



**Probing Solutions.
Made in Germany.**

EN



SMP SERIES

Passive Probes for SMD and Pin Headers

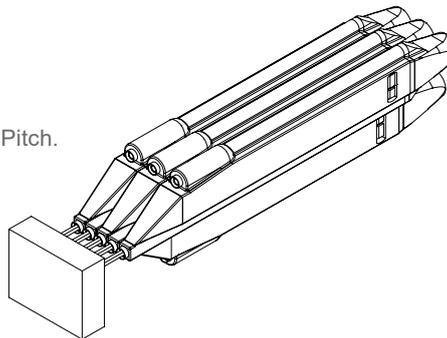
Datasheet



About the SMP Series

The passive probe series SMP is ideally suited for the analysis of SMD circuits. With its special T-shaped design, any number of rectangular pins with 2.54 mm pitch can be contacted next to each other and analyzed at the same time. A wide range of accessories for contacting allows easy and individual adaptation to various DUTs of different SMD designs. Connect the SMP probes to any measurement equipment with a 1 M Ω BNC input. The 500 MHz model offers lowest input capacitance of 7 pF only. The SMP series are using TETRIS[®] unique Inline Probing System.

TETRIS[®] probing system testing adjacent pins in 2.54 mm Pitch.



Specifications

	SMP 011	SMP 021	SMP 051	SMP 101
Order number without Read-Out	855-700-T00	855-700-T02	855-700-T05	855-700-T10
Order number with Read-Out	855-700-T01	-	-	855-700-T11

Electrical Specifications

Attenuation Ratio ($\pm 2\%$ at DC) ⁽¹⁾	1:1	2:1	5:1	10:1
System Bandwidth (-3 dB)	35 MHz	50 MHz	250 MHz	500 MHz
Rise time (10% - 90%)	10 ns	7 ns	1.4 ns	700 ps
Input Resistance (System) ($\pm 1\%$)	1 M Ω	2 M Ω	5 M Ω	10 M Ω
Input Capacitance (System)	45 pF	40 pF	13.5 pF	7 pF
Input Coupling of the Measuring Instrument	1 M Ω AC/DC			

Maximum Rated Input Voltages, CAT II, III, IV⁽²⁾

Pollution Degree	n.a.	n.a.	n.a.	n.a.
Measurement Category II, III, IV	n.a.	n.a.	n.a.	n.a.

Maximum Rated Input Voltages, No Measurement Category, not in CAT II, III, IV⁽²⁾

Pollution Degree	n.a.	n.a.	n.a.	n.a.
No Measurement Category	30 Vrms / 60 VDC			

Mechanical Specifications

Weight (Probe only)	44 g	44 g	44 g	44 g
Cable Length	1.3 m	1.3 m	1.3 m	1.3 m

Environmental Specifications

Altitude	operating	up to 2000 m
	non-operating	up to 15000 m
Temperature Range	operating	0 °C to +50 °C
	non-operating	-40 °C to +71 °C
Maximum Relative Humidity	operating	80% relative humidity for temperatures up to +31 °C, decreasing linearly to 40% at +50 °C
	non-operating	95% relative humidity for temperatures up to +40 °C

This product comes with 2 years warranty.
Specifications that are not marked as guaranteed are typical.

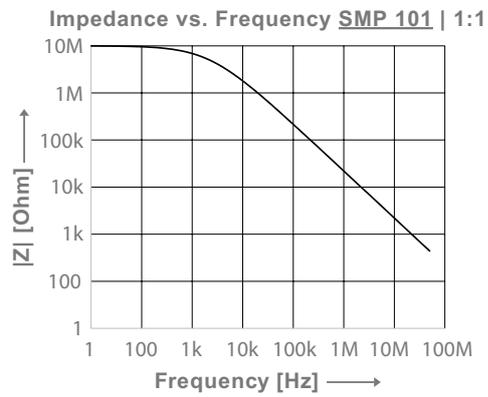
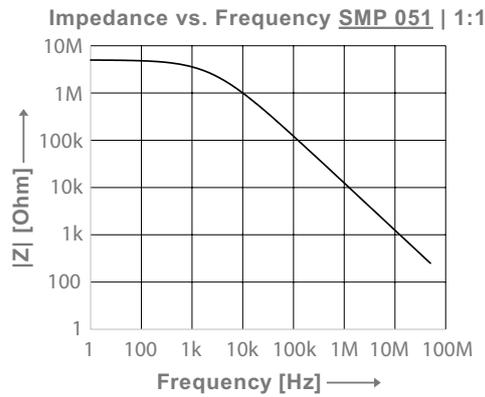
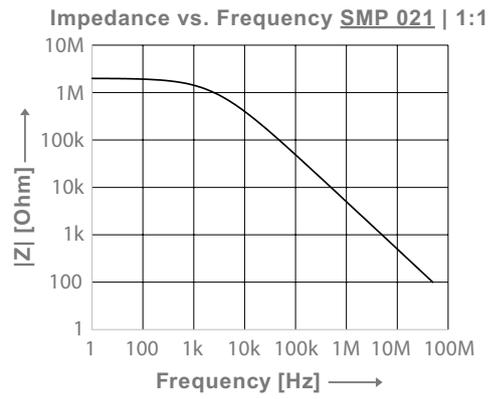
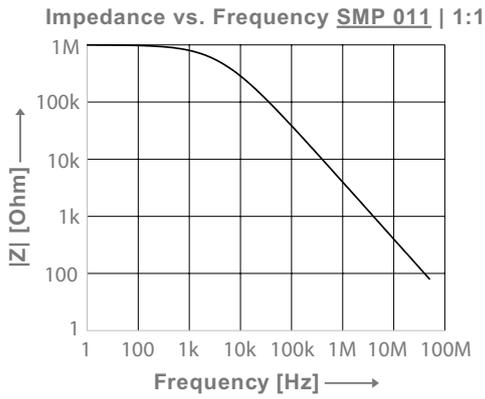
(1) Connected to oscilloscope with an input impedance of 1 M Ω $\pm 1\%$.
(2) As defined in IEC 61010-031.

Typical Input Impedance



Note that the input impedance of the probe decreases as the frequency of the applied signal increases.

The charts given here are valid for no measurement category, not in CAT II, III, IV (1).

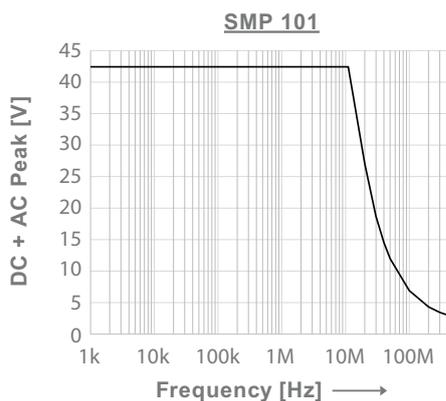
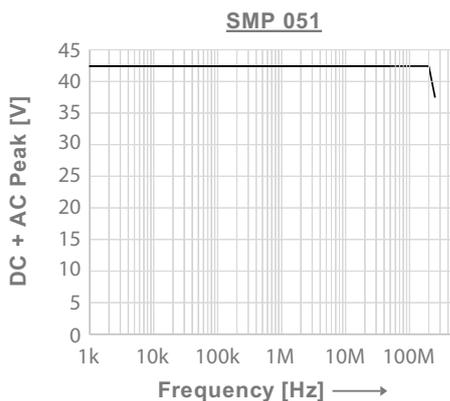
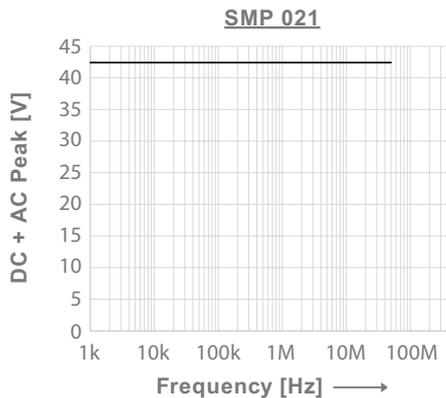
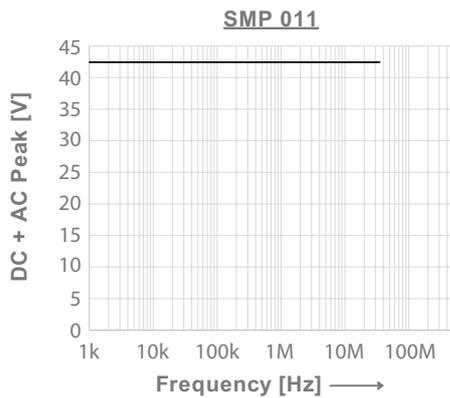


Typical Voltage Derating



Note that the maximum input voltage rating of the probe decreases as the frequency of the applied signal increases.

The charts given here are valid for no measurement category, not in CAT II, III, IV (1).



(1) As defined in IEC 61010-031. See definitions explained in the manual.

Probe Accessories

The parts supplied are „highlighted“, see also "Scope of Delivery".



Manufacturer

PMK Mess- und Kommunikationstechnik GmbH
Koenigsteinerstrasse 98
65812 Bad Soden am Taunus, Germany

Phone: +49 (0) 6196 5927 - 930
Fax: +49 (0) 6196 5927 - 939

Internet: www.pmk.de
E-Mail: sales@pmk.de

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