TYPICAL SETUP: SA-261-101-34-C00

CABLE INFO:

- CNCT_1: ADPTR x2_Banana-M-to-BNC-F \rightarrow CBL BNC-M-to-SMA-M
- CNCT_2: CBL SMA-M-to-BNC-M \rightarrow ADPTR BNC-F-to-x2_Banana-F
- CNCT_3: CBL SMA-M-to-SMA-M
- CNTC_4: ADPTR x2_Banana-M-to-BNC-F → CBL BNC-M-to-SMA-M
- CNCT_5: CBL BNC-M-to-SMA-M
- CNCT_6: CBL BNC-M-to-BNC-M



Notes:

1.) SYMBOL ‡ Current limited to 5mA due voltage-potential-relative to ground > ± 50VDC

- 2.) LIMIT, |V_COMP (-10*V_CTRL)| ≤ 180VDC: C10 to C12 on SD-144-174-04 are limited to 200VDC
 - a.) COMP is used to set the DC-bias on the substrate
 - b.) The resistance between COMP and OUT is currently $1M\Omega$
 - i.) This is adequate unless substrate locks up-can reduced if lockup becomes an issue
 - c.) V_COMP \geq 0VDC: The closer to 0 the larger the substrate capacitance (*less likely to lockup*)
- 3.) OUT is generate a positive 0 \rightarrow +100V pulse relative to V_COMP
- 4.) <u>FOR ALL</u> TEST-POINTS (TP) Use \geq 1M Ω probe
- 5.) LIMIT, $|V_CTRL| \leq$ +10VDC: Input resistance on CTRL node is 1k Ω
- 6.) ATTN 10x SA-261-101-35-C00
 - a.) Designed to work at max voltage $\pm 32 \text{VDC}$ input with $1 k \Omega$ load
 - b.) Had directionality (non-symmetric voltage divider)
 - c.) Used so can sweep pulse voltage in smaller steps

7.) ALL NODES ARE CLAMPED FOR PROTECTION to GND with zener-diodes: Except OUT is clamped to COMP with diode to only produce positive pulses relative to COMP (to avoid possibly reverse biasing substrate)