



**Probing Solutions.
Made in Germany.**

EN



ENVI[®] 4.5MΩ

Passive Probe with extended Temperature Range
350 MHz, 400 V

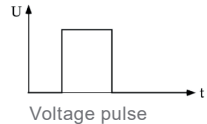
Datasheet



About ENVI® Probes

The passive probe ENVI® is ideal for environmental testing, and measurements in climatic chambers from -55 °C to +155 °C. The world's first modern probe for this high temperature range with 400 V input voltage range, 10:1 divider and 350 MHz bandwidth is suitable for a variety of applications. Due to its BNC connector with read-out function the probe is universally connectible to any oscilloscope with BNC input and shows the correct measured voltage directly.

Specifications

ENVI® 4.5MΩ	
Order Number with Read-Out	835-312-Z01
Electrical Specifications	
Attenuation Ratio ($\pm 2\%$ at DC) (1)	10:1
System Bandwidth (-3 dB)	350 MHz
Rise Time (10% - 90%)	1 ns
Voltage Coefficient (at DC)	0.00025 % / V
Input Resistance (System) ($\pm 1\%$)	4.5 MΩ
Input Capacitance (System)	20 pF
Compensation Range	10 pF - 25 pF
Input Coupling of the Measuring Instrument	1 MΩ AC/DC
Maximum Rated Input Voltages, CAT II (2)	
Pollution Degree	3
Measurement Category II	300 V CAT II
Maximum Rated Input Voltages, No Measurement Category, not in CAT II, III, IV (2)	
Pollution Degree	3
No Measurement Category	400 V / 1250 V peak
Maximum Pulse Rating, No Measurement Category, not in CAT II, III, IV (2)	
Upulse (3)	<p>Upulse 1250 V (Step 0 V to 1250 V)</p>  <p>Voltage pulse</p>

Mechanical Specifications	
Weight (Probe only)	93 g
Cable Length	2 m
Probe Tip Diameter	5 mm

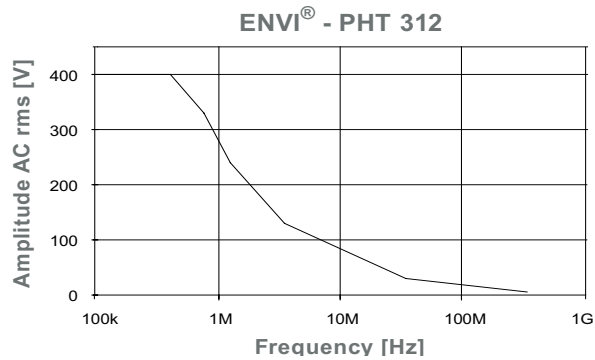
Environmental Specifications		
Probe head and cable assembly		
Altitude	operating	up to 2000m
	non-operating	up to 15000m
Temperature Range	operating	-55 °C to +155 °C
	non-operating	-55 °C to +155 °C
Maximum Relative Humidity	operating	98 % relative humidity
BNC connector and (*) marked accessories		
Altitude	operating	up to 2000m
	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

Typical Voltage Derating



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

Valid for no measurement category, not in CAT II, III, IV (*):

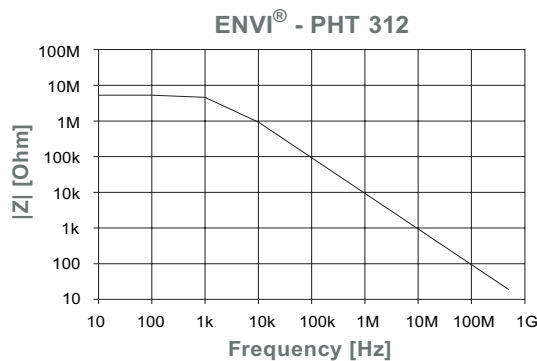


Typical Input Impedance



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

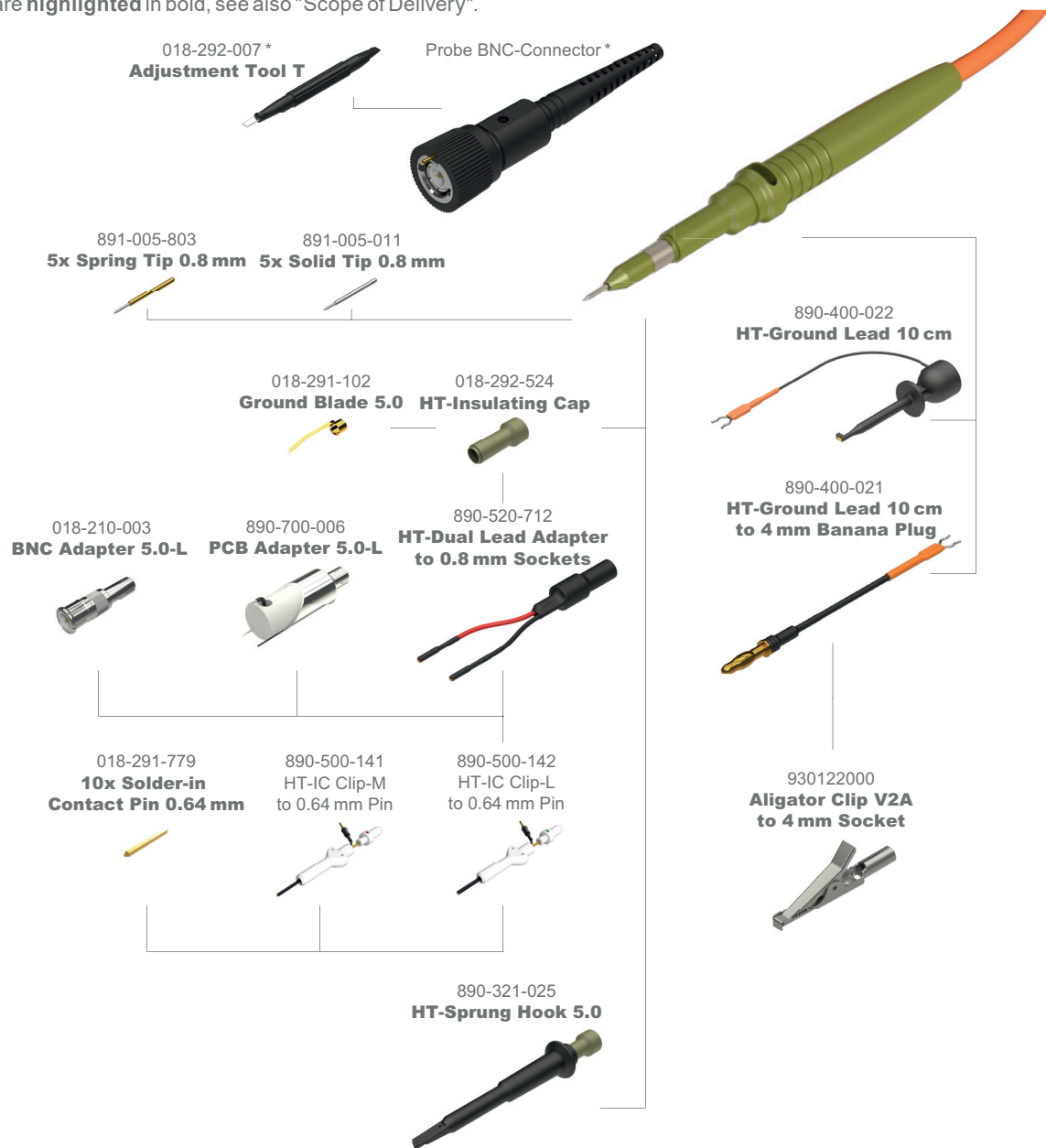
Valid for no measurement category, not in CAT II, III, IV (*):



(1) As defined in IEC 61010-031 in ENVI® manual on page 16 and 17.

Probe Accessories

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



Scope of Delivery

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

Item	Qty	Item	Qty
Adjustment tool T	1	HT-ground lead 10 cm to 4 mm banana plug	1
BNC adapter 5,0-L	1	Manual	1
PCB Adapter 5.0-L	1	Probe ENVI®	1
2 footer positioner	1	Solder-in contact pin 0.64 mm	10
Ground blade 5.0	1	Solid tip CuBe 0.8 mm	1
HT-dual lead adapter to 0.64 mm sockets	1	Spring tip 0.8 mm ⁽¹⁾	1
HT-insulating cap	1	Sprung hook 5.0-HT ⁽²⁾	1
HT-ground lead 10 cm	1		

(1) plugged on probe
 (2) installed in probe

(*) Ambient temperature may not exceed specified limits. See "Environmental Specifications" on page 3 for clarification.

Manufacturer

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