

PP007-WR PP007-WS Passive Probes



Key Features

- Compact probe head
- Supports fine pitch SMD probing
- Rugged, sharp tip
- HF optimized connection accessories
- Over 30 accessories
- Low input capacitance

The PP007 embodies leading technology in passive probe design. The small probe is optimized for maximum waveform fidelity, including high frequency signal components, in a rugged probe suitable for every day. The sharp probe tip (rigid tip is included) is spring loaded, allowing it to retract into the narrow probe head. The tip does not slip off the object being probed – important when probing small geometry surface-mounted components. Probing dense circuits is easier with the small 2.5 mm ground sleeve, which provides much better visibility than 5 mm and 3.5 mm probes.

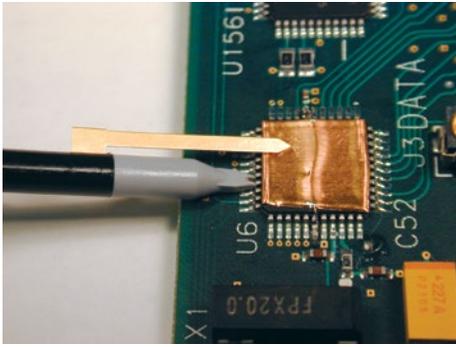
Optimized for HF Applications

The input capacitance of the probe is very low for a passive probe – to minimize loading of high frequency signals. However, keeping any resonance beyond the passband also requires low inductance in the interconnections. Probes with limited interconnection accessories often force the user to extend the input or ground lead lengths to connect to the circuit – a practice that adds inductance and lowers the resonate frequency.

Accessories such as the ground spring and innovative ground blade (PK007-013) provide a very low inductance ground interconnect.

Copper foil tape, (PK007-014) included with the probe, can be placed on top of an IC and connected to its ground pins to create a convenient ground plane for the probe to connect to. Used with the ground blade, this method provides an ideal ground connection for probing signals with high frequency content. For applications which require the flexibility of a longer ground lead without compromising high frequency performance, the optional HF-compensated ground lead (PK007-030) provides a solution. A passive network in the lead itself reduces the loading effect of any resonance.

SPECIFICATIONS & ORDERING INFORMATION



Ground Blade Used with Copper Foil

Ease in Probing SMT Circuits

In addition to the small probe head size, the PP007 is augmented with several accessories to simplify probing dense surface mounted circuit assemblies. Insulating probe caps with guide fingers (PK007-009, 010, 011, 012) keep the small probe tip

centered on the IC lead and prevent it from shorting to adjacent leads. The IC Caps are supplied in a range of sizes designed for IC lead pitches from 0.5 mm through 1.27 mm. Optional accessory kits contain 0.5 mm micro clips for attaching to the smallest IC leads, along with adapter leads to connect to the probe tip.

Rugged Probe for Everyday Use

Unlike some probes, the PP007 does not trade off physical robustness to obtain excellent high frequency performance. The probe will stand up to the rigors of everyday use. The probe has a working voltage rating of 400V CAT I with transient surges up

to 1250 V. EN61010-31-2 Installation category I (CAT I) is for probing circuits which are isolated from the power mains through a power supply transformer – the most common circuits measured with oscilloscopes. The probe also is rated for a CAT II working voltage of 300 V. CAT II circuits are on the primary side of power converters and similar power line connected circuits which are not intended to be permanently connected to building wiring.

The probe tip is mounted in a socket, allowing user replacement should it ever break.

Specifications

Electrical Characteristics

Attenuation	÷ 10
Bandwidth	> 500 MHz
Input R	10 MΩ
Input C	9.5 pF
Max. Input Voltage	400 V CAT I (1250 V surge), 300 V CAT II

General Characteristics

Ground Sleeve Diameter	2.5 mm
Input Pin Diameter	0.5 mm
Cable Length	1.3 m

Ordering Information

Product Description

÷10, 500 MHz 10 MΩ Passive Probe	PP007-WS
÷10, 500 MHz 10 MΩ Passive Probe	PP007-WR
Basic Adapter Kit	PK701
Advanced Adapter Kit	PK702
SMD Adapter Kit	PK703
Micro Clip Kit	PK704
Instruction Manual	PP007-OM-E

Product Code

Customer Service

Teledyne LeCroy oscilloscopes and probes are designed, built, and tested to ensure high reliability. In the unlikely event you experience difficulties, our digital oscilloscopes are fully warranted for three years and our probes are warranted for one year. This warranty includes:

- No charge for return shipping
- Long-term 7-year support
- Upgrade to latest software at no charge



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