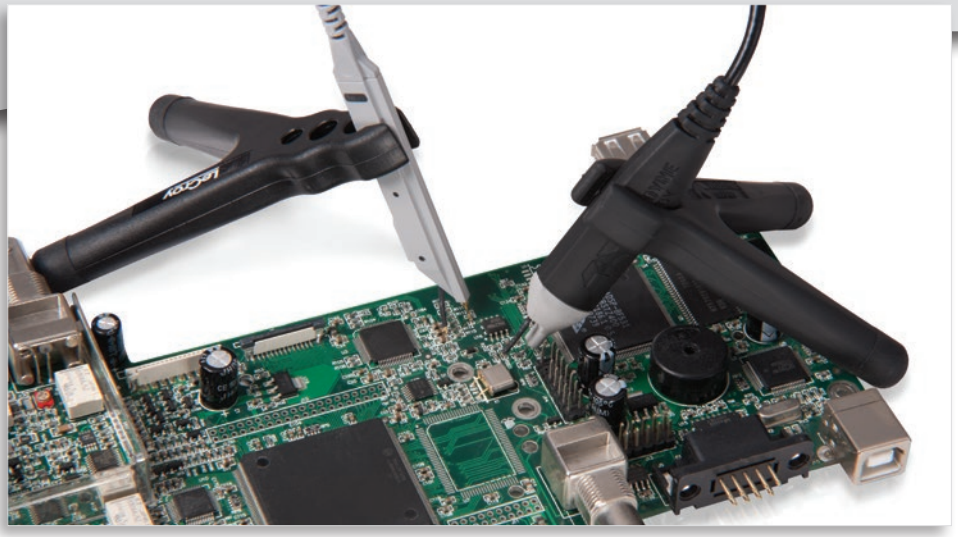
TELEDYNE LECROY
Everywhereyoulook™

ZS Series High Impedance Active Probes

1 GHz - 4 GHz Probes



Key Features

- **High signal fidelity to 4 GHz bandwidth**
- **Low circuit loading – High input impedance and low capacitance**
- **4 GHz, 2.5 GHz, 1.5 GHz and 1 GHz models**
- **1 MΩ input resistance**
- **0.6 pF (4 GHz) and 0.9 pF input capacitance**
- **± 8 V input dynamic range, ± 12 V offset range**
- **Wide variety of tips and grounds**
- **Easy to use, integrated with oscilloscope**

The ZS Series probes are high impedance, low capacitance active probes that maintain high signal fidelity through 4 GHz. A small form factor and a wide variety of accessories ensures the ZS probe meets every difficult probing challenge.

High Impedance Reduces Circuit Loading across Full Oscilloscope Bandwidth

Engineers must commonly probe high frequency signals with high signal fidelity. Typical passive probes with high input R and C provide good response at lower frequencies but inappropriately load the circuit and distort signals at higher frequencies. The ZS Series features both high input R (1 MΩ) and low input C (0.6 pF and 0.9 pF) to reduce circuit Loading across the entire probe/oscilloscope bandwidth. The ZS1000 is ideal for 200–600 MHz oscilloscopes. The ZS1500 is ideal for 1 GHz oscilloscopes, the ZS2500 is ideal for 2 GHz oscilloscopes, and the ZS4000 is ideal for 2.5 GHz and 4 GHz oscilloscopes.

A Variety of Probe Tips for Varied Tasks

The small form factor and extensive range of standard probe tips ensures that this probe can meet any difficult probing challenge. Various flexible leads and clips, such as right-angle leads, Y-adapters, and micro-grabbers, are also available for probing test points that are spaced farther apart.

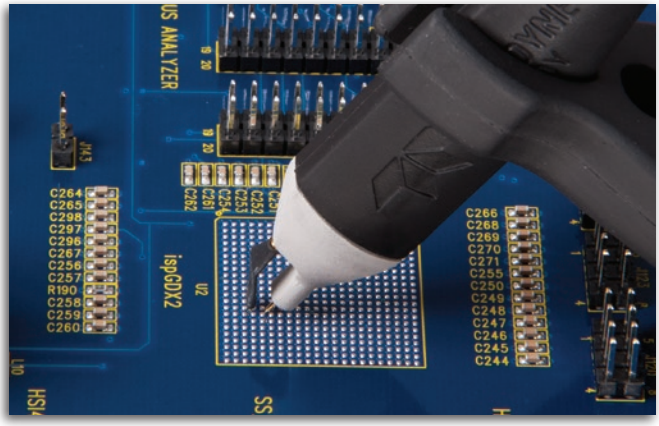
Innovative Grounding Provides the Highest Signal Fidelity

Keeping the ground loop short is critical to eliminating the effect of high inductance on the signal. The ZS probes provide a wide variety of unique and innovative accessories which maintain the highest signal fidelity. They eliminate the effects of the loop on the circuit.

EXTENSIVE SET OF PROBE TIPS AND GROUND LEADS



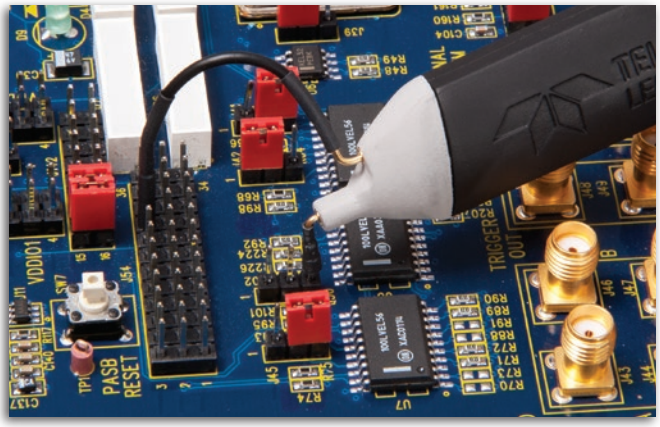
Use the Solder-In Ground with Straight Tip for general purpose browsing.



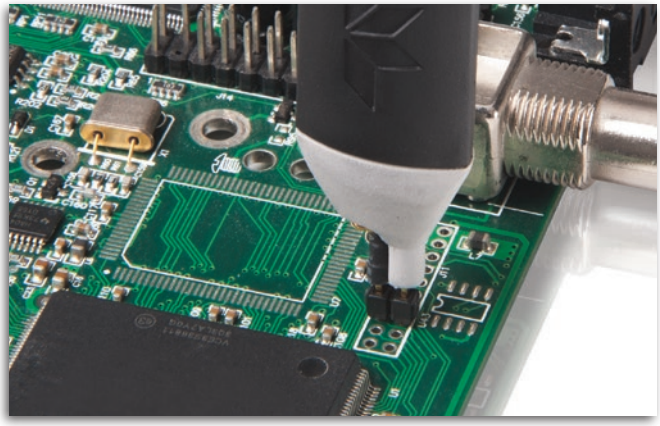
The Straight Tip and Offset Ground Lead can be used together for probing signal and ground points extremely close together.



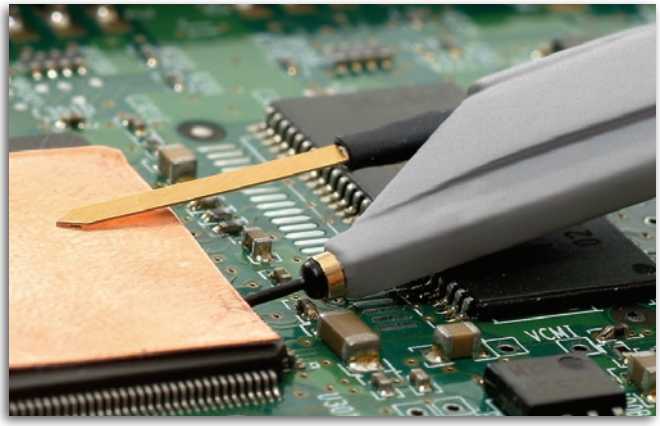
Hard-to-reach spaces can be be probed with the Bent Sharp Tip and can be used with a range of ground leads like the flexible Short Right-Angle Lead shown here.



Probe directly on surface mount components, like resistors or capacitors, with the Discrete SMD Tip. Use this tip with any of the ground leads, like the flexible Long Right-Angle Lead shown here.



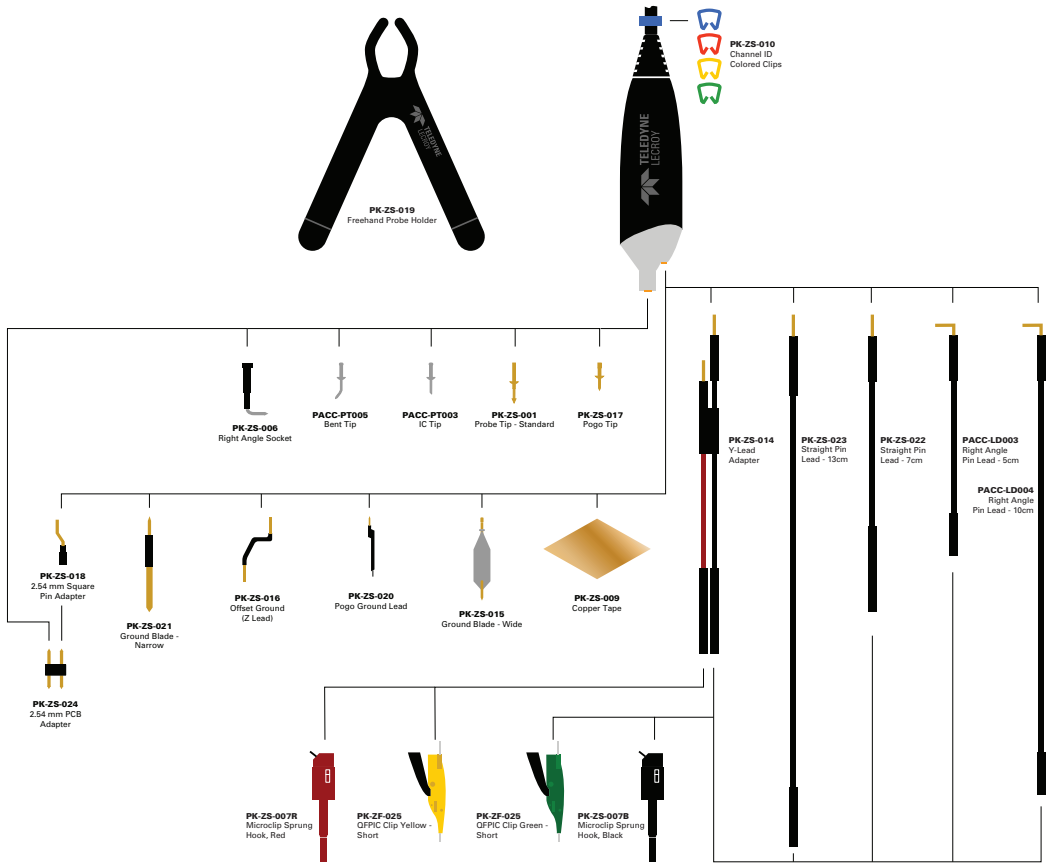
The 2.54 mm probe adapter provides full BW probing and holds the probe in place.



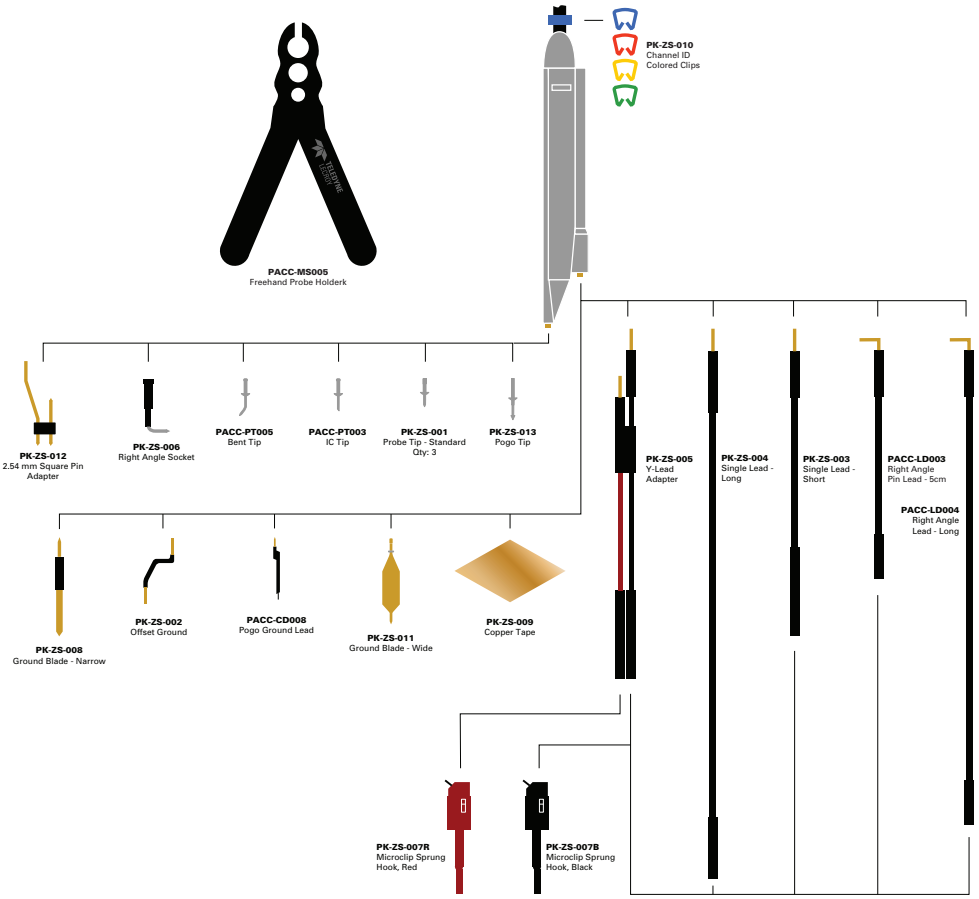
The Ground Blade and Copper Pad provide the shortest ground loop for excellent signal fidelity when probing an IC. Use them with the insulated IC Lead Tip to prevent shorting between test points.

ZS PROBE ACCESSORIES

ZS4000



ZS1000
ZS1500
ZS2500



SPECIFICATIONS AND ORDERING INFORMATION

Specifications

	ZS1000	ZS1500	ZS2500	ZS4000
Electrical Characteristics				
Probe Bandwidth	1 GHz	1.5 GHz	2.5 GHz	4 GHz
Input Capacitance	0.9 pF			0.6 pF
DC Input Resistance	1 MΩ			
Probe Offset Range	N/A	±12 V		
Attenuation	÷10			
Input Dynamic Range	±8 V			
Non-destruct Voltage	20 V			
General Characteristics				
Cable Length	1.3 m			

Ordering Information

Product Description	Product Code
4 GHz, 0.6 pF, 1 MΩ High Impedance Active Probe	ZS4000
2.5 GHz, 0.9 pF, 1 MΩ High Impedance Active Probe	ZS2500
1.5 GHz, 0.9 pF, 1 MΩ High Impedance Active Probe	ZS1500
1 GHz, 0.9 pF, 1 MΩ High Impedance Active Probe	ZS1000
Set of 4 ZS2500, 2.5 GHz, 0.9 pF, 1 MΩ High Impedance Active Probes	ZS2500-QUADPAK
Set of 4 ZS1500, 1.5 GHz, 0.9 pF, 1 MΩ High Impedance Active Probes	ZS1500-QUADPAK
Set of 4 ZS1000, 1 GHz, 0.9 pF, 1 MΩ High Impedance Active Probes	ZS1000-QUADPAK

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

Standard Accessory/Quantity

Accessory Description	Replacement Part Number	ZS1000 ZS1500 ZS2500	ZS4000
2.54 mm PCB Adaptor	PK-ZS-024		5
2.54mm Square Pin Adapter	PK-ZS-012	1	
2.54mm Square Pin Adaptor	PK-ZS-018		1
IC Tip	PACC-PT003	1	1
Bent Tip	PACC-PT005	1	1
Channel ID Clips (Set of 4 colors)	PK-ZS-010	4	1
Copper Tape Pad	PK-ZS-009	2	2
Freehand Probe Holder	PK-ZS-019		1
Freehand Probe Holder	PACC-MS005	1	
Ground Blade – Narrow	PK-ZS-008	1	
Ground Blade – Wide	PK-ZS-011	1	
Ground Blade, Narrow	PK-ZS-021		1
Ground Blade, Wide	PK-ZS-015		2
Micro-Grabber Pair	PK-ZS-007R and PK-ZS-007B	1	2
Offset Ground	PK-ZS-016		2
Offset Ground – Z Lead	PK-ZS-002	1	
Pogo Ground Lead	PK-ZS-020		1
Pogo Ground Lead	PACC-CD008	1	
Pogo Tip	PK-ZS-017		3
Pogo Tip	PK-ZS-013	1	
Probe Tip – Standard	PK-ZS-001	3	3
QFPIC Clips (set of 2)	PK-ZS-025		1
Right Angle Lead – Long	PACC-LD004	1	1
Right Angle Lead – Short	PACC-LD003	1	1
Right Angle Socket	PK-ZS-006	1	1
Straight Pin Lead – Long	PK-ZS-023		1
Straight Pin Lead – Long	PK-ZS-004	1	
Straight Pin Lead – Short	PK-ZS-022		1
Straight Pin Lead – Short	PK-ZS-003	1	
Y Lead Adapter	PK-ZS-005	1	
Y Lead Adaptor	PK-ZS-014		1

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Local sales offices are located throughout the world.
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