



**Probing Solutions.
Made in Germany.**

EN



PMM SERIES

High Impedance 300 V Passive Probes up to 500 MHz

Datasheet



Specifications

	PMM 511A / 511A-RO	PMM 512A / 512A-RO	PMM 513A / 513A-RO	PMM 515A / 515-RO
Order number without Read-Out	855-511-A00	855-512-A00	855-513-A00	855-515-A00
Order number with Read-Out	855-511-A01	855-512-A01	855-513-A01	855-515-A01

Electrical Specifications

Attenuation Ratio ($\pm 2\%$ at DC) ⁽¹⁾	10:1	10:1	10:1	10:1
System Bandwidth (-3dB)	500MHz	380MHz	250MHz	175MHz
Rise time (10% - 90%)	0.7 ns	0.95 ns	1.4 ns	2 ns
Voltage Coefficient (at DC)	0.00025%/V	0.00025%/V	0.00025%/V	0.00025%/V
Input Resistance (System) ($\pm 1\%$)	10 M Ω	10 M Ω	10 M Ω	10 M Ω
Input Capacitance (System)	11 pF	13.5 pF	18 pF	23 pF
Compensation Range	10 pF - 25 pF	10 pF - 25 pF	10 pF - 25 pF	10 pF - 25 pF
Input Coupling of the Measuring Instrument	1 M Ω AC / DC	1 M Ω AC / DC	1 M Ω AC / DC	1 M Ω AC / DC

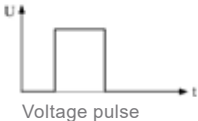
Maximum Rated Input Voltages, CAT II, CAT III ⁽²⁾

Pollution Degree	2	2	2	2
Measurement Category II	300V CAT II	300V CAT II	300V CAT II	300V CAT II

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

Pollution Degree	2	2	2	2
No Measurement Category ⁽²⁾	400V / 1650V peak	400V / 1650V peak	400V / 1650V peak	400V / 1650V peak

Maximum Pulse Rating, No Measurement Category, not in CAT II, III, IV ⁽²⁾

Upulse ⁽³⁾	Upulse 1650V (Step 0V to 1650V)  Voltage pulse			
-----------------------	---	--	--	--

Mechanical Specifications

Weight (Probe only)	45g	57g	75g	105g
Cable Length	1.2m	2m	3m	5m
Probe Tip Diameter	5mm	5mm	5mm	5mm

Environmental Specifications

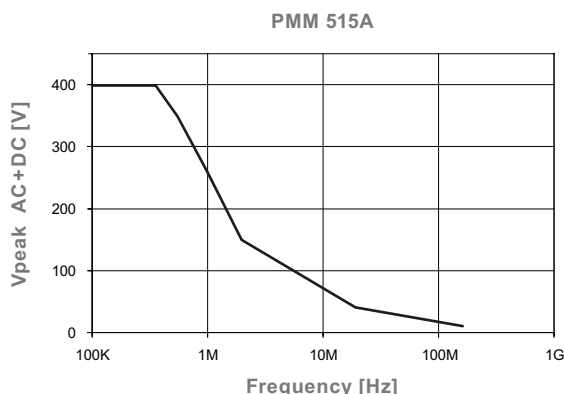
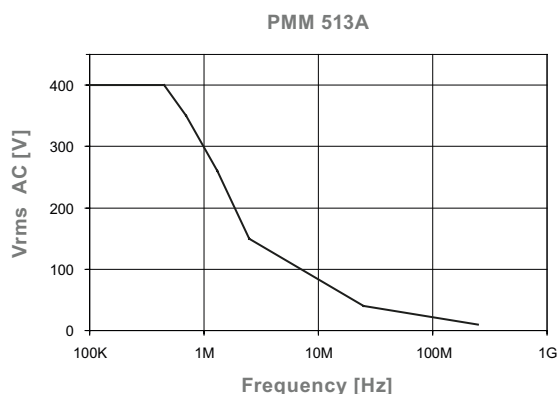
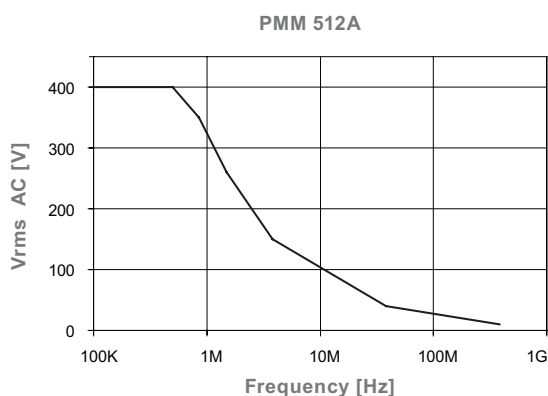
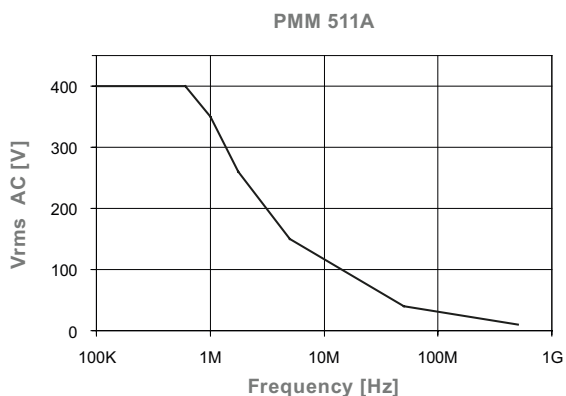
Altitude	operating	up to 2000 m
	non-operating	up to 15000m
Temperature Range	operating	0 °C to +50 °C
	non-operating	-40 °C to +71 °C
Maximum Relative Humidity	operating	80 % relative humidity for temperatures up to +31 °C, decreasing linearly to 40 % at +50 °C
	non-operating	95 % relative humidity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

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).

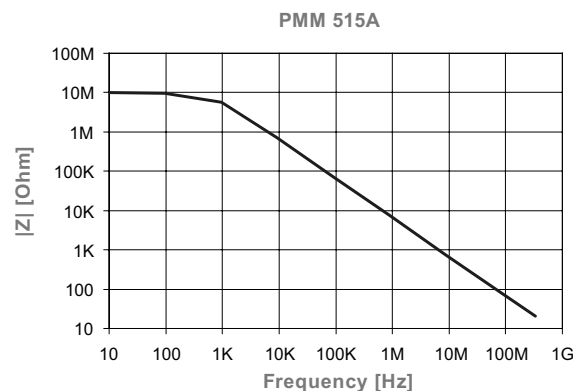
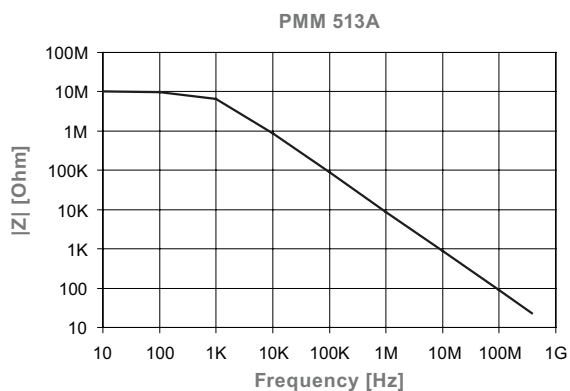
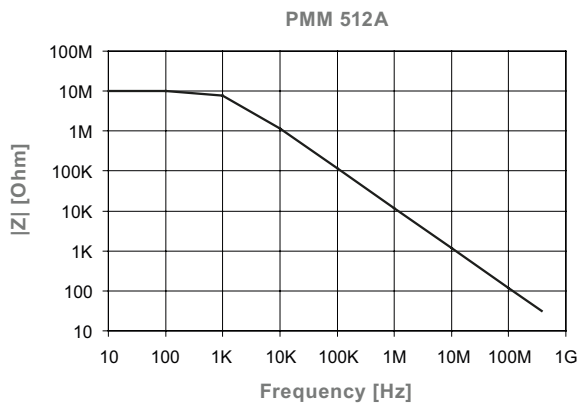
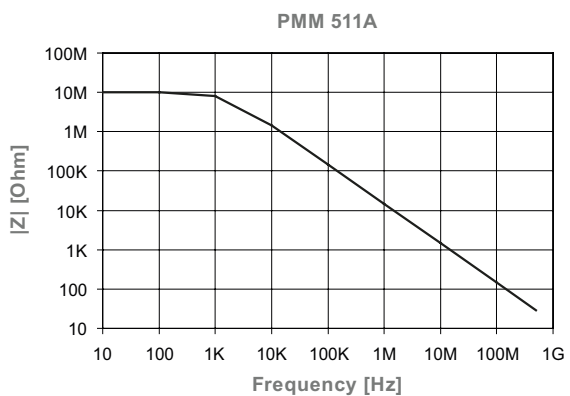


Typical Input Impedance



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).



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

Probe Accessories

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



890-500-00X
QFP IC-Clip short
down to 0.5 mm pitch
(X : 4 = yellow; 5 = green)



890-500-13X
QFP IC-Clip 13 mm long
down to 0.5 mm pitch
(X : 4 = yellow; 5 = green)



972405101 / 972405100
Safety Alligator Clip
(red / black)



P25-2 / P25-0
Pico Hook™
(red / black)



890-320-020 / 890-320-000
Sprung Hook 5.0
(red / black)



890-220-020 / 890-220-000
Flexible Adapter 5.0
to 4 mm Safety Banana
Plug (red / black)



018-292-063
IC-cap 5.0
0.8 mm pitch (grey)



018-292-064
IC-cap 5.0
1.0 mm pitch (brown)



018-292-065
IC-Cap 5.0
1.27 mm pitch (black)



018-292-017
Insulating Cap
(black)



018-292-02
Protection Cap 5.0
(black)



890-520-710
Dual Adapter 5.0
to Open Leads



890-520-701
Dual Adapter 5.0
to 0.8 mm Socket



890-510-700
Adapter 5.0
to 0.8 mm Socket



890-202-000
Flexible Adapter
5.0 to 2 mm
Banana Plug



890-210-000
Flexible Adapter
5.0 to 4 mm
Banana Plug



018-210-001
BNC-Adapter 5.0



890-700-000
PCB-Adapter



890-100-150
10 self adhesive Cu Pads
(2 x 2 cm)



891-005-803
5x Spring Tip
0.8 mm



891-005-011
5x Solid Tip
0.8 mm



018-292-007
Adjustment Tool T



890-010-912
Set Coding
Rings 3x4
colors



018-291-102
Ground Blade 5.0



890-400-003
Ground Spring 5.0

893-250-001
2 Footer
positioner



890-400-013
Ground Lead
11 cm to
0.8 mm plug



890-400-011
Ground Lead
11 cm to
Miniclip



890-400-102
Ground Lead
22 cm to 2 mm
Banana Plug



890-400-104
Ground Lead
22 cm to 4 mm
Banana Plug



890-400-015
Ground
Lead 15 cm



890-400-000
Ground Lead
22 cm



890-450-220
HF compensated
Ground Lead
22 cm



890-400-D00
Ground Lead
differential
22 cm

Manufacturer

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

Phone: +49 (0) 6196 999 5000

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

Copyright © 2024 PMK - All rights reserved.

Information in this publication supersedes that in all previously published material.
Specifications are subject to change without notice.