

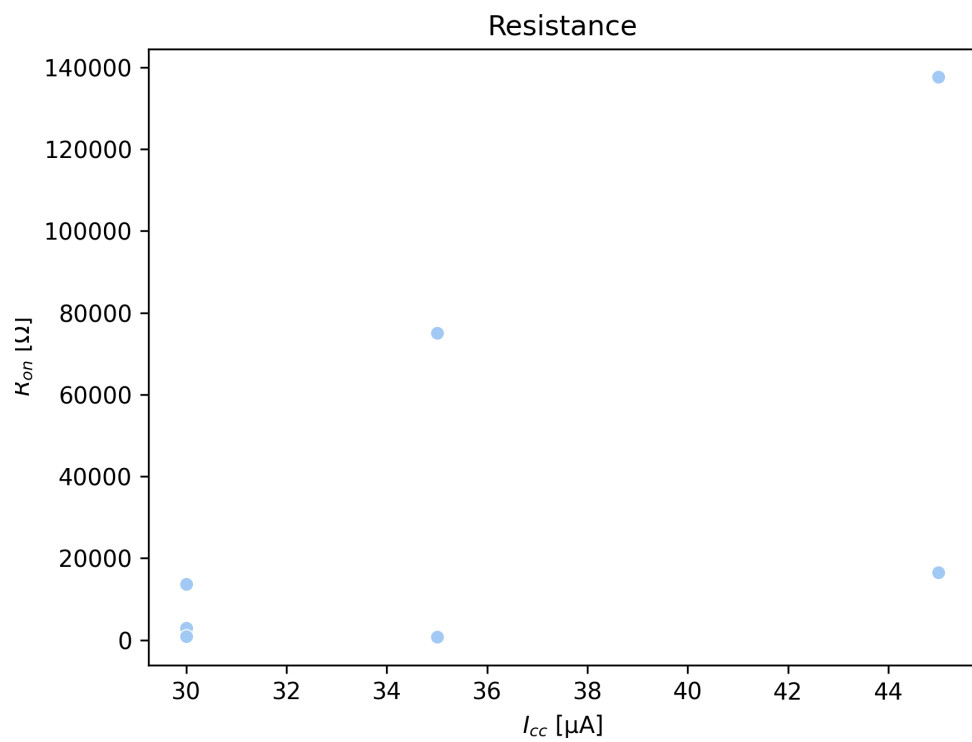
## (wafer2,0,6,-1,-1,0,3) Characteristics

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- **Cell Size:** 10um
- **Times Accessed:** 32
- **Last Measurement:** 2022/April/01 at 12:48:55PM

### Summary

Cycle #	Set Icc ( $\mu$ A)	Set Voltage (V)	R_on ( $\Omega$ )	R2
1	30.0	2.80	155001.35	0.952
2	30.0	4.95	2917.90	1.000
3	30.0	2.95	960.67	1.000
4	30.0	3.80	18029.63	0.970
5	30.0	1.05	63652.05	0.956
6	30.0	1.05	13698.14	0.998
7	35.0	3.60	69800.52	0.867
8	35.0	3.45	750.45	1.000
9	35.0	3.45	-9714646.93	0.015
10	35.0	3.45	75085.44	0.990
11	35.0	3.45	1110334.89	0.754
12	45.0	0.90	6537426.51	0.684
13	45.0	0.90	5821482.49	0.646
14	45.0	0.90	16510.44	0.983
15	45.0	0.90	137625.64	0.993

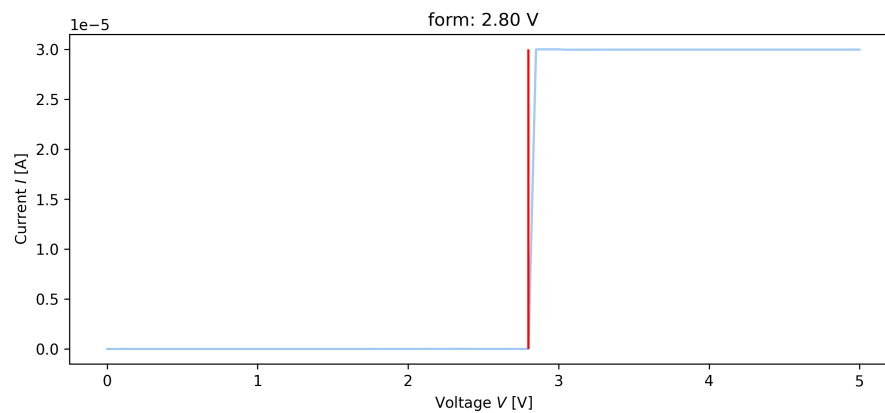


## form

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- **Time:** 12:04:38PM
- **Icc:** 30.0uA
- **Voltage Range:** 0V  $\rightarrow$  5V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** 1.068 V/s\*
- **Cycle:** 1
- **Set Voltage:** 2.80 V

formed at 2.85V, not actual forming due to low voltage

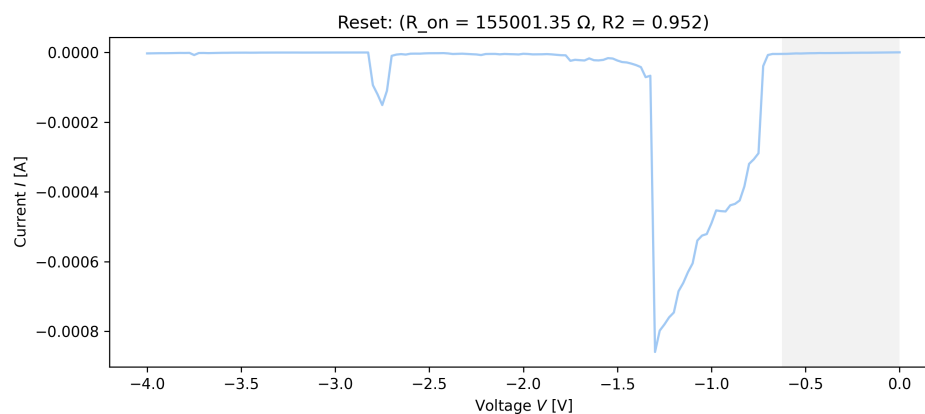


## reset

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- **Time:** 12:05:15PM
- **I<sub>cc</sub>:** 8.0mA
- **Voltage Range:** 0V → -4V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** -0.551 V/s\*
- **Cycle:** 1
- **Resistance:** 155001.35 Ω
- **Linear Fit R<sup>2</sup>:** 0.952

Reset but looks odd

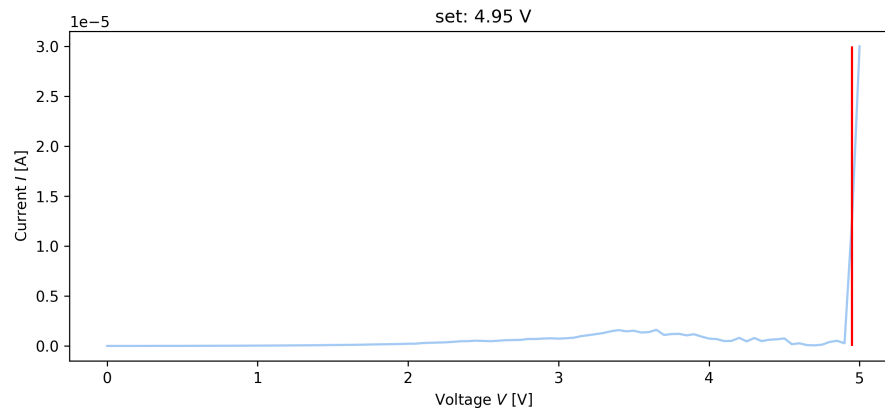


## set

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- **Time:** 12:05:43PM
- **Icc:** 30.0uA
- **Voltage Range:** 0V  $\rightarrow$  5V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** 1.069 V/s\*
- **Cycle:** 2
- **Set Voltage:** 4.95 V

Set at 5V, behaved more like a form

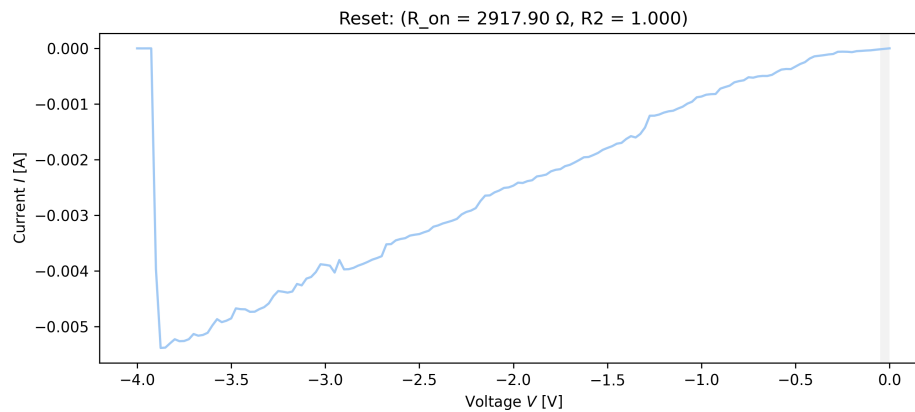


## reset

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- **Time:** 12:06:16PM
- **Icc:** 8.0mA
- **Voltage Range:** 0V  $\rightarrow$  -4V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** -0.569 V/s\*
- **Cycle:** 2
- **Resistance:** 2917.90  $\Omega$
- **Linear Fit R2:** 1.000

Did Reset, better slope

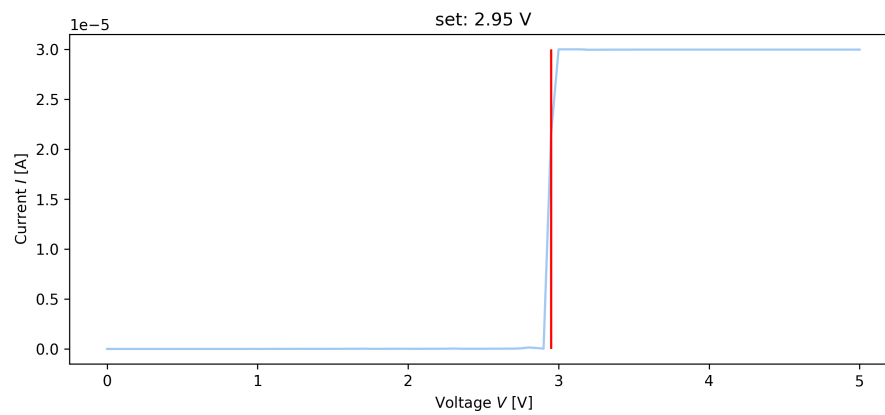


## set

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- **Time:** 12:06:38PM
- **Icc:** 30.0uA
- **Voltage Range:** 0V  $\rightarrow$  5V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** 1.069 V/s\*
- **Cycle:** 3
- **Set Voltage:** 2.95 V

Set at 3V

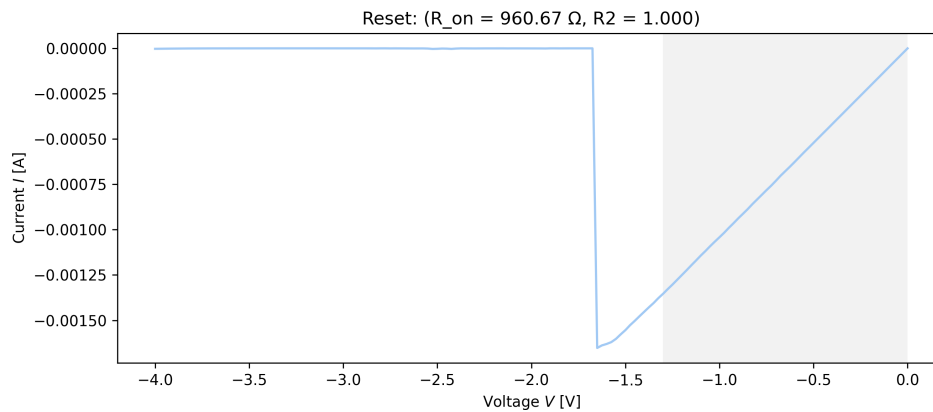


## reset

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- **Time:** 12:07:10PM
- **I<sub>cc</sub>:** 8.0mA
- **Voltage Range:** 0V → -4V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** -0.619 V/s\*
- **Cycle:** 3
- **Resistance:** 960.67  $\Omega$
- **Linear Fit R<sup>2</sup>:** 1.000

Good reset



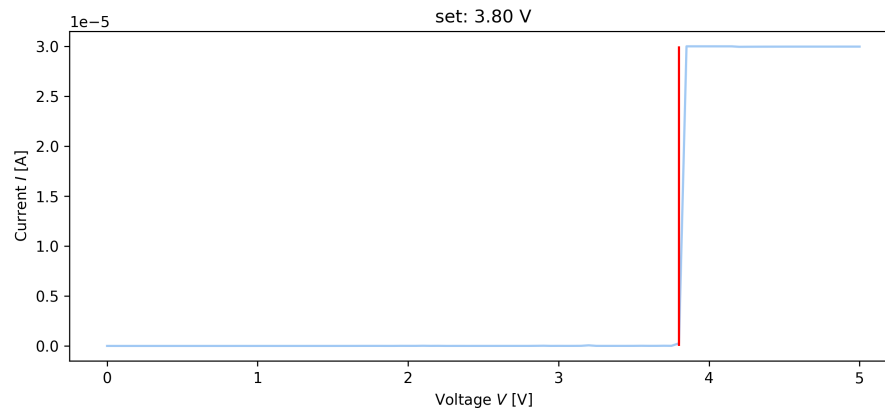


## set

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- **Time:** 12:07:57PM
- **Icc:** 30.0uA
- **Voltage Range:** 0V  $\rightarrow$  5V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** 1.069 V/s\*
- **Cycle:** 4
- **Set Voltage:** 3.80 V

Set at 3.85V

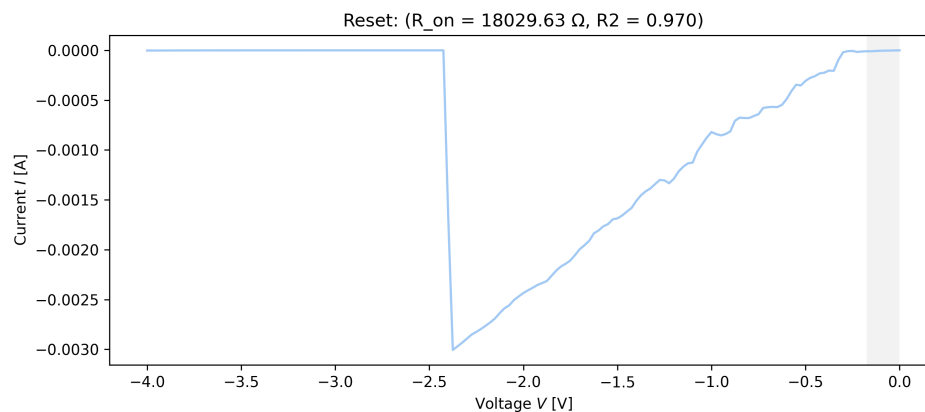


## reset

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- **Time:** 12:12:08PM
- **I<sub>cc</sub>:** 8.0mA
- **Voltage Range:** 0V → -4V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** -0.575 V/s\*
- **Cycle:** 4
- **Resistance:** 18029.63  $\Omega$
- **Linear Fit R<sup>2</sup>:** 0.970

Reset

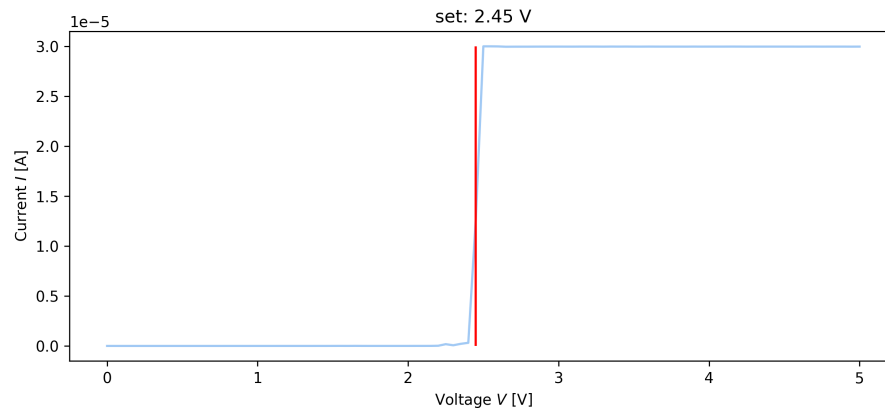


## set

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- **Time:** 12:12:27PM
- **Icc:** 30.0uA
- **Voltage Range:** 0V  $\rightarrow$  5V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** 1.069 V/s\*
- **Cycle:** 5
- **Set Voltage:** 2.45 V

Set at 2.5V

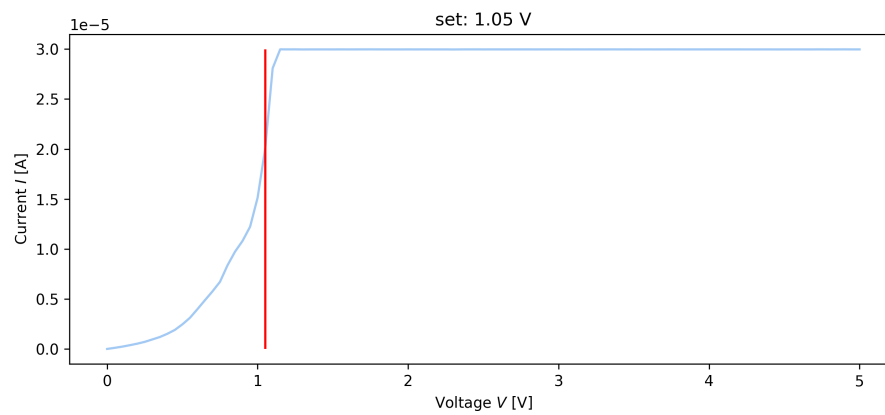


## set

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- **Time:** 12:14:43PM
- **I<sub>cc</sub>:** 30.0uA
- **Voltage Range:** 0V → 5V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** 1.161 V/s\*
- **Cycle:** 5
- **Set Voltage:** 1.05 V

And it gave us this graph...

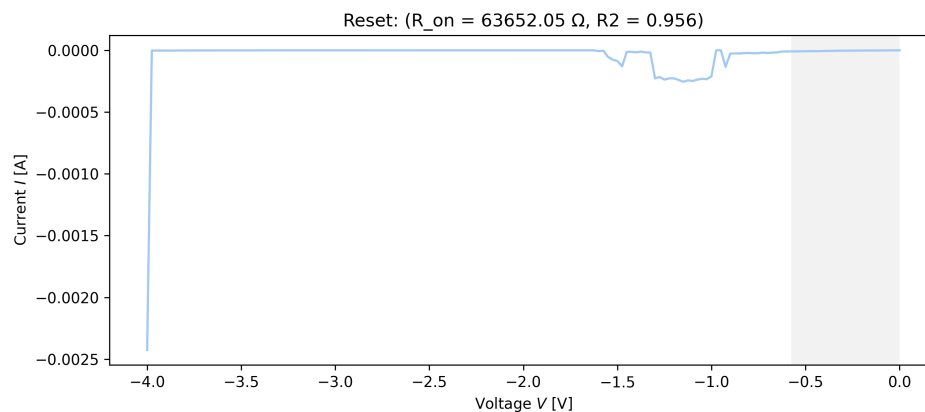


## reset

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- **Time:** 12:15:23PM
- **I<sub>cc</sub>:** 8.0mA
- **Voltage Range:** 0V → -4V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** -0.549 V/s\*
- **Cycle:** 5
- **Resistance:** 63652.05  $\Omega$
- **Linear Fit R<sup>2</sup>:** 0.956

Reset

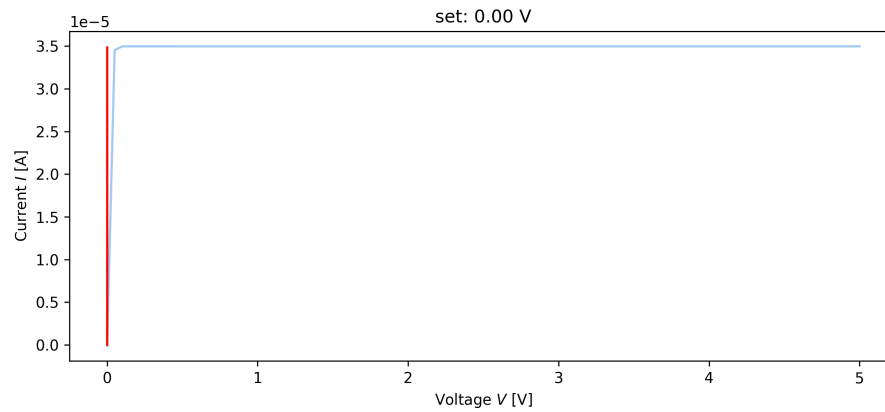


## set

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- **Time:** 12:15:52PM
- **Icc:** 35.0uA
- **Voltage Range:** 0V  $\rightarrow$  5V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** 1.839 V/s\*
- **Cycle:** 6
- **Error:** Set failed

Immediately Set

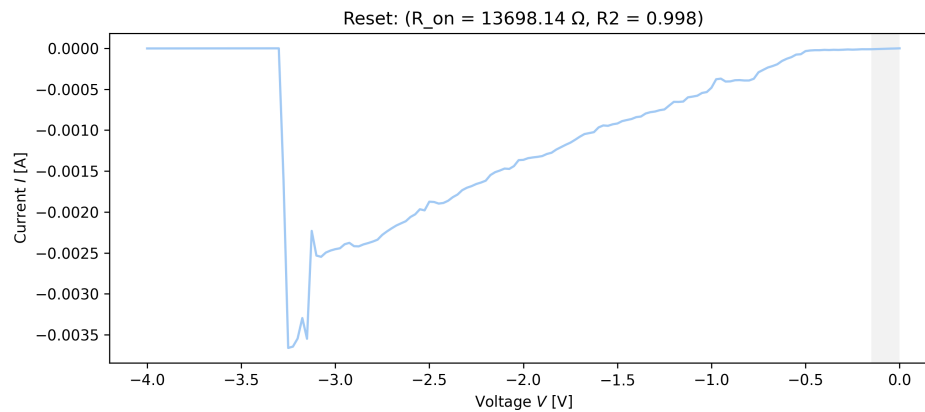


## reset

---

- **Time:** 12:16:19PM
- **I<sub>cc</sub>:** 8.0mA
- **Voltage Range:** 0V → -4V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** -0.554 V/s\*
- **Cycle:** 6
- **Resistance:** 13698.14 Ω
- **Linear Fit R<sup>2</sup>:** 0.998

Did reset but was weird

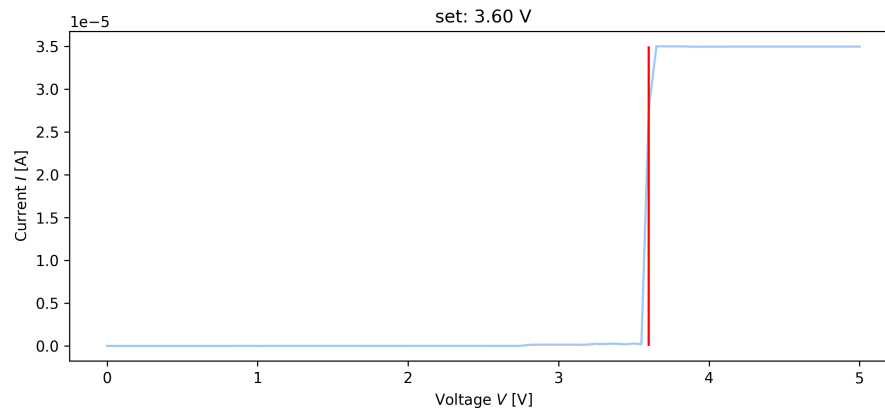


## set

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- **Time:** 12:16:36PM
- **Icc:** 35.0uA
- **Voltage Range:** 0V  $\rightarrow$  5V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** 1.069 V/s\*
- **Cycle:** 7
- **Set Voltage:** 3.60 V

Set at 3.65V



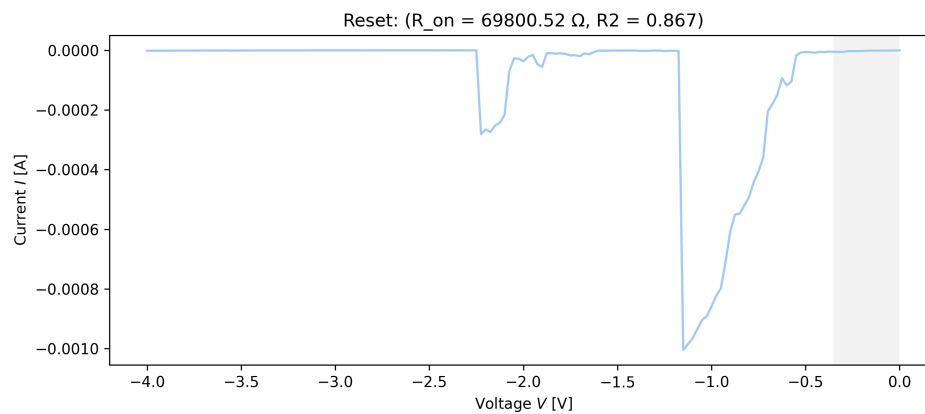


## reset

---

- **Time:** 12:17:11PM
- **I<sub>cc</sub>:** 8.0mA
- **Voltage Range:** 0V → -4V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** -0.559 V/s\*
- **Cycle:** 7
- **Resistance:** 69800.52 Ω
- **Linear Fit R<sup>2</sup>:** 0.867

Reset in the weirdest way possible

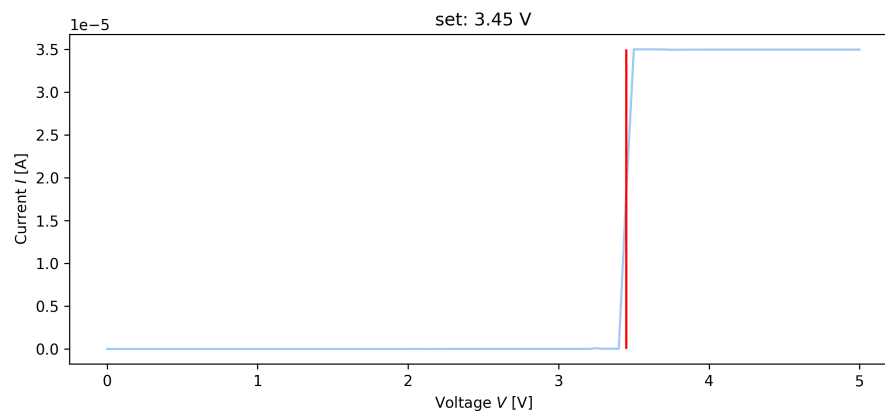


## set

---

- **Time:** 12:17:43PM
- **Icc:** 35.0uA
- **Voltage Range:** 0V  $\rightarrow$  5V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** 1.068 V/s\*
- **Cycle:** 8
- **Set Voltage:** 3.45 V

Set at 3.5V

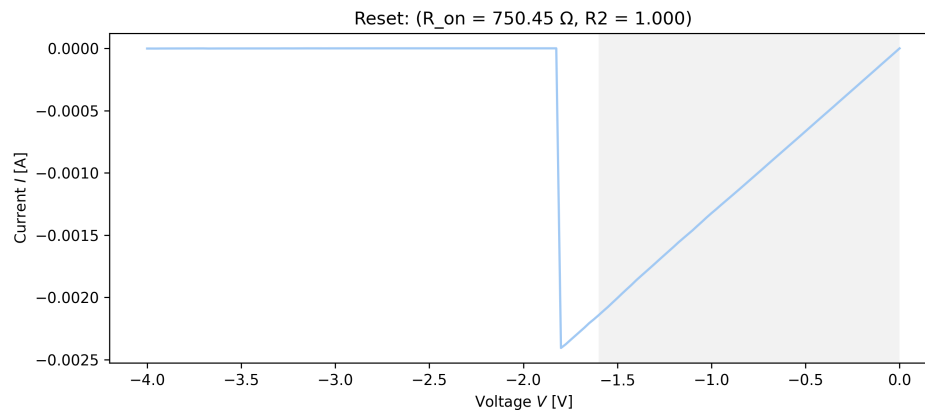


## reset

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- **Time:** 12:18:40PM
- **I<sub>cc</sub>:** 8.0mA
- **Voltage Range:** 0V → -4V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** -0.667 V/s\*
- **Cycle:** 8
- **Resistance:** 750.45 Ω
- **Linear Fit R<sup>2</sup>:** 1.000

Reset nicely

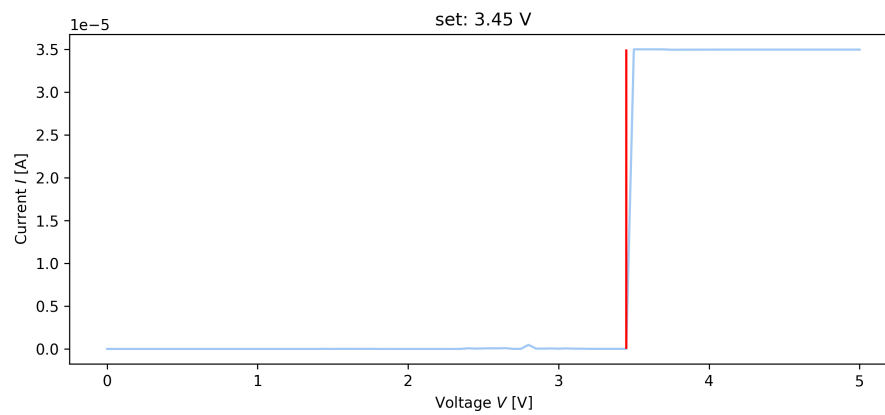


## set

---

- **Time:** 12:18:54PM
- **I<sub>cc</sub>:** 35.0uA
- **Voltage Range:** 0V → 5V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** 1.069 V/s\*
- **Cycle:** 9
- **Set Voltage:** 3.45 V

set again, 3.5V

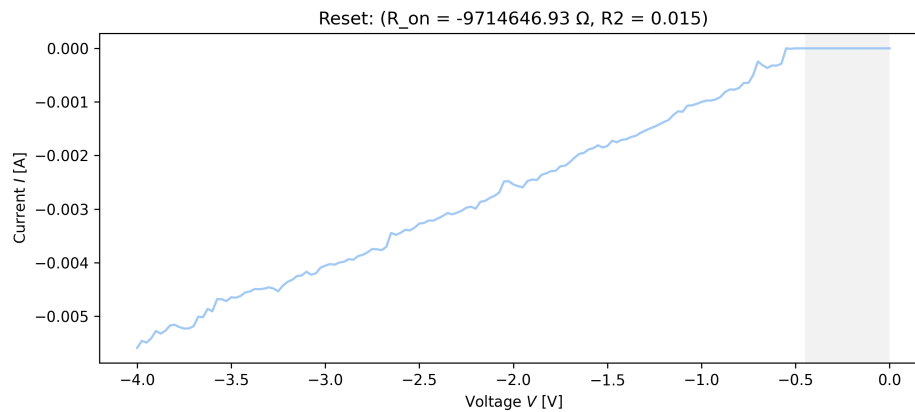


## reset

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- **Time:** 12:44:09PM
- **Icc:** 8.0mA
- **Voltage Range:** 0V  $\rightarrow$  -4V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** -0.584 V/s\*
- **Cycle:** 9
- **Resistance:** -9714646.93  $\Omega$
- **Linear Fit R2:** 0.015

Did not reset

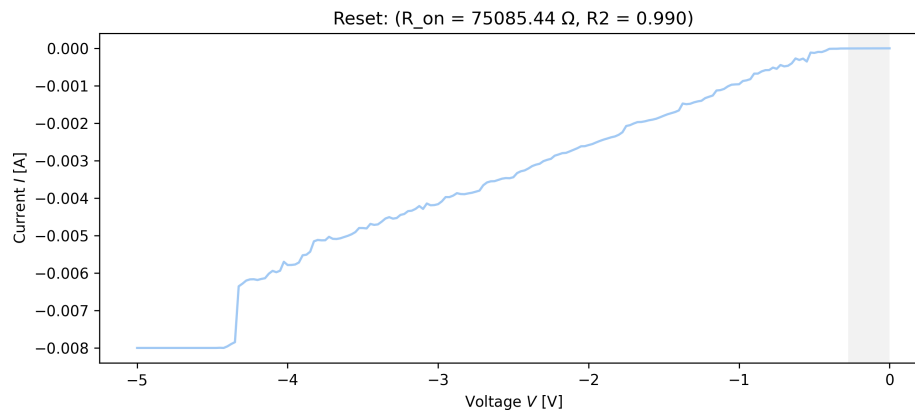


## reset

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- **Time:** 12:44:44PM
- **I<sub>cc</sub>:** 8.0mA
- **Voltage Range:** 0V → -5V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** -0.567 V/s\*
- **Cycle:** 10
- **Resistance:** 75085.44 Ω
- **Linear Fit R<sup>2</sup>:** 0.990

Did not reset

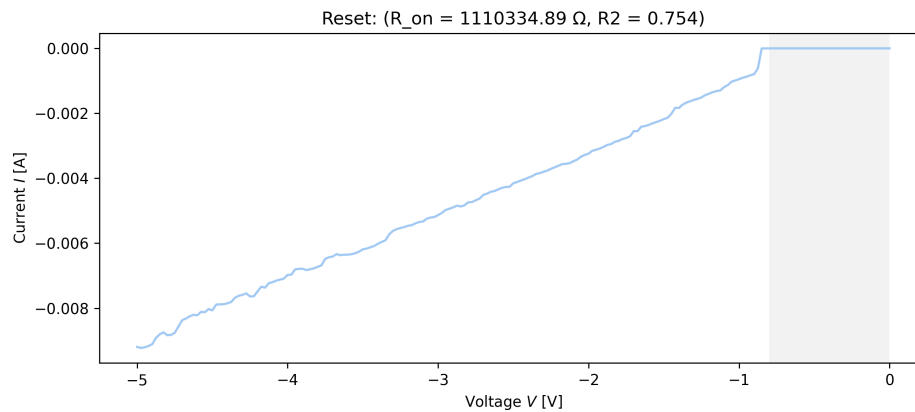


## reset

---

- **Time:** 12:45:38PM
- **Icc:** 10.0mA
- **Voltage Range:** 0V  $\rightarrow$  -5V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** -0.567 V/s\*
- **Cycle:** 11
- **Resistance:** 1110334.89  $\Omega$
- **Linear Fit R2:** 0.754

Did not reset

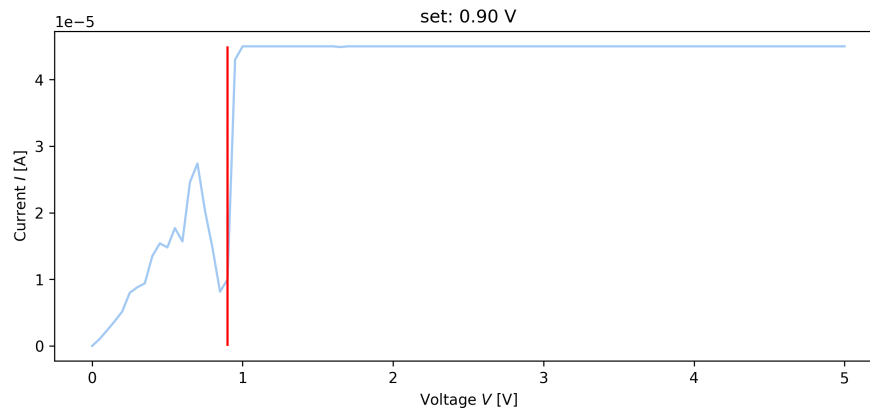


## set

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- **Time:** 12:45:58PM
- **I<sub>cc</sub>:** 45.0uA
- **Voltage Range:** 0V → 5V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** 1.608 V/s\*
- **Cycle:** 12
- **Set Voltage:** 0.90 V

Set



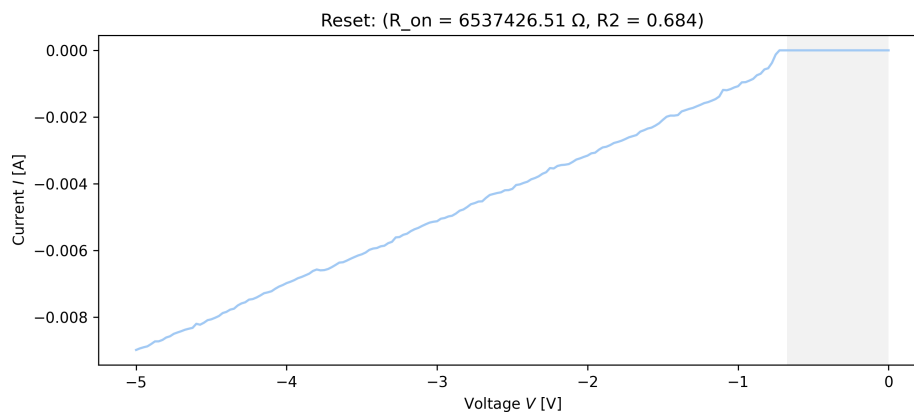


## reset

---

- **Time:** 12:46:39PM
- **I<sub>cc</sub>:** 10.0mA
- **Voltage Range:** 0V → -5V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** -0.569 V/s\*
- **Cycle:** 12
- **Resistance:** 6537426.51  $\Omega$
- **Linear Fit R<sup>2</sup>:** 0.684

Did not reset again

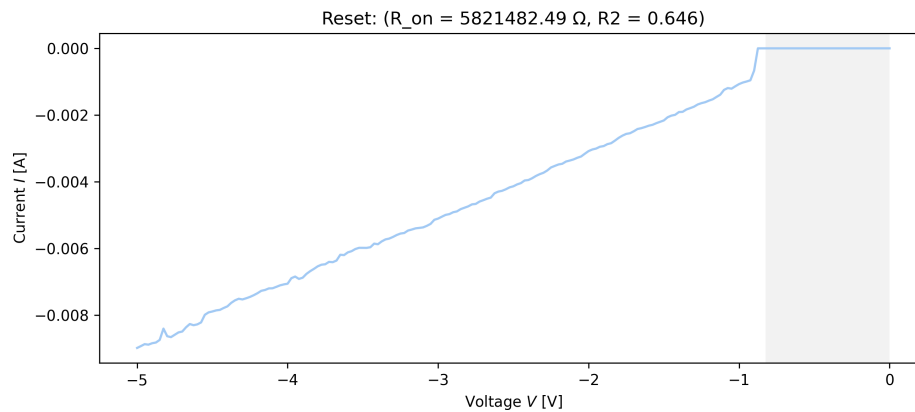


## reset

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- **Time:** 12:47:45PM
- **I<sub>cc</sub>:** 12.0mA
- **Voltage Range:** 0V → -5V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** -0.549 V/s\*
- **Cycle:** 13
- **Resistance:** 5821482.49 Ω
- **Linear Fit R<sup>2</sup>:** 0.646

Did not reset

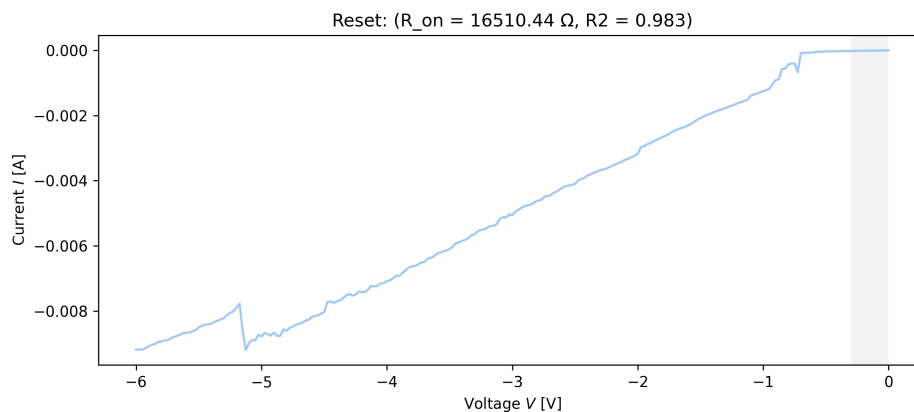


## reset

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- **Time:** 12:48:18PM
- **Icc:** 12.0mA
- **Voltage Range:** 0V  $\rightarrow$  -6V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** -0.550 V/s\*
- **Cycle:** 14
- **Resistance:** 16510.44  $\Omega$
- **Linear Fit R2:** 0.983

Did not reset



## reset

---

- **Time:** 12:48:55PM
- **I<sub>cc</sub>:** 12.0mA
- **Voltage Range:** 0V → -6V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** -0.550 V/s\*
- **Cycle:** 15
- **Resistance:** 137625.64 Ω
- **Linear Fit R<sup>2</sup>:** 0.993

Did not reset

