

High-Frequency Passive Voltage Probe

Agilent 54006A 6 GHz Resistor Divider Probe

- **Useful in probing high-frequency signals with low source impedance**
- **Supplied with 10:1, 500 Ω and 20:1, 1 k Ω resistor dividers**
- **Low capacitive loading to extremely high frequencies**

The Agilent 54006A allows you to probe signals up to 6 GHz using replaceable tips that provide either 10:1 division ratio with 500 Ω input resistance, or a 20:1 division ratio with 1 k Ω input resistance. This 6 GHz probe gives access to circuit nodes that are not 50 Ω or do not have 50 Ω connectors allowing

you to see signals at specific points, such as the input to a gate. Agilent 54006A's input capacitive loading is approximately 0.25 pF, allowing you to get very accurate timing measurements for a wide bandwidths of signals.

The 54006A probe is a good, low-cost alternative for high frequency probing where the higher resistive loading is not an issue and the other features of the InfiniiMax probing system are not needed (such as differential inputs and multiple connectivity options).



Figure 3.14. Agilent 54006A for probing high frequency, up to 100 Ω impedance signals.

Specifications

Operating Characteristics

Bandwidth (–3 dB)	6 GHz
Attenuation ratio	10:1, 20:1
Input resistance	500 Ω , 1 k Ω
Input capacitance	0.25 pF
Max dc volts	20 V
Length in meters (feet)	0.9 m (3 ft)

Ordering Information

Part #	Description	Quantity
54006A*	6 GHz Resistor Divider Probe Includes: One 10:1 500 Ω probe body, six 450 Ω resistors, One 20:1, 1 k Ω probe body, six 950 Ω resistors, One 36 in, 50 Ω coaxial cable, SMA (m-m) One blocking cap, 10 GHz-26 GHz APC – 3,5 (m-f)	1

* Requires the 54855-67604 SMA to precision-BNC adapter to connect to BNC scope input.