



**Probing Solutions.  
Made in Germany.**

EN



# SMP SERIES

**Passive Probes for SMD and Pin Headers**

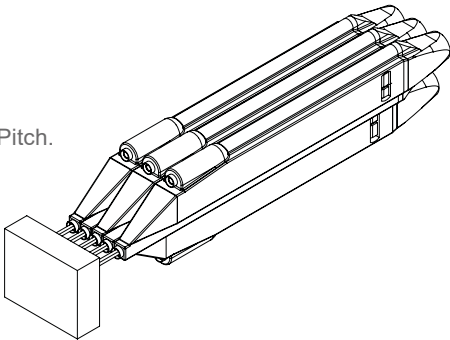
Datasheet



## 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 MΩ 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 (±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) (±1%)	1 MΩ	2 MΩ	5 MΩ	10 MΩ
Input Capacitance (System)	45 pF	40 pF	13.5 pF	7 pF
Input Coupling of the Measuring Instrument	1 MΩ AC/DC	1 MΩ AC/DC	1 MΩ AC/DC	1 MΩ 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	30 Vrms / 60 VDC	30 Vrms / 60 VDC	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.

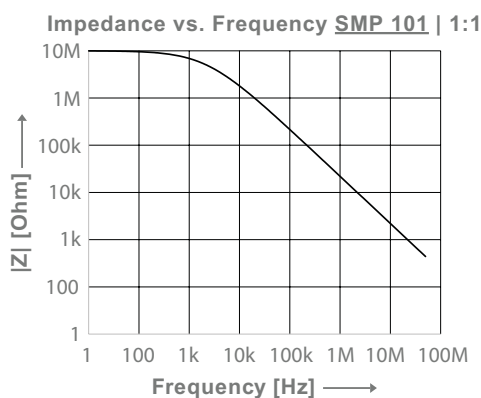
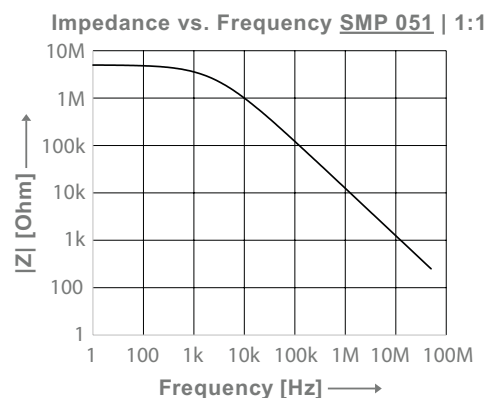
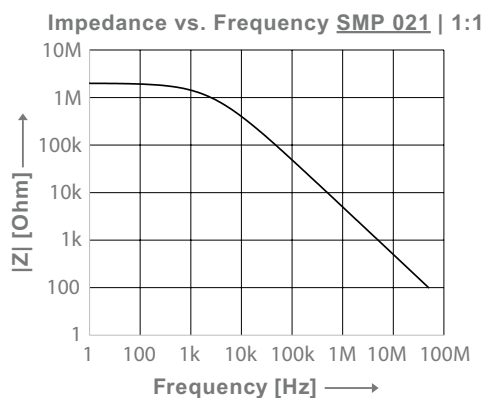
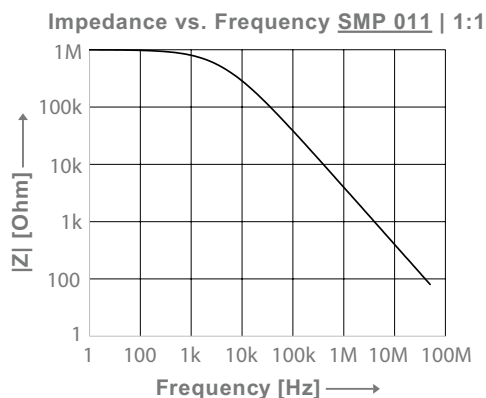
(1) Connected to oscilloscope with an input impedance of 1 MΩ ±1%.  
(2) As defined in IEC 61010-031.

## 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).

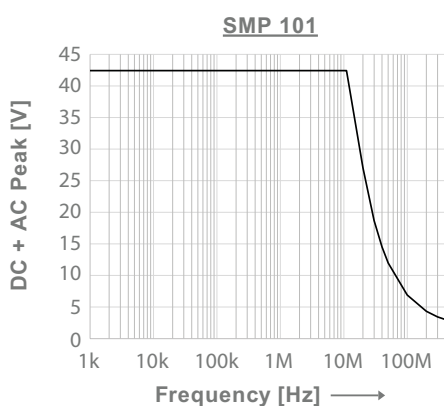
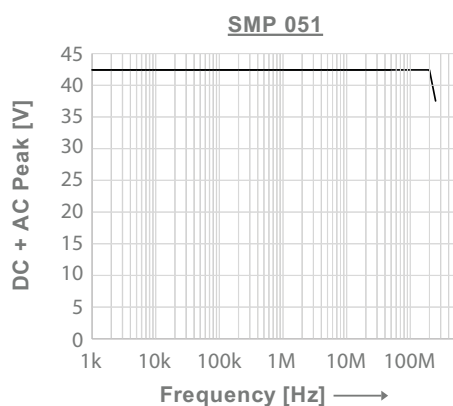
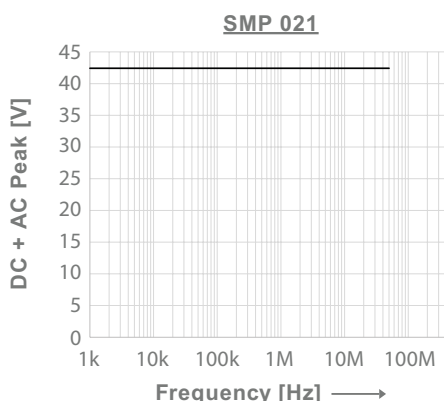
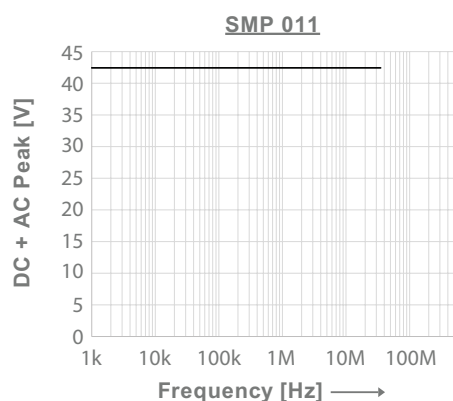


## Typical Voltage Derating



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".



## Scope of Delivery

Accessories delivered with each probe are highlighted in the graphical overview.

Items	Qty	Items	Qty
Ground Blade	1	PCB Adapter	1
Ground Leaf	1	Picohook™ black	1
Ground Lead 7 cm	1	Picohook™ red	1
Ground Lead 13cm	1	Probe	1
Ground Lead 90° 5 cm	1	Self adhesive Cu Pad (2cm x 2 cm)	2
Ground Lead 90° 10 cm	1	Solid Tip	1
Instruction Manual	1	Spring Tip	1
L-In Adapter	1	Y-Lead Adapter to 0.8 mm Sockets	1
Set Markerbands 4x4 colors	1	Z-Ground	1



Use ground lead only for connections to earth ground.



The accessories provided with the probe have been safety tested.  
Do not use any other accessories than those "originally" provided.

## Notes

## **Manufacturer**

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