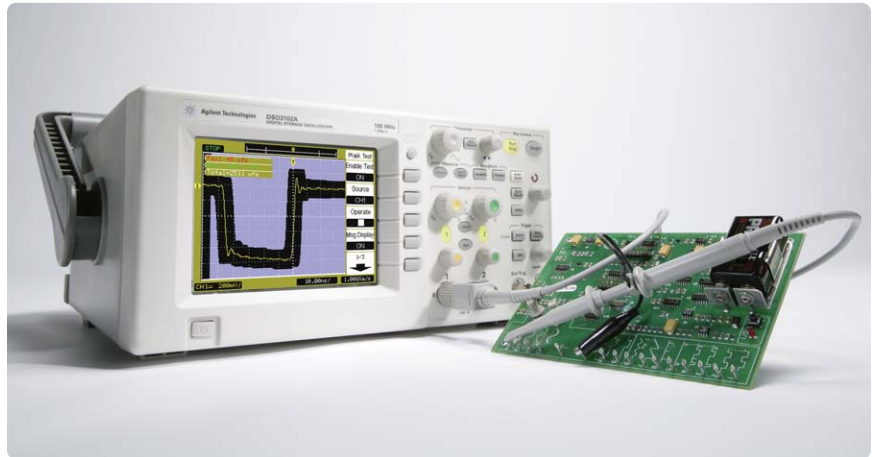


N2862A Passive Oscilloscope Probe

Data Sheet



Characteristics

| | |
|-----------------------|--|
| Operating temperature | 0° C to 50° C, 80% RH |
| Storage temperature | 0° C to 50° C, 80% RH |
| Cable length | 1.2 m |
| Bandwidth | DC to 150 MHz |
| Risetime | 2.33 ns |
| Attenuation ratio | 10:1 |
| Input resistance | 10 M Ω (when terminated into 1 M Ω) |
| Input capacitance | \approx 12 pF |
| Maximum input | 300 V RMS |
| Compensation | 5-30 pF |
| Safety | Conformance to IEC-1010 |



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Compensation Adjustments

The probes can be adjusted for low-frequency compensation and high-frequency compensation. For the best measurements you should compensate your probe to match its characteristics to the oscilloscope. A poorly compensated probe can introduce measurement errors. Low-frequency compensation should be performed before performing high-frequency compensation.

Low-frequency compensation

1. Connect the probe from the appropriate oscilloscope channel to 1 kHz square wave source.
2. Press Autoscale. Adjust the oscilloscope to display two to three cycles of the waveform over two to six vertical divisions.
3. Set the low-frequency compensation adjustment on the probe for the flattest pulse possible (see Figure 2).

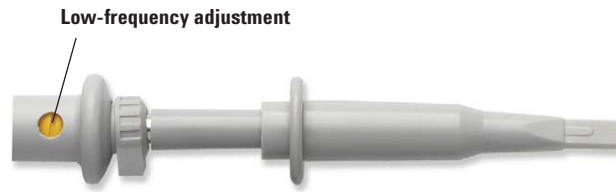


Figure 1. Low-frequency compensation adjustment.

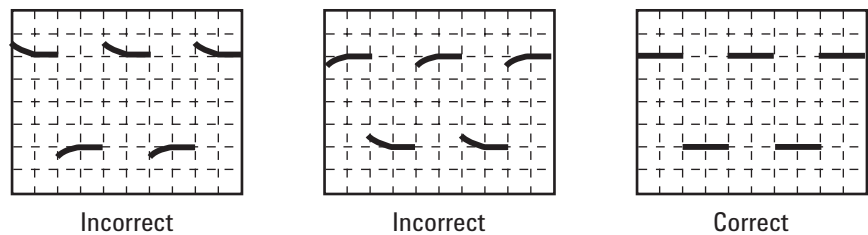


Figure 2.

High-frequency compensation

1. Using the BNC adapter, connect the probe to a square wave generator operating between 10 kHz and 1 MHz, and terminated into 50 Ω .
2. Press Autoscale. Adjust the oscilloscope to display one cycle of the waveform over two to six vertical divisions.
3. Set the high-frequency compensation adjustment on the probe for the flattest, most square, and most horizontal pulse possible (see Figure 4).

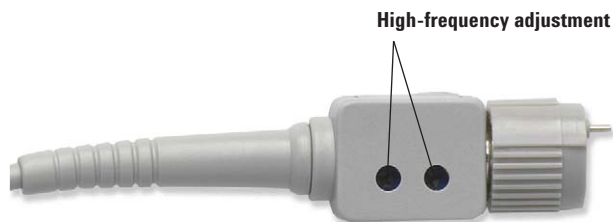


Figure 3. High-frequency compensation adjustment.

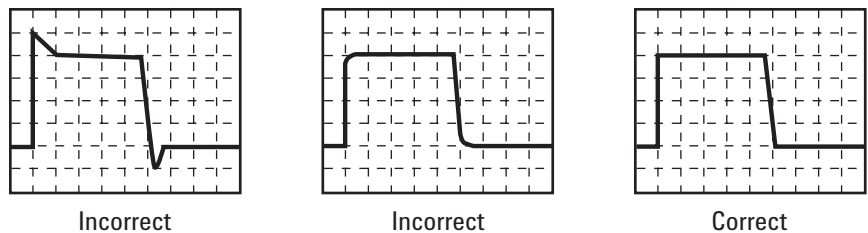


Figure 4.

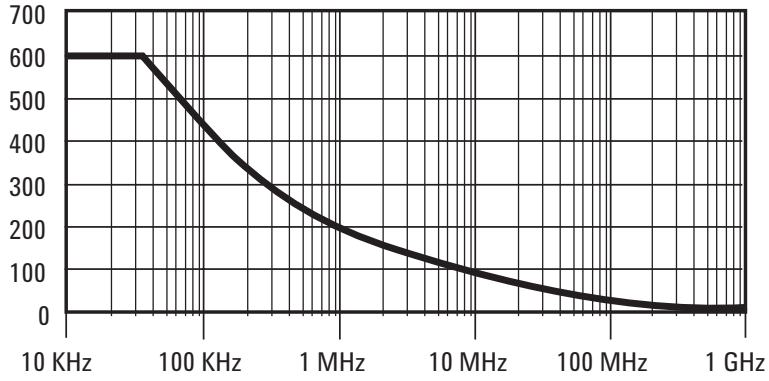


Figure 5. Voltage derating curve



Accessory Kit

| Item | Description | Quantity |
|------|---|----------|
| 1 | Retractable hook | 1 |
| 2 | Adjustment tool | 1 |
| 3 | Insulating cap | 1 |
| 4 | IC insulating cap | 1 |
| 5 | Identification tags (green,yellow, purple and pink) | 2 ea |
| 6 | Probe tip | 1 |
| 7 | Ground spring | 1 |
| 8 | BNC adapter | 1 |
| 9 | Ground lead (black 12 cm) | 1 |

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