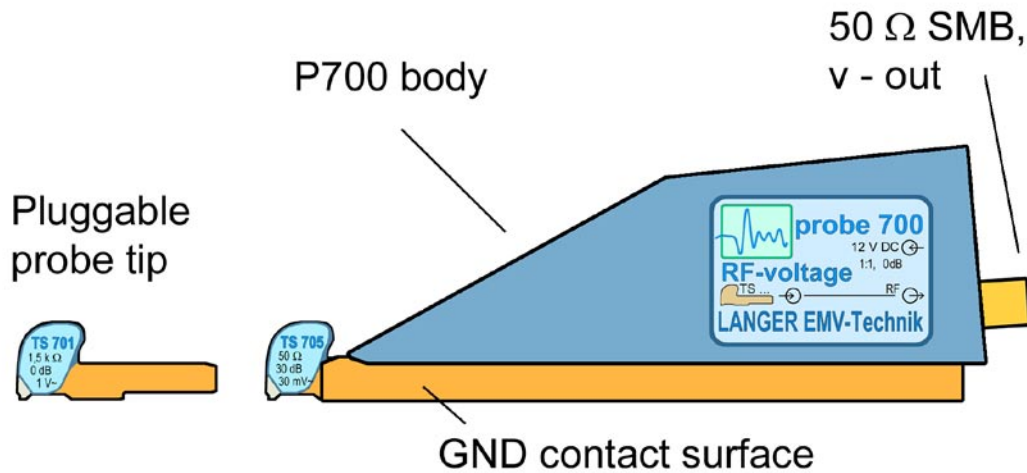
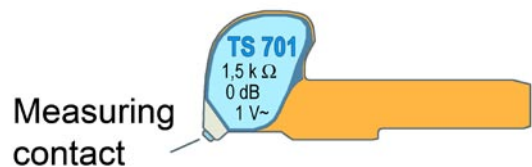


**Probe 700****RF voltage probe  
Line-conducted RF voltage measurement**

Low-capacitance and low-inductance voltage measurement at IC pins:

**Design:**

The probe consists of the P700 body and a variable pluggable probe tip (TS).  
The probe tips are available with different internal resistance and different gain.  
Every probe tip is delivered as a unit with the P700 probe body.



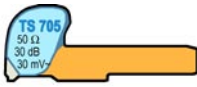
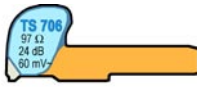

**Probe tip****Use:**

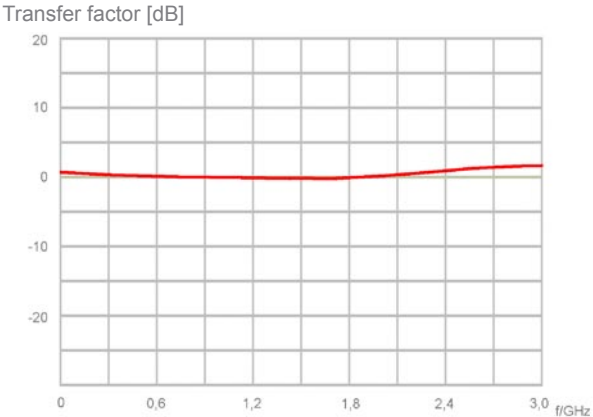
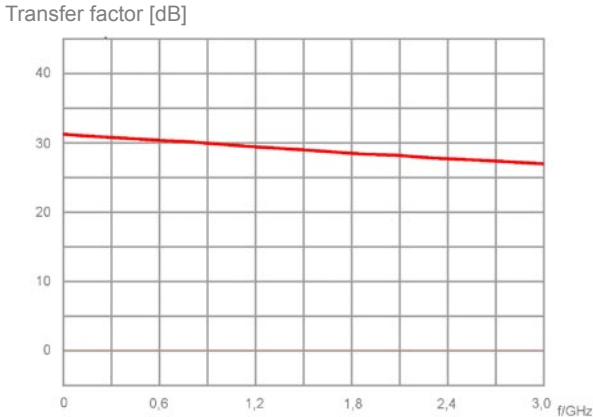
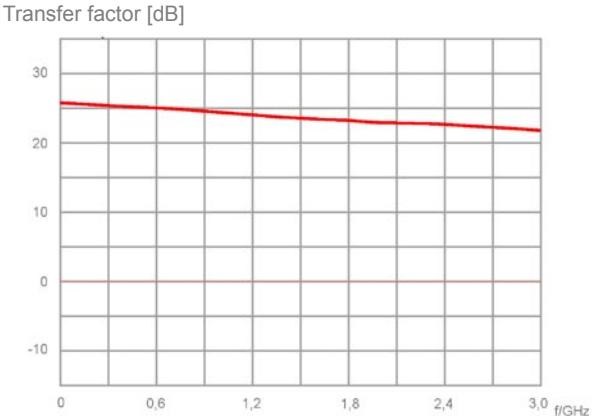
HF voltage measurement on ICs. The voltmeter is ideal for measurements in non-matched systems (source impedances unequal 50 R, IC pin).

**Properties:**

The output of the P700 probe is isolated from the measurement divider by a 30 dB preamplifier. A low probe tip capacitance (TS 701 overcoupling capacity: 0.3 pF) reduces the susceptibility to transient behavior on low-impedance sources.  
The probe tip measuring contact is connected to the inner probe tip resistor via an extremely short path and consequently with a low inductance ( $L \ll 1\text{nH}$ ).  
Special characteristic of the TS 705 probe tip: The input resistance is 50 Ω. The length of the connection to the probe tips inner resistor is approx. 4 mm. The measuring output is isolated from the measuring contact via an preamplifier. No reflection occurs in the measuring cable with a mismatched DUT.

<b>Probe 700</b>	<b>P700 body</b>
RF input	Special plug contact to the probe tip (TS)
RF measuring output	SMB, 50 Ω
Auxiliary power	12 V

Probe 700	TS 7xx probe tips for the P700 probe body				
					
Probe tip	<b>TS 701</b>	<b>TS 705</b>	<b>TS 706</b>	<b>TS 751</b>	
Input resistance	1.5 k $\Omega$	50 $\Omega$	100 $\Omega$	150 $\Omega$	
Transfer factor $V_{out}/V_{in}$	0 dB	30 dB	25 dB	20 dB	
Frequency range	20 kHz - 3 GHz	24 kHz - 3 GHz	24 kHz - 3 GHz	120 kHz - 3 GHz	
Max. input voltage RF	1 V	30 mV	60 mV	0.3 V	
Overcoupling capacity	approx. 0.3 pF				
Max. input voltage DC	50 V				
Amplifier probe tip	30 dB				
-1 dB compression point	120 dB $\mu$ V				
IP3	134 dB $\mu$ V				
Noise figure	4.5 dB				
RF measuring output	50 $\Omega$				
Supply voltage	12 V / DC				

General frequency responses	
<b>Probe tip TS 701</b> 	<b>Probe tip TS 705</b> 
<b>Probe tip TS 706</b> 	<b>Probe tip TS 751</b> 