

# Oscilloscope Probes & Accessories

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## Choosing the Right Probe, High Impedance Passive Probes

10070 Family

### Oscilloscope/Probe Compatibility

Oscilloscope	General Purpose Passive Probes								Active	Differential	Current
	10:1	100:1	1000:1	1:1	Low Mass 10:1	Low Mass 20:1	Low Z	50 Ohm			
Infinium Oscilloscopes 54810/15/20/25A	1160A 1164A	10440B <sup>1</sup> 10076A	N2771A	1162A	1170A	1172A	1163A	10437B	1152A, 1155A	1153A <sup>1</sup> , 1154A, 1159A	1146A, N2774A
54835A, 54845A, 54846A Infinium Oscilloscopes	1161A	10440B <sup>1</sup> 10076A	N2771A	1162A	1171A	1173A	1163A 10020A	10437B 10020A	1152A <sup>1</sup> , 1155A <sup>1</sup> , 54701A <sup>1</sup> *	1153A <sup>1</sup> , 1154A, 1159A	1146A, N2774A
54751/52A/B	-	-	-	-	-	-	54006A	-	54701A <sup>1</sup> *	1141A <sup>1</sup> **	-
54711/12/21/22A	-	-	-	-	-	-	54006A	-	54701A <sup>1</sup> *	1141A <sup>1</sup> **	-
54714/15A/13B	-	-	-	-	-	-	54006A	10437B	1144A <sup>1</sup> , 1145A <sup>1</sup> , 54701A <sup>1</sup> *	1141A <sup>1</sup> **	-
54645A/D	10441B	10440B, 10076A	N2771A	10439B	1170A <sup>1</sup>	1172A <sup>1</sup>	10442B	10437B	1144A <sup>1</sup> , 1145A <sup>1</sup> , w 50 Ohm term	1141A <sup>1</sup> w 50 Ohm term N2772A	1146A, N2774A
54621A/D 54622A/D/24A	10074C	10440B, 10076A	N2771A	10070C 10439B	1171A	1173A	-	-	-	1141A <sup>1</sup> w 50 Ohm term N2772A	1146A, N2774A
54615/16B	10073B	10440B, 10076A	N2771A	10070C 10439B	1170A <sup>1</sup>	1172A <sup>1</sup>	1163A <sup>1</sup> 10442B	10437B	1144A, 1145A	1141A <sup>1</sup> N2772A	1146A, N2774A
54610A/B	10073B	10440B, 10076A	N2771A	10070C 10439B	1170A <sup>1</sup>	1172A <sup>1</sup>	1163A <sup>1</sup> 10442B	10437B	1144A <sup>1</sup> , 1145A <sup>1</sup>	1141A <sup>1</sup> ** N2772A	1146A, N2774A
54600/01/02/03A/B	10074C	10440B, 10076A	N2771A	10070C 10439B	1171A <sup>1</sup>	1173A <sup>1</sup>	-	-	1144A <sup>1</sup> , 1145A <sup>1</sup> w 50 Ohm term	1141A <sup>1</sup> w 50 Ohm term N2772A	1146A, N2774A
54520/22/40/42A/C	10441B	10440B <sup>1</sup> 10076A	N2771A	10439B	1170A <sup>1</sup>	1172A <sup>1</sup>	10442B	10437B	1144A, 1145A	1141A	1146A N2774
54502/03/04/10A/05/06/10/12B	10441B	10440B <sup>1</sup> 10076A	N2771A	10439B	1170A <sup>1</sup>	1172A <sup>1</sup>	10442B	10437B	1144A <sup>1</sup> , 1145A <sup>1</sup>	1141A <sup>1</sup>	1146A N2774
54501A	10433B	10440B 10076A	N2771A	10439B	-	-	-	-	1144A <sup>1</sup> , 1145A <sup>1</sup> w 50 Ohm term	1141A <sup>1</sup> w 50 Ohm term	1146A N2774
54201A/D	10433B	10440B 10076A	N2771A	10439B	1170A <sup>1</sup>	1172A <sup>1</sup>	10442B	10437B	-	1141A <sup>1</sup>	1146A N2774
54200A/D	10433B	10440B 10076A	N2771A	10439B	1170A <sup>1</sup>	1172A <sup>1</sup>	-	-	-	1141A <sup>1</sup> w 50 Ohm term	1146A N2774
54121/22/23/24T	-	-	-	-	-	-	54006A	10020A	54701A <sup>1</sup> **	1141A <sup>1</sup>	-
54111/112D	10441B	10440B 10076A	N2771A	10439B	1170A <sup>1</sup>	1172A <sup>1</sup>	10442B	10437B	1144A <sup>1</sup> , 1145A <sup>1</sup>	1141A <sup>1</sup>	1146 N277
1980, 1950AA/B	10433B	10440B 10076A	N2771A	10439B	-	-	10442B	10437B	-	1141A <sup>1</sup>	1146 N277
1740/41/42/43/44/45/46A	10436B	10076A	N2771A	10439B	-	-	10442B	10437B	1144A <sup>1</sup> , 1145A <sup>1</sup>	1141A <sup>1</sup>	1146 N277
1715/22/25/26/27	10433B	10440B 10076A	N2771A	10439B	-	-	10442B	10437B	1144A <sup>1</sup> , 1145A <sup>1</sup>	1141A <sup>1</sup>	1146 N277

<sup>1</sup>Must remove pogo pin and configure scope for probe manually  
<sup>2</sup>Not commensurate with oscilloscope bandwidth

\*Requires the 1142A probe power supply  
\*\*Requires the 1143A probe offset and power module

### 10070 Passive Divider Probe Family

The 10070 family of rugged, general purpose probes are designed to operate with the 54600 family of oscilloscopes. This family provides a range of high-quality probing solutions at very reasonable prices.

These reliable probes come with one retractable hook tip, eight color identification tags, one ground bayonet, one IC Tip, one adjustment tool, and one ground lead.

See page 128 for compatible SMT probing kit.



10070 Passive Divider Probe Series

Model	Length	Division ratio	Circuit loading (1 MΩ scope input)	Typical scope bandwidth	Compensates oscilloscope input
10070C	1.5 m	1:1	1 MΩ: 70 pF	20 MHz	High Impedance
10073B	1.5 m	10:1	2.2 MΩ: 12 pF	500 MHz	1 MΩ: 6 to 15 pF
10074C <sup>1</sup>	1.5 m	10:1	10 MΩ: 15 pF	150 MHz	1 MΩ: 9 to 17 pF
10076A	1.8 m	100:1	66.7 MΩ: 3 pF	250 MHz	1 MΩ: 7 to 20 pF

<sup>1</sup> Probe ID pin

### Other 10070 Series Probe Accessories

Accessory	p/n
Probe tip to BNC (m) adapter	5081-7705
Replacement parts accessory kit	5081-7690
SMT probe accessory kit	10072A
0.5 mm IC probing kit	10075A
Retractable hook tip, qty 2	N2769A
Alligator ground lead, qty 2	N2770A

### Other Accessories

Accessory	p/n
BNC 50 Ω feedthrough	10100C
BNC 75 Ω feedthrough	11094B
BNC AC blocking capacitor	10240B

