

Passive Probe Customizable Interconnect Solution

OFF-THE-SHELF, DEPENDABLE SOLUTION

Part of Carlisle Interconnect Technologies' (CarlisleIT) full lineup of customizable interconnect solutions, the Passive Probe is a standard, commercial off-the-shelf system engineered to deliver consistent, repeatable, and dependable results.

The Passive Probe provides an industry-leading combination of high bandwidth and high voltage in a low cost, rugged, general purpose probing solution, while the small UL-approved probe body and compact head enables the user to have access to small geometry circuit elements.

FEATURES & BENEFITS

Feature	Benefit
500 MHz bandwidth and 1,000 V CAT III, 600 V CAT IV	A combination of high bandwidth and high voltage reduces the number of probes needed for a variety of applications, simplifying the toolkit and lowering costs
1X, 10X, and 100X configurations	Multiple configurations give the flexibility to choose the passive probe that fits your application
Third-party certified, exceeds UL61010-31, IEC61010-31	Superior product quality and safety greatly reduces risk in high-voltage applications
Small, compact probe head and body	Enhanced visibility to small, dense geometry circuit elements within the device-under-test (DUT) ensures correct and accurate test point contact



Passive Probe Kit

SUGGESTED APPLICATIONS

- » Low power device services
- » Manufacturing engineering
- » Test research and development
- » Relative low frequency measurement
- » Low frequency computer and telecom measurements
- » Power supplies
- » Inverter design
- » Power conversion

» Learn More: [CarlisleIT.com/prod-info/passive-probe](https://www.carlisleit.com/prod-info/passive-probe)

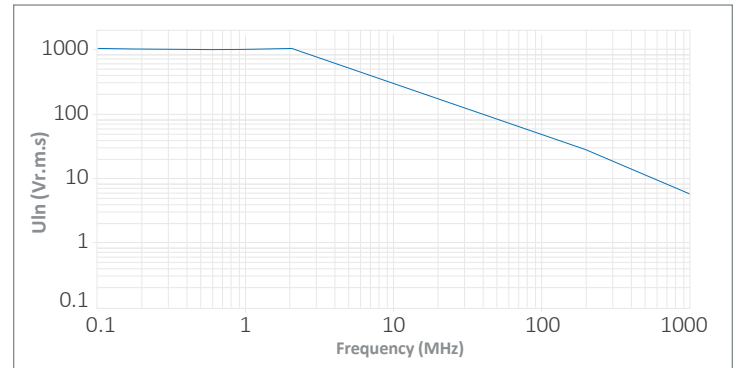
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SPECIFICATIONS & PERFORMANCE

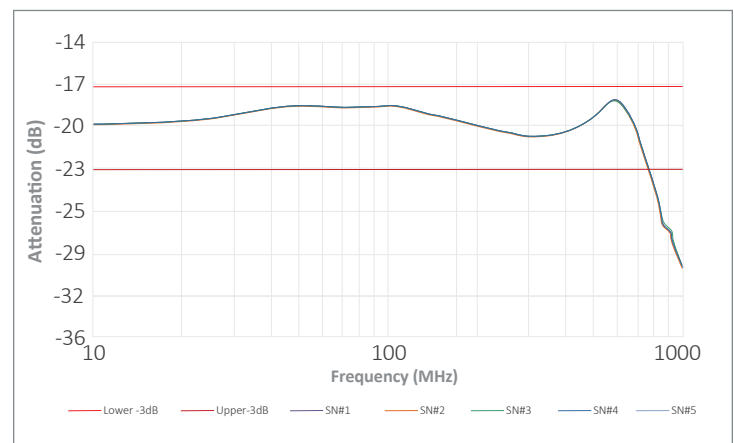
Specification			
Parameter	TM50-0012-00 (1X)	TM50-0013-00 (10X)	TM50-0014-00 (100X)
Bandwidth	DC – 50 MHz	DC – 500 MHz	DC – 500 MHz
Attenuation Ratio	1:1	10:1	100:1
Max Input Voltage (V)	*600 V CAT III	*1000 V CAT IV	*1000 V CAT IV
Input Resistance	Impedance of measuring instrument	10 MΩ	100 MΩ
Input Capacitance (pF)	42 pF	12 pF	4.5 pF
Compensation Range	N/A	10 – 25 pF, center @ 15 pF	10 – 25 pF, center @ 15 pF
Rise Time	Instrument spec + 6 ns	<1 ns	<1 ns
Safety	Conformance to Low Voltage Directive (LVD) 73/23/EEC, amendment 93/68/EEC; IEC-61010-031:2008		
Operating Temperature	0 °C – 60 °C, 80% RH		

Ordering Specification	
Model	Description
TM50-0012-00	1X High-Voltage Probe Kit
TM50-0013-00	10X High-Voltage Probe Kit
TM50-0014-00	100X High-Voltage Probe Kit

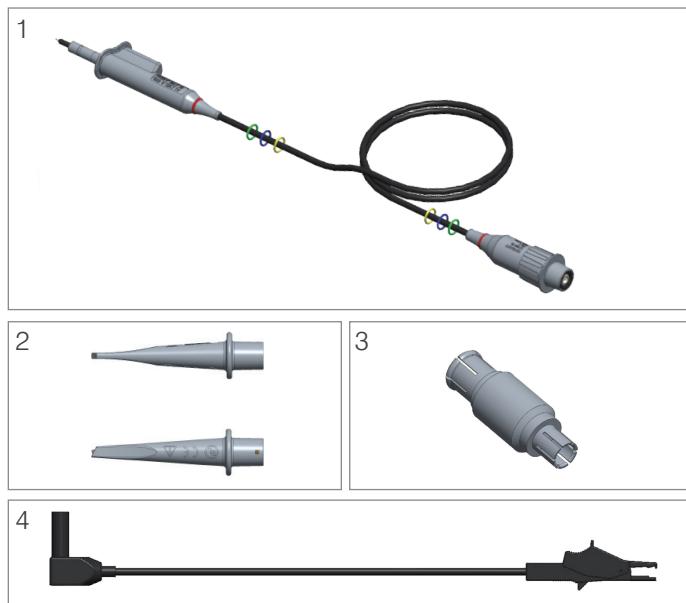
Voltage Derating Curve



TM50-0013-00 Passive Probe 10:1, 500 MHz (20 dB) 1.2 m
(N5717B @ 0 dBm, MSO-S104A set @ 1 MΩ, avg. 16, w/50 Ω load)



*Max input voltage frequency dependent, see Voltage Derating Curve.



Probe (1), Grabber Hook (2), BNC Adapter (3), Alligator GND lead (4).



See CarlisleIT's line of Probes at:
CarlisleIT.com/markets/test-measurement/probes

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