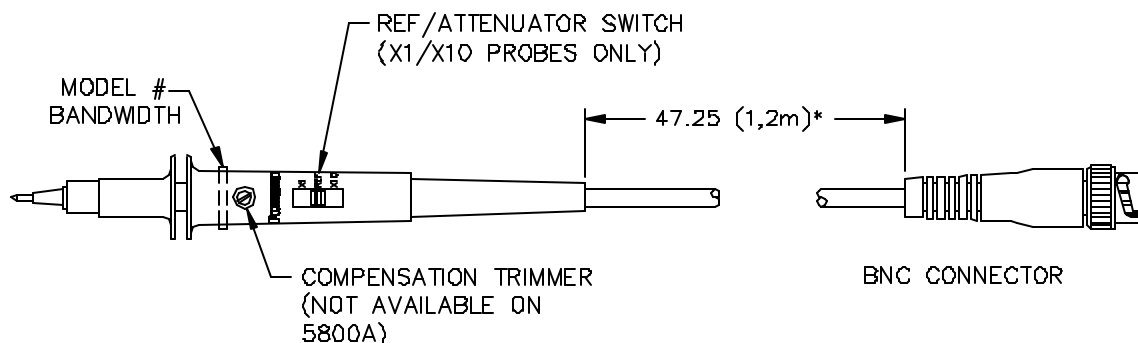


## General Purpose Passive Oscilloscope Probes Models 4550B, 5795A, 5800A, 5803A, 5806A, 5827A, 6049A, 6069A, 6265, 6266, SP150B



### FEATURES:

- Pomona's latest design of Passive Oscilloscope probes feature a one piece (monolithic) design for robust probe life.
- Probe bandwidth ratings are specified as a system bandwidth. System bandwidth includes both probe and oscilloscope together as a system. The result is a probe frequency response that can essentially be considered transparent.
- For ease of use, Readout Actuator for probe attenuation sensing and a Ground Reference switch are featured on some probe models.
- Full set of accessories are included with each probe.
- All probes meet IEC1010-2-031, 300V, CAT I

| Model #: | Attention: | System Bandwidth (3dB) MHz.: | System Risetime ns | Compensation Range (pf.): | Voltage Max. (Note 2) | Input Res. (M $\Omega$ ) | Input Cap. (pf.): | Readout Actuator Pin: | Gnd. Ref.: |
|----------|------------|------------------------------|--------------------|---------------------------|-----------------------|--------------------------|-------------------|-----------------------|------------|
| 4550B    | X1/X10     | 15/100                       | 23.33/3.5          | 10-60                     | 300                   | 1/10                     | 64/10.5           |                       | X          |
| 5795A    | X10        | 100                          | 3.5                | 10-60                     | 300                   | 10                       | 9.5               |                       |            |
| 5800A    | X1         | 30                           | 11.66              | N/A                       | 300                   | 1                        | 57                |                       |            |
| 5803A    | X10        | 200                          | 1.75               | 10-60                     | 300                   | 10                       | 10                |                       |            |
| 5806A    | X1/X10     | 20/200                       | 17.5/1.75          | 10-60                     | 300                   | 1/10                     | 77/11.5           |                       | X          |
| 5827A    | X100       | 200                          | 1.75               | 15-50                     | 300                   | 10                       | 5.5               |                       |            |
| 6049A    | X10        | 150                          | 2.33               | 10-30                     | 300                   | 10                       | 10.5              |                       |            |
| 6069A    | X10        | 250                          | 1.75               | 10-30                     | 300                   | 10                       | 10                |                       |            |
| 6265     | X10        | 60                           | 5.83               | 10-60                     | 300                   | 10                       | 10.5              |                       |            |
| 6266     | X1/X10     | 20/60                        | 17.5/5.83          | 10-60                     | 300                   | 1/10                     | 65/11             |                       | X          |
| SP150B   | X1/X10     | 15/150                       | 23.33/2.33         | 10-60                     | 300                   | 1/10                     | 50/15             |                       | X          |

### 1.) Measurements based on 1M Ohm, 20 pf. Oscilloscope.

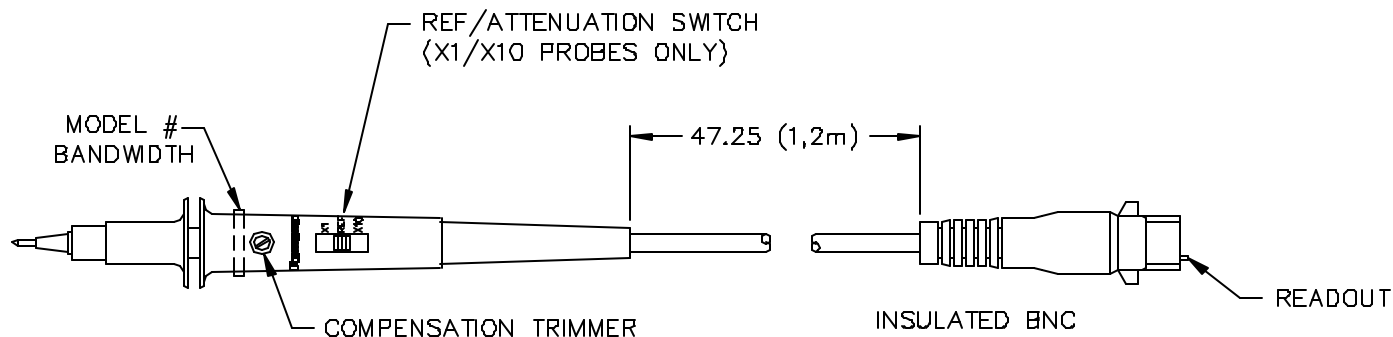
All dimensions are in inches. Tolerances (except noted): .xx =  $\pm 0.02$ " (.51 mm), .xxx =  $\pm 0.005$ " (.127 mm).  
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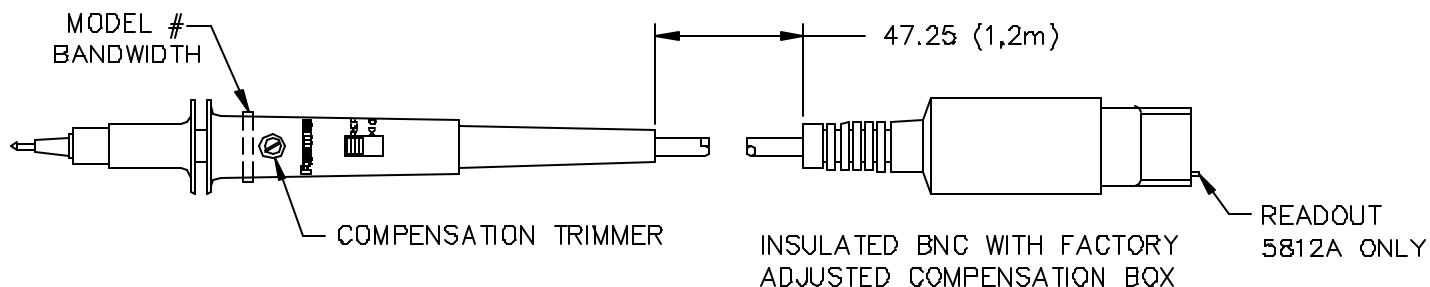
## General Purpose Passive Oscilloscope Probes Models 4550B, 5795A, 5800A, 5803A, 5806A, 5827A, 6049A, 6069A, 6265, 6266, SP150B

2.) Maximum probe input voltage is limited to the lesser of 300VDC (includes AC peak to 1.3MHz.) or on X1, to the driven equipment's input rating.

\* Oscilloscope Model # 5827 has a cable length of 2.0 Meters.



| Model #: | Attention: | System Bandwidth (3dB) MHz.: | System Risetime ns | Compensation Range (pf.): | Voltage Max. (Note 2) | Input Res. (M $\Omega$ ) | Input Cap. (pf.): | Readout Actuator Pin: | Gnd. Ref.: |
|----------|------------|------------------------------|--------------------|---------------------------|-----------------------|--------------------------|-------------------|-----------------------|------------|
| 6101A    | X10        | 150                          | 2.33               | 10-30                     | 300                   | 10                       | 10.5              | X                     |            |
| 6102A    | X10        | 250                          | 1.4                | 10-30                     | 300                   | 10                       | 10                | X                     |            |



| Model #: | Attention: | System Bandwidth (3dB) MHz.: | System Risetime ns | Compensation Range (pf.): | Voltage Max. (Note 2) | Input Res. (M $\Omega$ ) | Input Cap. (pf.): | Readout Actuator Pin: | Gnd. Ref.: |
|----------|------------|------------------------------|--------------------|---------------------------|-----------------------|--------------------------|-------------------|-----------------------|------------|
| 5809A    | X10        | 300                          | 1.17               | 10-60                     | 300                   | 10                       | 17                |                       |            |
| 5812A    | X10        | 300                          | 1.17               | 10-60                     | 300                   | 10                       | 17                | X                     |            |

1.) Measurements based on 1M Ohm, 20 pf. Oscilloscope.

2.) Maximum probe input voltage is limited to the lesser of 300VDC (includes AC peak to 1.3MHz.) or on X1, to the driven equipment's input rating.

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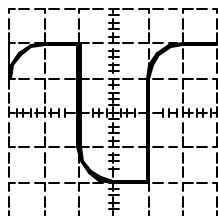
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### Low Frequency Trimmer Adjustment:

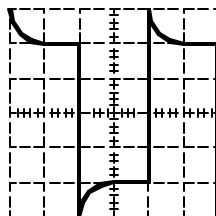
(Model 5800A is not adjustable)

Low frequency response can be matched to the oscilloscope by adjusting the compensation trimmer on the head of the probe.

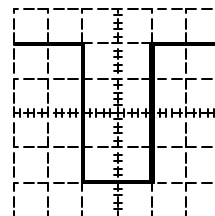
- 1.) Connect the probe to the oscilloscope and to a 1 KHz. Square wave source, the rise time should not exceed 10 microseconds (most oscilloscopes provide a probe compensation output). For X1/X10 probes, switch to the X10 position.
- 2.) Set the oscilloscope to display two to three cycles and two to six vertical divisions.
- 3.) Carefully adjust the trimmer tool to obtain the flattest tops to the square waves displayed on the oscilloscope, see illustrations.



INCORRECT



INCORRECT



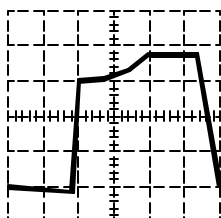
CORRECT

### High Frequency Trimmer Adjustment:

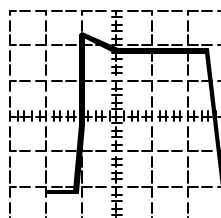
(Models 5809A and 5812A only)

The high frequency compensation has been preadjusted at the factory, however if adjustment is required, use the following procedure.

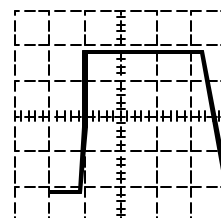
- 1.) Remove the compensation box cover located near the connector. Using the BNC adapter, connect the probe to a square wave generator operating between 10 to 100 KHz terminated into 50 ohms. The square wave generator rise time should be approximately .125 ns. Adjust each control until the leading edge of the waveform is as flat, square and horizontal as possible (see high frequency illustrations).
- 2.) Readjust the low frequency compensation if necessary.



INCORRECT



INCORRECT



CORRECT

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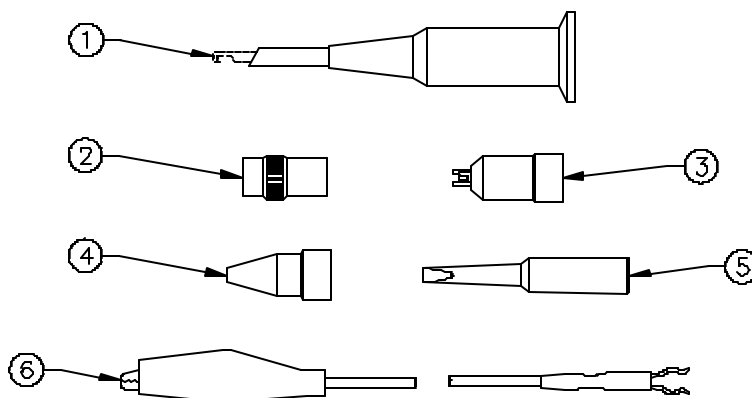
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## General Purpose Passive Oscilloscope Probes Models 4550B, 5795A, 5800A, 5803A, 5806A, 5827A, 6049A, 6069A, 6265, 6266, SP150B

Replacement Accessory Kit Part Number: 6267

|   |                      |
|---|----------------------|
| 1 | RETRACTABLE HOOK TIP |
| 2 | BNC ADAPTER          |
| 3 | I.C. ADAPTER         |
| 4 | INSULATING TIP       |
| 5 | TRIMMER TOOL         |
| 6 | 6" GROUND LEAD       |



### Pomona Oscilloscope to Probe Cross Reference:

| Manf. | Model Series     | x1    | x10          | x1/x10 | x100  |
|-------|------------------|-------|--------------|--------|-------|
| B&K   | 1422, 1443       | 5800A | 6265         | 6266   | 5827A |
| B&K   | 2120, 2125, 2160 | 5800A | 6265         | 6266   | 5827A |
| B&K   | 2190             | 5800A | 5795A        | 4550B  | 5827A |
| B&K   | 2522             | 5800A | 6265         | 6266   | 5827A |
| B&K   | 5020, 5024, 5034 | 5800A | 6265         | 6266   | 5827A |
| B&K   | 5100, 5105       | 5800A | 5795A        | 4550B  | 5827A |
| B&K   | 5150             | 5800A | 6049A        | SP150B | 5827A |
| B&K   | 1541B            | 5800A | 6265         | 6266   | 5827A |
| Fluke | 90, 105 Series   |       | 6006* & 6033 | 6035*  |       |
| Fluke | PM3050, PM3052   | 5800A | 6265         | 6266   | 5827A |
| Fluke | PM3055, PM3057   | 5800A | 6265         | 6266   | 5827A |
| Fluke | PM3065, PM3067   | 5800A | 5795A        | 4550B  | 5827A |
| Fluke | PM3070, PM3072   | 5800A | 5795A        | 4550B  | 5827A |
| Fluke | PM3092, PM33094  | 5800A | 5803A        | 5806A  | 5827A |
| Fluke | PM3208, PM3209   | 5800A | 6265         | 6266   | 5827A |
| Fluke | PM3335, PM3337   | 5800A | 6265         | 6266   | 5827A |
| Fluke | PM3350A, PM3352A | 5800A | 6265         | 6266   | 5827A |
| Fluke | PM3355, PM3357   | 5800A | 6265         | 6266   | 5827A |
| Fluke | PM3365A, PM3367A | 5800A | 5795A        | 4550B  | 5827A |
| Fluke | PM3375, PM3377   | 5800A | 5795A        | 4550B  | 5827A |
| Fluke | PM3382, PM3384   | 5800A | 5795A        | 4550B  | 5827A |

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## General Purpose Passive Oscilloscope Probes Models 4550B, 5795A, 5800A, 5803A, 5806A, 5827A, 6049A, 6069A, 6265, 6266, SP150B

|         |                        |       |       |        |       |
|---------|------------------------|-------|-------|--------|-------|
| Fluke   | PM3392, PM3394         | 5800A | 5803A | 5806A  | 5827A |
| Hitachi | V-1060, V-1065A        | 5800A | 5795A | 4550B  | 5827A |
| Hitachi | V-1100A                | 5800A | 5795A | 4550B  | 5827A |
| Hitachi | V-1150                 | 5800A | 6049A | SP150B | 5827A |
| Hitachi | V-209, V-212           | 5800A | 6265  | 6266   | 5827A |
| Hitachi | V-222, V-223, V-225    | 5800A | 6265  | 6266   | 5827A |
| Hitachi | V-422                  | 5800A | 6265  | 6266   | 5827A |
| Hitachi | V-509, V-522           | 5800A | 6265  | 6266   | 5827A |
| Hitachi | V-523, V-525           | 5800A | 6265  | 6266   | 5827A |
| Hitachi | V-6155                 | 5800A | 5795A | 4550B  | 5827A |
| Hitachi | V-660, V-665A          | 5800A | 6265  | 6266   | 5827A |
| Hitachi | VC-5025                | 5800A | 6265  | 6266   | 5827A |
| Hitachi | VC-5410, VC-5430       | 5800A | 6265  | 6266   | 5827A |
| Hitachi | VC-5460                | 5800A | 6049A | SP150B | 5827A |
| Hitachi | VC-6023, VC-6024       | 5800A | 6265  | 6266   | 5827A |
| Hitachi | VC-6025A               | 5800A | 6265  | 6266   | 5827A |
| Hitachi | VC-6045, VC-6045A      | 5800A | 5795A | 4550B  | 5827A |
| Hitachi | VC-6155                | 5800A | 5795A | 4550B  | 5827A |
| Hitachi | VC-7102, VC-7104       | 5800A | 6049A | SP150B | 5827A |
| H-P     | 54600B, 54601B         | 5800A | 5795A | 4550B  | 5827A |
| H-P     | 54602B                 | 5800A | 6049A | SP150B | 5827A |
| H-P     | 54603B                 | 5800A | 6265  | 6266   | 5827A |
| H-P     | 54645A, 54645D         | 5800A | 5795A | 4550B  | 5827A |
| Iwatsu  | SS-7811, SS-7821       | 5800A | 5795A | 4550B  | 5827A |
| Kikusui | COR5500U, COR5501U     | 5800A | 5795A | 4550B  | 5827A |
| Kikusui | COR5502U               | 5800A | 5795A | 4550B  | 5827A |
| Kikusui | COR5520U, COR5521U     | 5800A | 6265  | 6266   | 5827A |
| Kikusui | COR5540U, COR5541U     | 5800A | 6265  | 6266   | 5827A |
| Kikusui | COR5560U, COR5561U     | 5800A | 6265  | 6266   | 5827A |
| Leader  | 326                    | 5800A | 5795A | 4550B  | 5827A |
| Leader  | 1041                   | 5800A | 6265  | 6266   | 5827A |
| Leader  | 2250                   | 5800A | 6069A |        |       |
| Leader  | 8020, 8060, 8063       | 5800A | 6265  | 6266   | 5827A |
| Leader  | 8060, 8063             | 5800A | 6265  | 6266   | 5827A |
| Leader  | 8100, 8101, 8103, 8104 | 5800A | 5795A | 4550B  | 5827A |
| Leader  | 3060D                  | 5800A | 6265  | 6266   | 5827A |
| Leader  | 3100A                  | 5800A | 5795A | 4550B  | 5827A |
| Leader  | 313A, 315A, 323A, 325A | 5800A | 6265  | 6266   | 5827A |
| Leader  | LBO-5825               | 5800A | 6265  | 6266   | 5827A |
| LeCroy  | 9304A, 9340AM          | 5800A | 5803A | 5806A  | 5827A |

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## General Purpose Passive Oscilloscope Probes Models 4550B, 5795A, 5800A, 5803A, 5806A, 5827A, 6049A, 6069A, 6265, 6266, SP150B

|           |                     |       |       |        |       |
|-----------|---------------------|-------|-------|--------|-------|
| Tektronix | 2201, 2205          | 5800A | 6265  | 6266   | 5827A |
| Tektronix | 2211, 2214          | 5800A | 6265  | 6266   | 5827A |
| Tektronix | 2212, 2224          | 5800A | 6101A | 6266   | 5827A |
| Tektronix | 2221A, 2235A, 2236A | 5800A | 6101A | 4550B  | 5827A |
| Tektronix | 2245A, 2246A, 2247A | 5800A | 6101A | 4550B  | 5827A |
| Tektronix | 2430A/M, 2445B      | 5800A | 6101A | SP150B | 5827A |
| Tektronix | 2445A               | 5800A | 6101A | 4550B  | 5827A |
| Tektronix | TAS220, TAS250      | 5800A | 6265  | 6266   | 5827A |
| Tektronix | TAS465, TAS475      | 5800A | 6101A | 4550B  | 5827A |
| Tektronix | TAS485              | 5800A | 6102A | 5806A  | 5827A |
| Tektronix | TDS210              | 5800A | 6265  | 6266   | 5827A |
| Tektronix | TDS220              | 5800A | 6265  | 4550B  | 5827A |
| Tektronix | TDS310              | 5800A | 6101A | 6266   | 5827A |
| Tektronix | TDS320, TDS350      | 5800A | 6102A | 5806A  | 5827A |
| Tektronix | TDS410, TDS420      | 5800A | 6101A | SP150B | 5827A |
| Tektronix | TDS410A, TDS420A    | 5800A | 6102A | 5806A  | 5827A |
| Yokogawa  | DL1540, DL4100      | 5800A | 6049A | SP150B | 5827A |
| Yokogawa  | DL4200              | 5800A | 5809A |        |       |

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SY/EH/LS

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