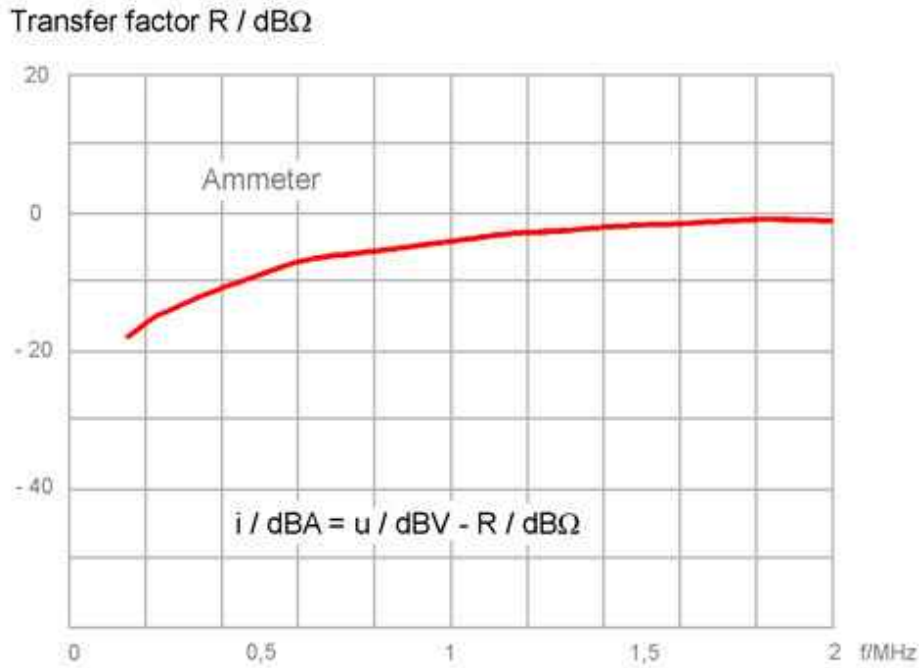
## Short description

The P503 DPI coupling network is designed for RF direct power injection (DPI) in IC pins according to IEC 62132-4. Current and voltage can be measured separately during the power injection via integrated measuring outputs. The P503 coupling network is connected to a power amplifier.

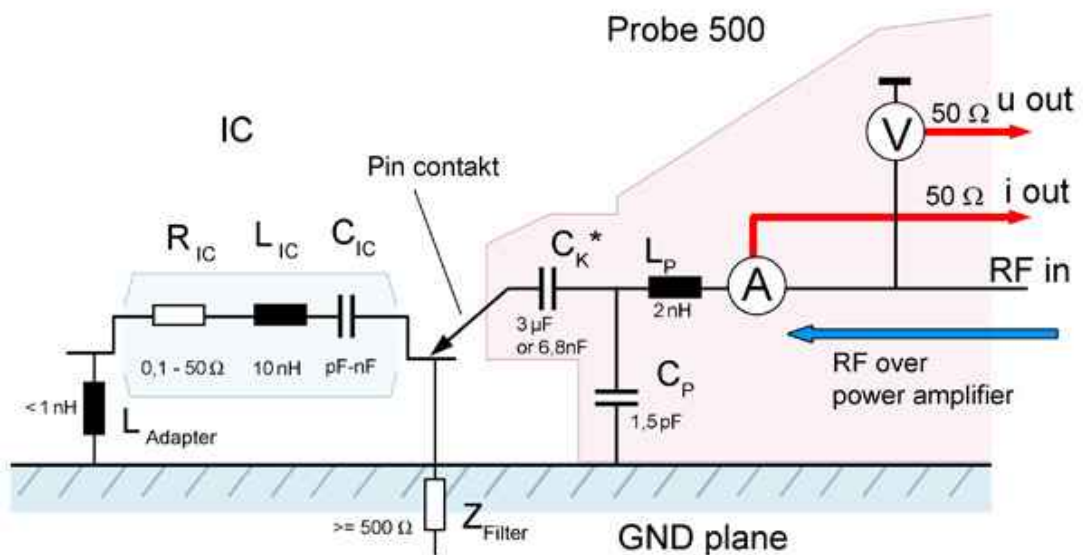
## Technical parameters

<b>Coupling capacity</b>	3 $\mu$ F
<b>Voltage probe</b>	without preamplifier
Frequency range	16 kHz ... 3 GHz
Measurement output	50 $\Omega$ , SMB
Transfer factor	-40 dB
<b>Ammeter /current probe</b>	with preamplifier
-1 dB compression point (output)	120 dB $\mu$ V
Frequency range	200 kHz ... 1 GHz
IP3	134 dB $\mu$ V
Correction curve R (2MHz - 1 GHz), typical	0 dB $\Omega$ (= 1 V/A)
Correction curve R (200 kHz - 2 MHz) [dB $\Omega$ ]	characteristic curve
Measurement output	50 $\Omega$ , SMB
Noise figure	4.5 dB
Delay from current to voltage, typical	240 ps
<b>Supply voltage</b>	12 V/DC
<b>Max. forward power</b>	30 W
<b>Max. input voltage RF</b>	50 V <sub>eff</sub>
<b>Max. input current RF</b>	1 A
<b>Connector - input</b>	50 $\Omega$ , SMA

## Frequency response



## Equivalent circuit



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Design, view 1

