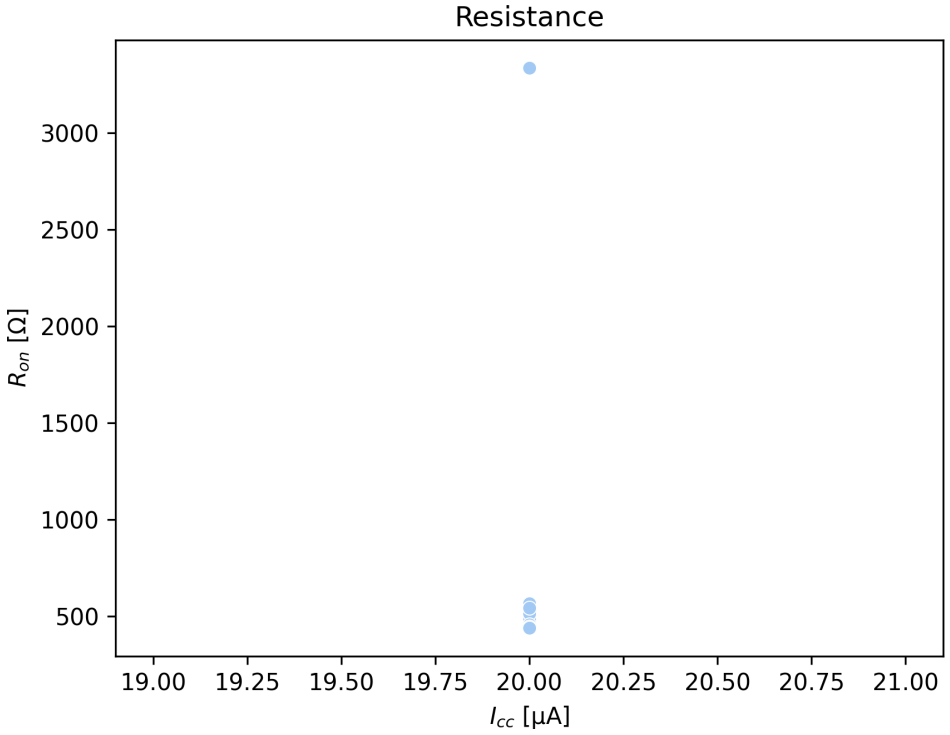
(wafer1,2,0,-1,-1,4,4) Characteristics

- **Cell Size:** 15um
- **Times Accessed:** 26
- **Last Measurement:** 2022/March/01 at 03:26:18PM

Summary

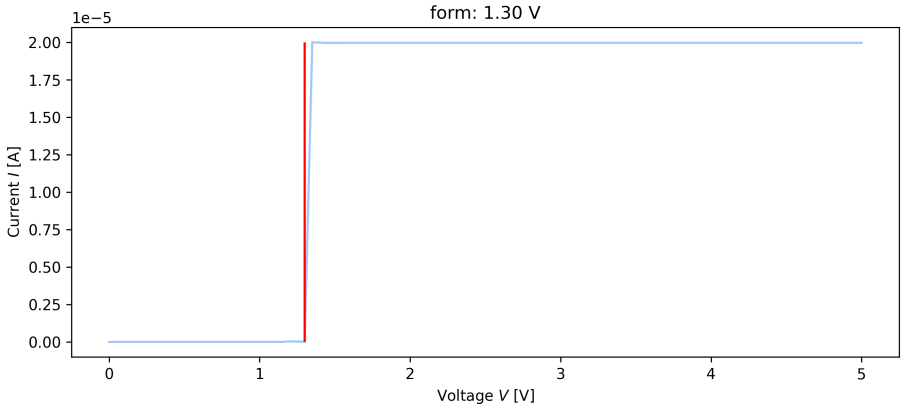
Cycle #	Set Icc (μA)	Set Voltage (V)	R_on (Ω)	R2
1	20.0	1.30	415572.57	0.679
2	20.0	2.30	3334.96	1.000
3	25.0	2.15	-2344954.45	0.089
4	20.0	3.80	485.78	1.000
5	20.0	1.40	565.12	1.000
6	20.0	3.70	512.10	1.000
7	20.0	3.70	543.26	1.000
8	20.0	3.70	440.85	1.000
9	20.0	3.70	456.09	1.000
10	20.0	3.70	444.85	1.000
11	20.0	3.70	437.82	1.000


Resistance
3000
2500
2000
1500
1000
500
R_{on} [Ω]
19.00
19.25
19.50
19.75
20.00
20.25
20.50
20.75
21.00
I_{cc} [μA]

form

- **Time:** 02:57:08PM
- **Icc:** 20.0uA
- **Voltage Range:** 0V → 5V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** 1.069 V/s*
- **Cycle:** 1
- **Set Voltage:** 1.30 V

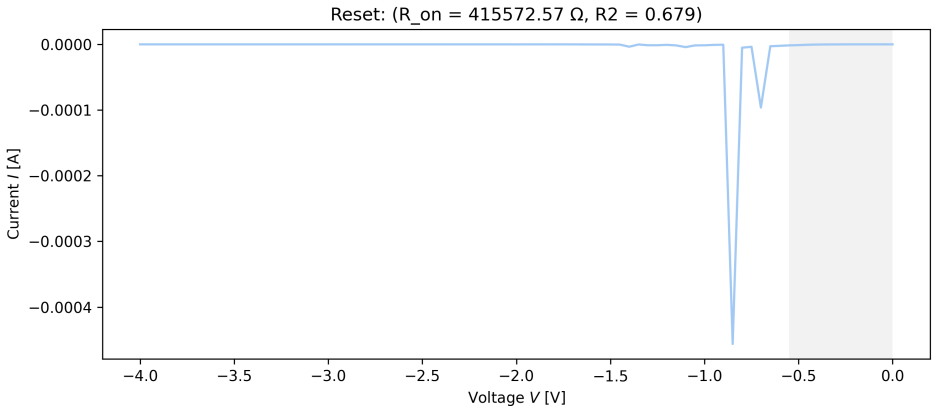
Form* at 1.35 V. Too flimsy and reset after due to bad probe connection



reset

- **Time:** 02:58:34PM
- **Icc:** 5.0mA
- **Voltage Range:** 0V → -4V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** -1.069 V/s*
- **Cycle:** 1
- **Resistance:** 415572.57 Ω
- **Linear Fit R2:** 0.679

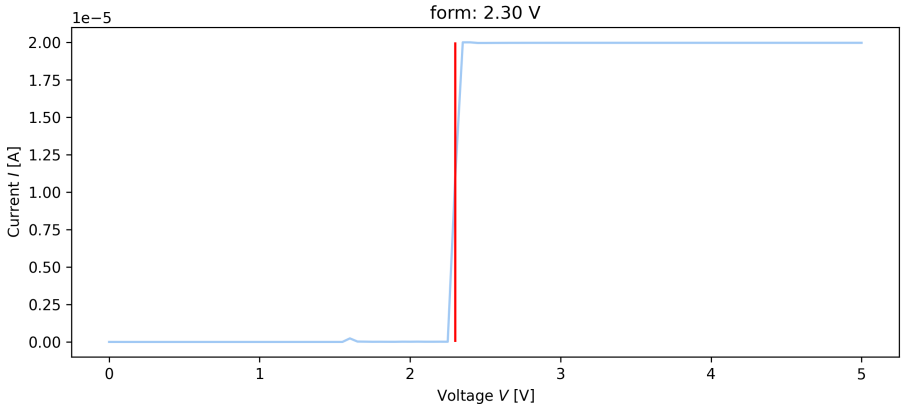
Cell did not conduct



form

- **Time:** 03:00:01PM
- **Icc:** 20.0uA
- **Voltage Range:** 0V → 5V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** 1.069 V/s*
- **Cycle:** 2
- **Set Voltage:** 2.30 V

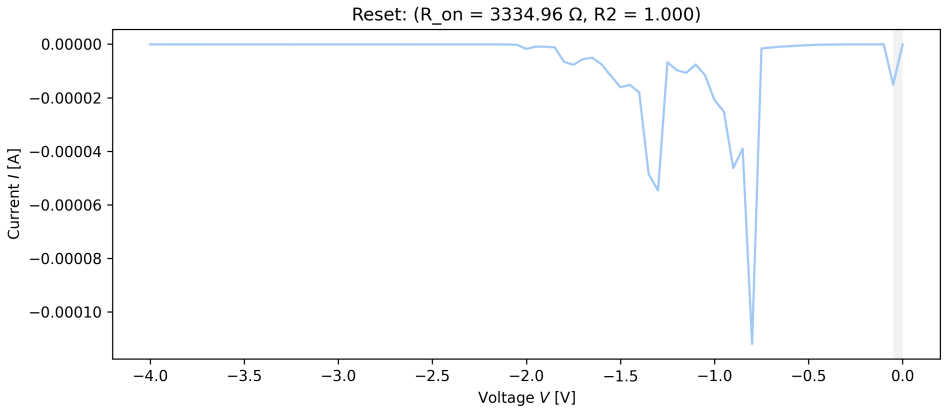
Form* at 2.3 V. Too flimsy and reset after due to bad probe connection



reset

- **Time:** 03:00:49PM
- **Icc:** 5.0mA
- **Voltage Range:** 0V → -4V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** -1.068 V/s*
- **Cycle:** 2
- **Resistance:** 3334.96 Ω
- **Linear Fit R2:** 1.000

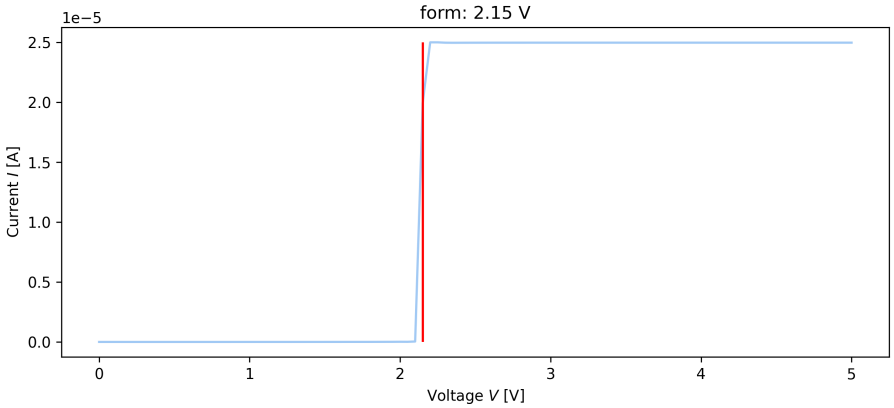
Wild reset graph. Probe connection issues



form

- **Time:** 03:01:49PM
- **Icc:** 25.0uA
- **Voltage Range:** 0V → 5V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** 1.069 V/s*
- **Cycle:** 3
- **Set Voltage:** 2.15 V

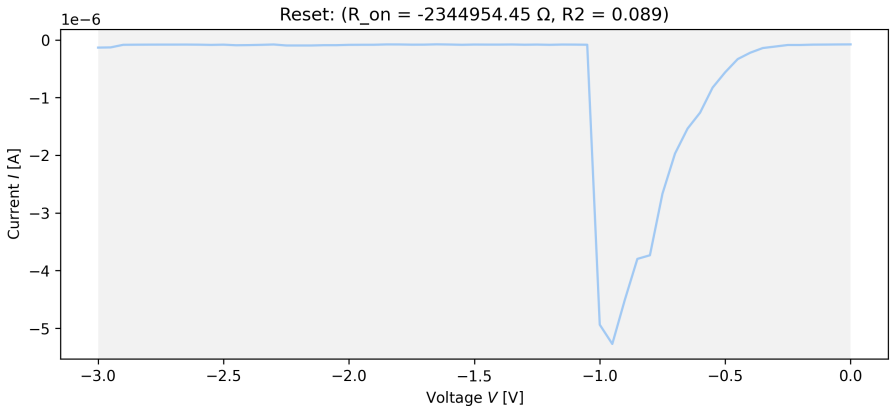
Form* at 2.2 V. Too flimsy and reset after due to bad probe connection



reset

- **Time:** 03:02:52PM
- **Icc:** 5.0mA
- **Voltage Range:** 0V → -3V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** -1.067 V/s*
- **Cycle:** 3
- **Resistance:** -2344954.45 Ω
- **Linear Fit R2:** 0.089

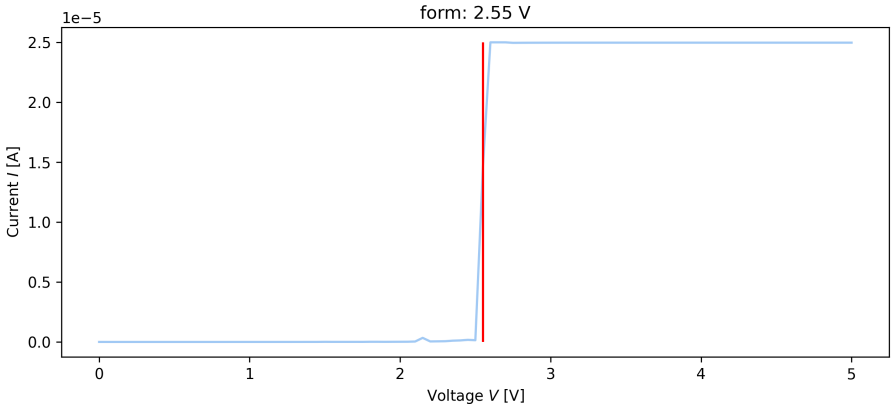
Reset at -1.05 V, but had non-ohmic behavior leading up to reset



form

- **Time:** 03:03:52PM
- **Icc:** 25.0uA
- **Voltage Range:** 0V → 5V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** 1.069 V/s*
- **Cycle:** 4
- **Set Voltage:** 2.55 V

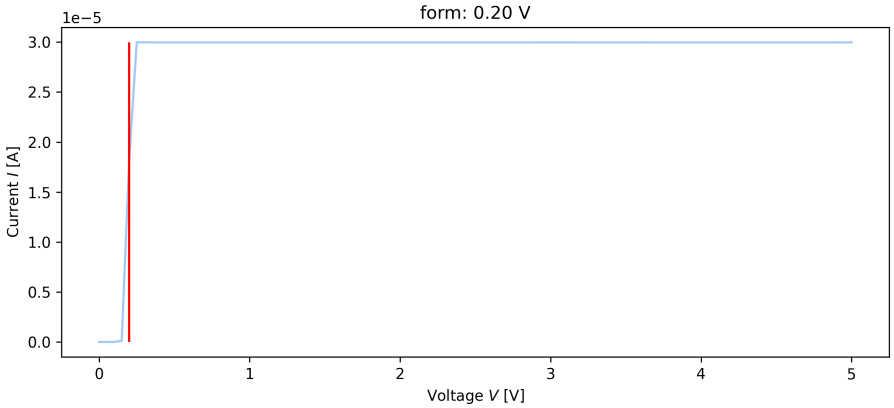
Form* at 2.6 V. Too flimsy and reset after due to bad probe connection



form

- **Time:** 03:06:05PM
- **Icc:** 30.0uA
- **Voltage Range:** 0V → 5V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** 1.651 V/s*
- **Cycle:** 4
- **Set Voltage:** 0.20 V

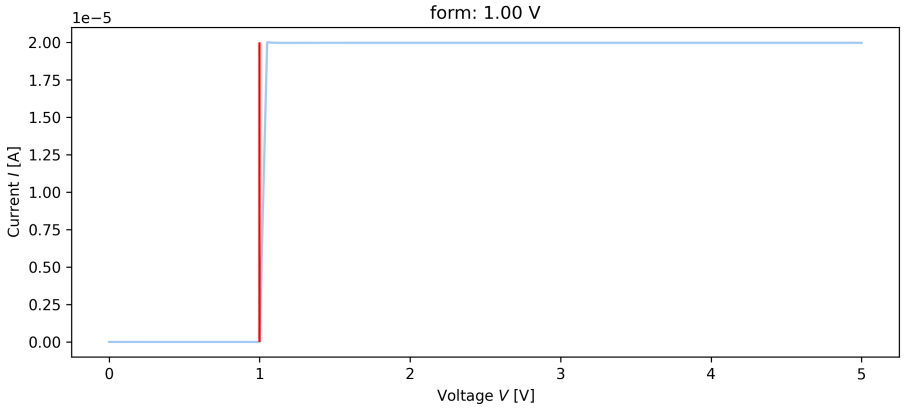
Form* at 0.25 V, very early



form

- **Time:** 03:10:31PM
- **Icc:** 20.0uA
- **Voltage Range:** 0V → 5V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** 1.069 V/s*
- **Cycle:** 4
- **Set Voltage:** 1.00 V

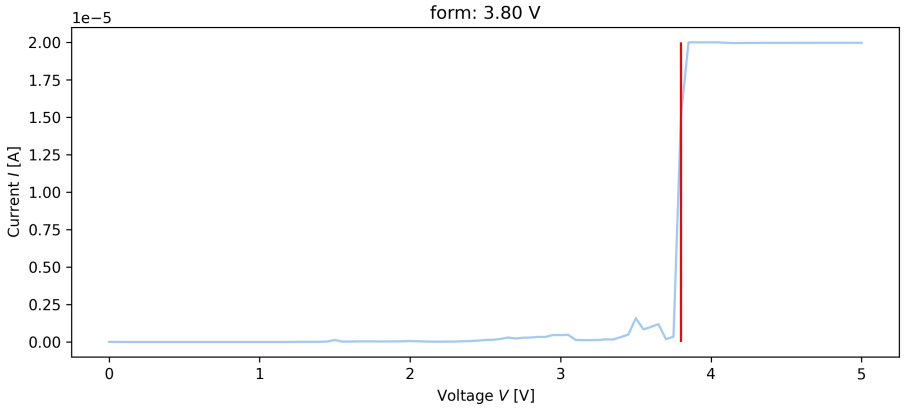
Form at 1.05 V after replacing probes



form

- **Time:** 03:12:21PM
- **Icc:** 20.0uA
- **Voltage Range:** 0V → 5V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** 1.069 V/s*
- **Cycle:** 4
- **Set Voltage:** 3.80 V

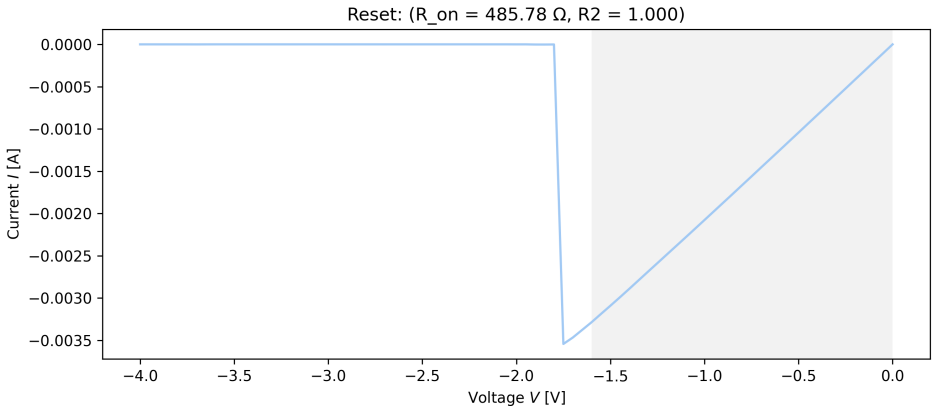
Form* at 3.85 V



reset

- **Time:** 03:15:33PM
- **Icc:** 5.0mA
- **Voltage Range:** 0V → -4V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** -1.470 V/s*
- **Cycle:** 4
- **Resistance:** 485.78 Ω
- **Linear Fit R2:** 1.000

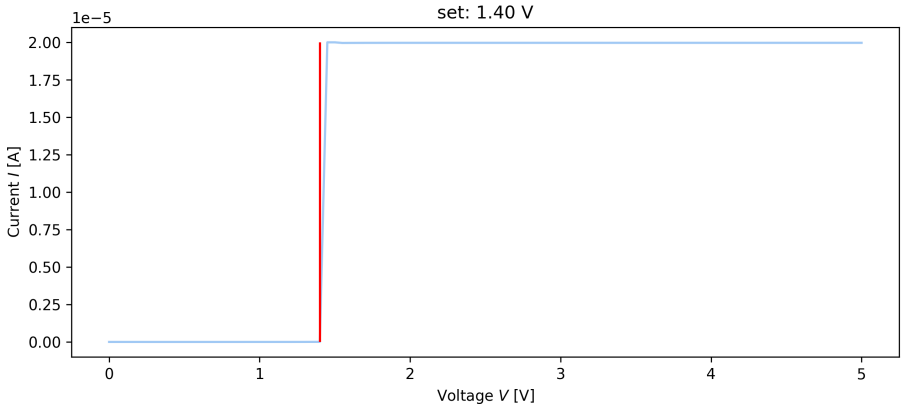
Reset at -1.8 V



set

- **Time:** 03:18:00PM
- **Icc:** 20.0uA
- **Voltage Range:** 0V → 5V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** 1.069 V/s*
- **Cycle:** 5
- **Set Voltage:** 1.40 V

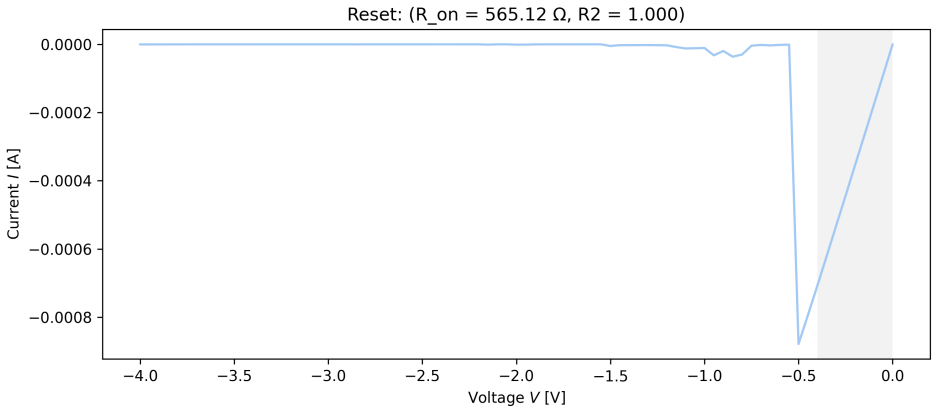
Set at 1.45 V



reset

- **Time:** 03:18:44PM
- **Icc:** 5.0mA
- **Voltage Range:** 0V → -4V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** -1.104 V/s*
- **Cycle:** 5
- **Resistance:** 565.12 Ω
- **Linear Fit R2:** 1.000

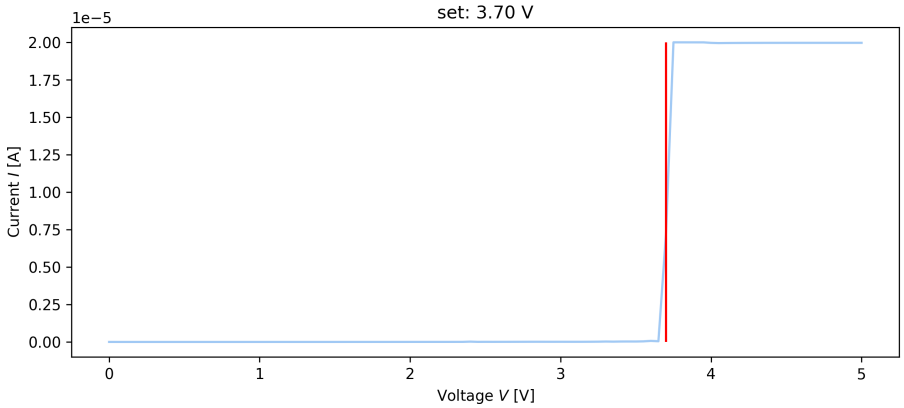
Reset at -0.55 V



set

- **Time:** 03:20:00PM
- **Icc:** 20.0uA
- **Voltage Range:** 0V → 5V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** 1.069 V/s*
- **Cycle:** 6
- **Set Voltage:** 3.70 V

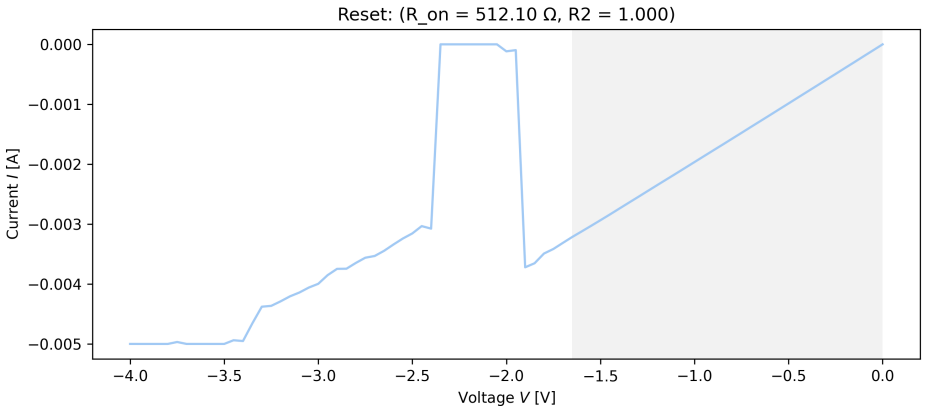
Set at 3.7 V



reset

- **Time:** 03:20:44PM
- **Icc:** 5.0mA
- **Voltage Range:** 0V → -4V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** -1.429 V/s*
- **Cycle:** 6
- **Resistance:** 512.10 Ω
- **Linear Fit R2:** 1.000

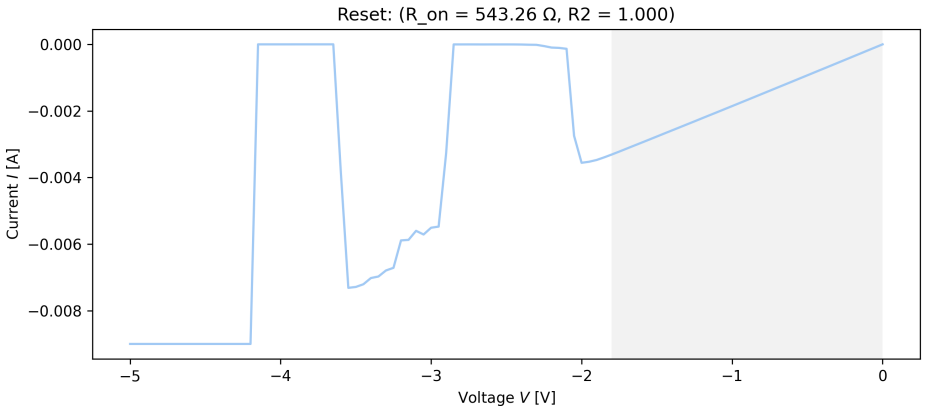
Failed reset



reset

- **Time:** 03:21:22PM
- **Icc:** 9.0mA
- **Voltage Range:** 0V → -5V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** -1.429 V/s*
- **Cycle:** 7
- **Resistance:** 543.26 Ω
- **Linear Fit R2:** 1.000

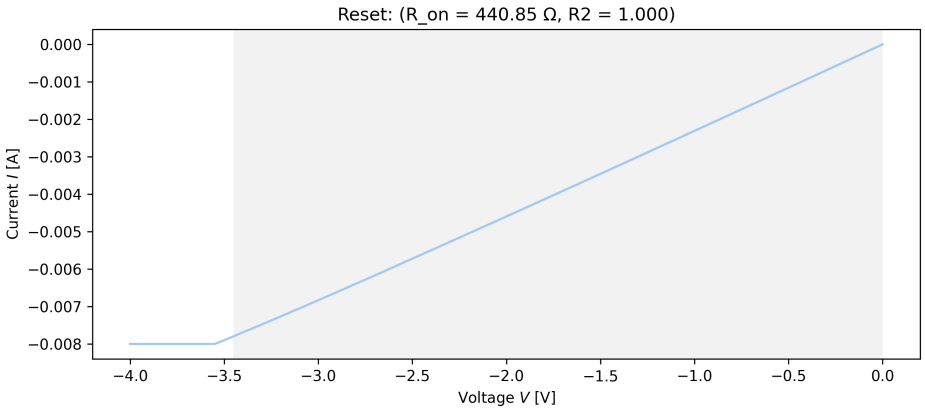
Failed reset



reset

- **Time:** 03:22:34PM
- **Icc:** 8.0mA
- **Voltage Range:** 0V → -4V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** -1.514 V/s*
- **Cycle:** 8
- **Resistance:** 440.85 Ω
- **Linear Fit R2:** 1.000

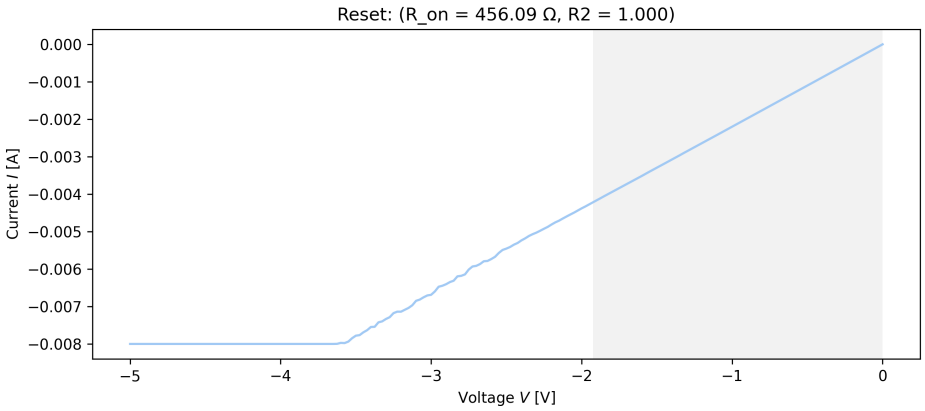
Failed reset



reset

- **Time:** 03:24:39PM
- **Icc:** 8.0mA
- **Voltage Range:** 0V → -5V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** -0.765 V/s*
- **Cycle:** 9
- **Resistance:** 456.09 Ω
- **Linear Fit R2:** 1.000

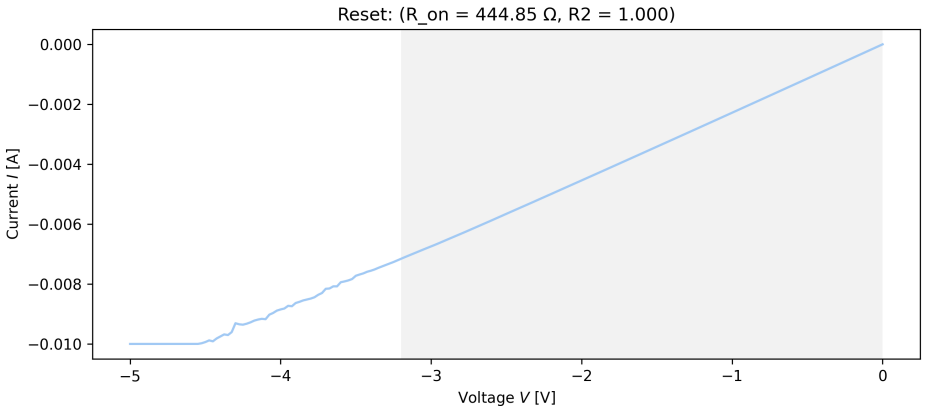
Failed reset. Amrita is determined this cell will reset



reset

- **Time:** 03:25:42PM
- **Icc:** 10.0mA
- **Voltage Range:** 0V → -5V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** -0.777 V/s*
- **Cycle:** 10
- **Resistance:** 444.85 Ω
- **Linear Fit R2:** 1.000

Failed reset



reset

- **Time:** 03:26:18PM
- **Icc:** 10.0mA
- **Voltage Range:** 0V → -6V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** -0.776 V/s*
- **Cycle:** 11
- **Resistance:** 437.82 Ω
- **Linear Fit R2:** 1.000

Failed reset