

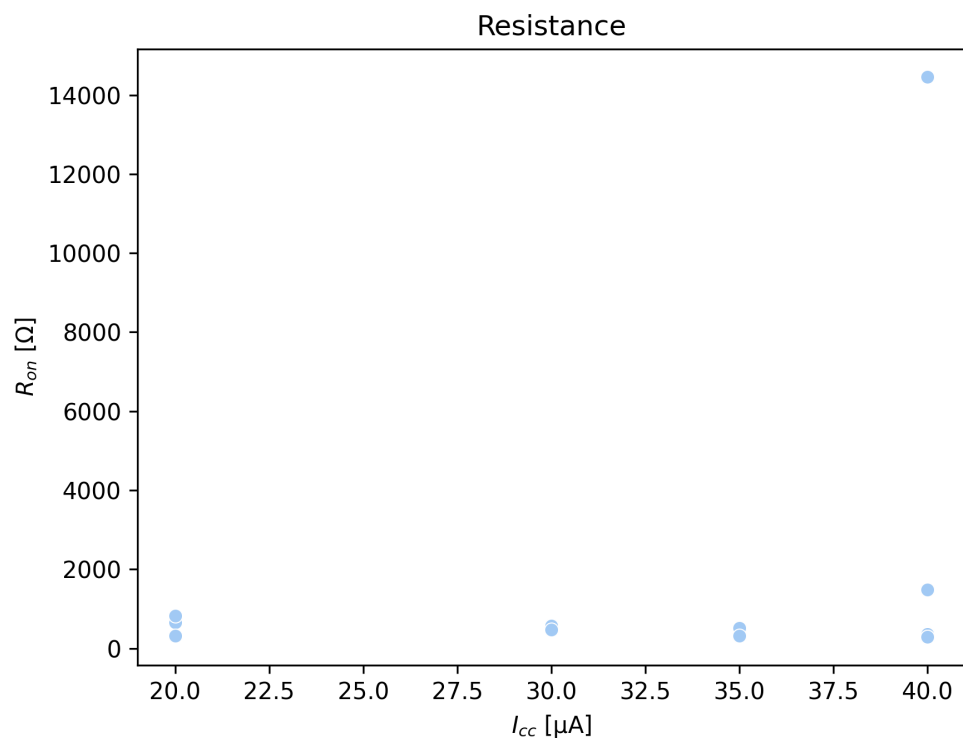
## (wafer2,0,7,-1,-1,0,1) Characteristics

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- **Cell Size:** 10um
- **Times Accessed:** 38
- **Last Measurement:** 2022/March/28 at 04:56:29PM

### Summary

Cycle #	Set Icc ( $\mu$ A)	Set Voltage (V)	R_on ( $\Omega$ )	R2
1	20.0	2.30	654.98	1.000
2	20.0	2.30	819.61	1.000
3	20.0	4.45	315.02	1.000
4	20.0	4.30	322.70	1.000
5	30.0	4.40	2676.30	0.942
6	30.0	2.40	563.15	1.000
7	30.0	2.60	476.54	1.000
8	35.0	2.20	516.50	1.000
9	35.0	4.20	320.11	1.000
10	35.0	2.55	238136.15	0.964
11	35.0	2.35	64468642.68	0.349
12	35.0	3.40	1495435.48	0.401
13	40.0	3.45	14455.01	0.997
14	40.0	2.15	366.09	1.000
15	40.0	3.20	353.90	1.000
16	40.0	3.20	1486.98	1.000
17	40.0	3.20	286.45	1.000
18	40.0	3.20	285.70	1.000

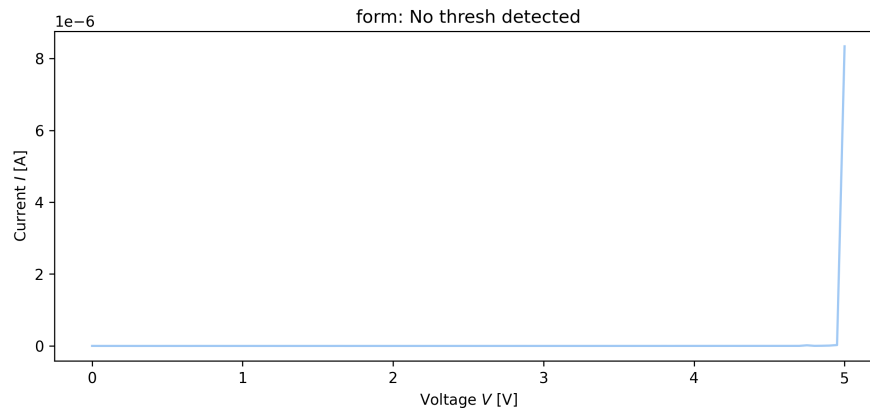


## form

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- **Time:** 04:55:37PM
- **Icc:** 20.0uA
- **Voltage Range:** 0V  $\rightarrow$  5V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** 1.069 V/s\*
- **Cycle:** 1
- **Error:** Set failed

Set, but too high to tell accurately ~5V

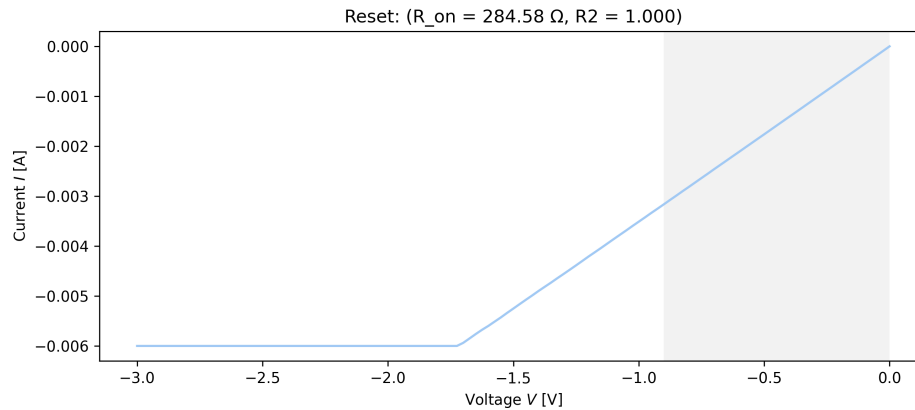


## reset

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- **Time:** 04:57:52PM
- **I<sub>cc</sub>:** 6.0mA
- **Voltage Range:** 0V → -3V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** -0.826 V/s\*
- **Cycle:** 1
- **Resistance:** 284.58 Ω
- **Linear Fit R<sup>2</sup>:** 1.000

Did not reset

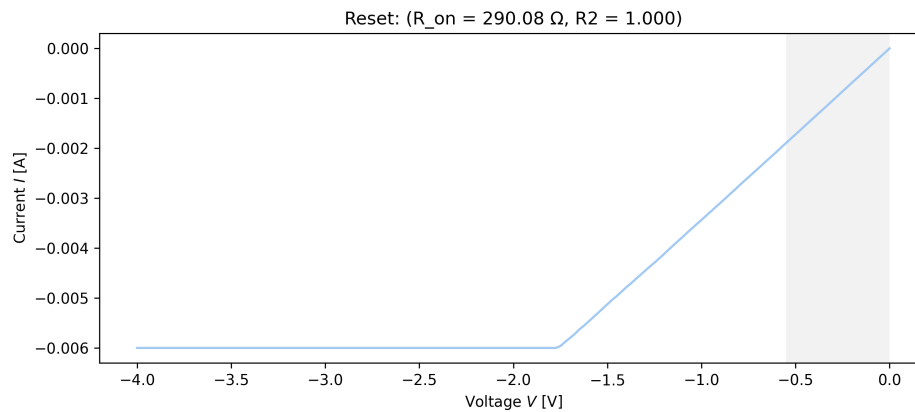


## reset

---

- **Time:** 04:58:11PM
- **I<sub>cc</sub>:** 6.0mA
- **Voltage Range:** 0V → -4V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** -0.826 V/s\*
- **Cycle:** 1
- **Resistance:** 290.08 Ω
- **Linear Fit R<sup>2</sup>:** 1.000

Did not reset again

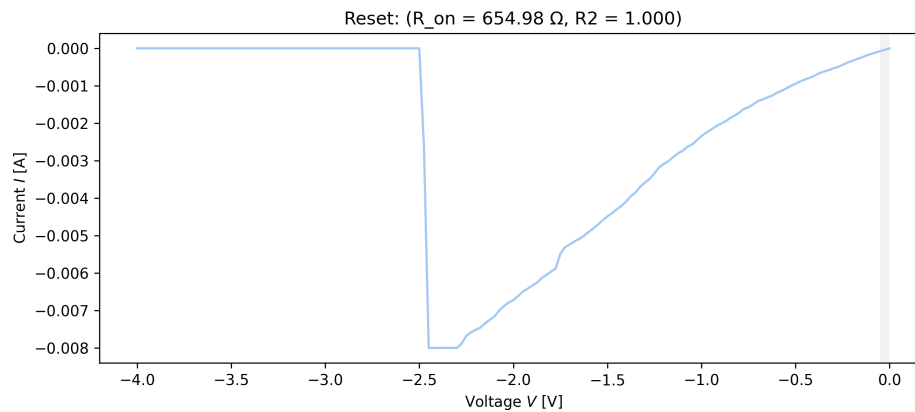


## reset

---

- **Time:** 04:58:30PM
- **I<sub>cc</sub>:** 8.0mA
- **Voltage Range:** 0V → -4V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** -0.732 V/s\*
- **Cycle:** 1
- **Resistance:** 654.98 Ω
- **Linear Fit R<sup>2</sup>:** 1.000

Did reset, slope not constant

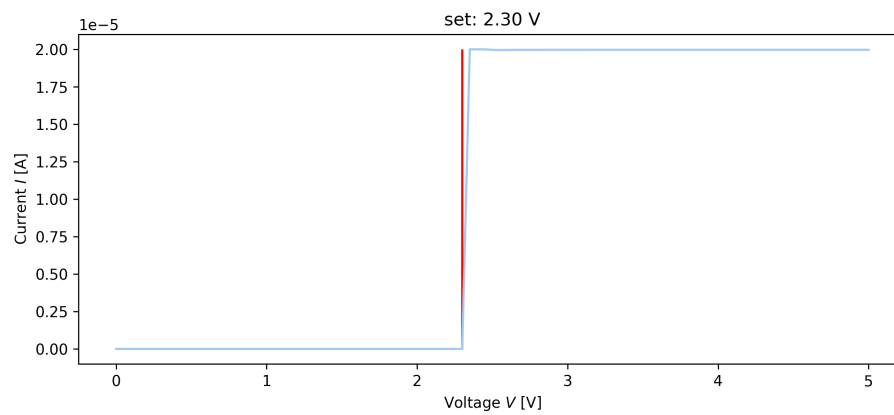


## set

---

- **Time:** 04:59:44PM
- **Icc:** 20.0uA
- **Voltage Range:** 0V  $\rightarrow$  5V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** 1.069 V/s\*
- **Cycle:** 1
- **Set Voltage:** 2.30 V

Set at 2.35V

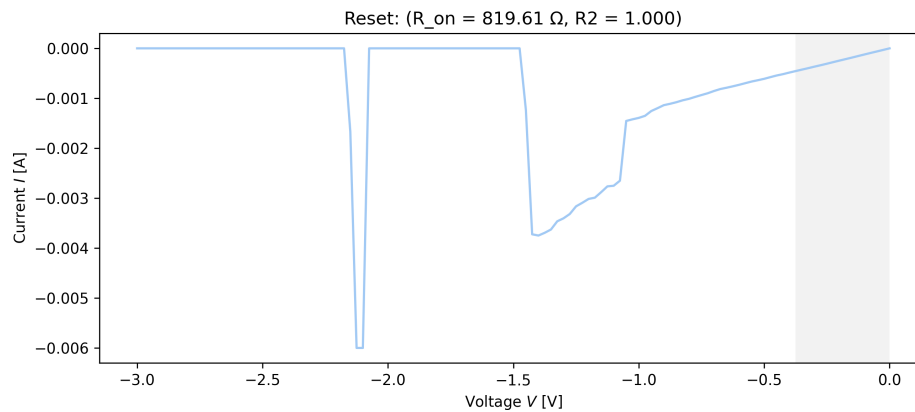


## reset

---

- **Time:** 05:00:43PM
- **Icc:** 6.0mA
- **Voltage Range:** 0V  $\rightarrow$  -3V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** -0.650 V/s\*
- **Cycle:** 2
- **Resistance:** 819.61  $\Omega$
- **Linear Fit R2:** 1.000

Did reset, but was erratic. rr not maintained



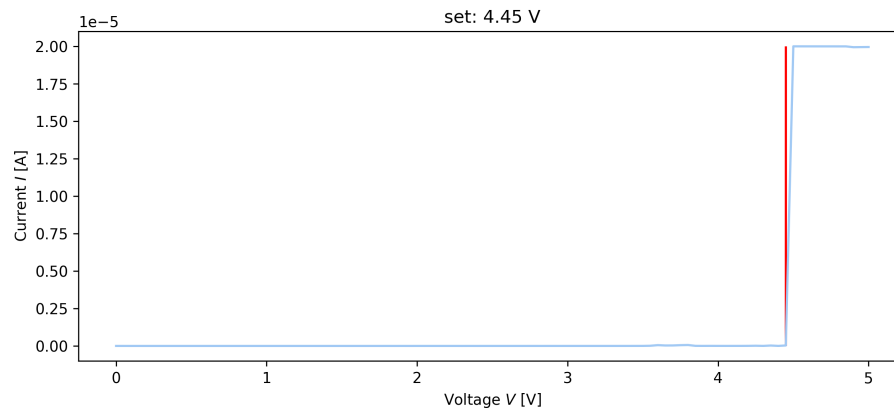


## set

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- **Time:** 05:01:31PM
- **Icc:** 20.0uA
- **Voltage Range:** 0V  $\rightarrow$  5V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** 1.069 V/s\*
- **Cycle:** 3
- **Set Voltage:** 4.45 V

Set at 4.50V

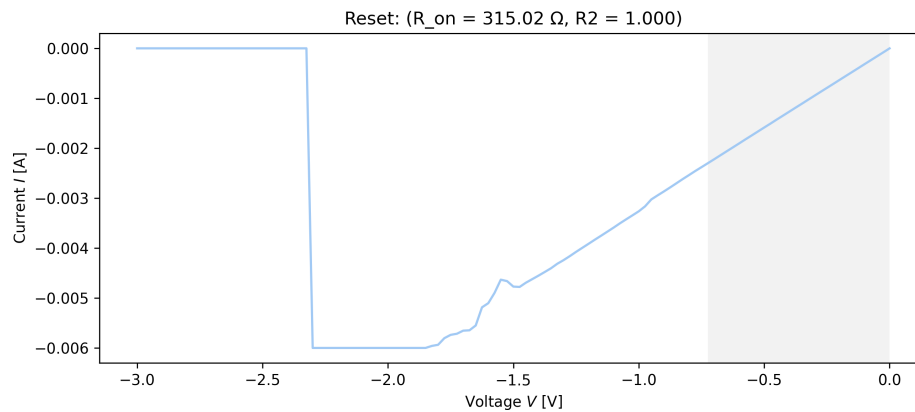


## reset

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- **Time:** 05:02:18PM
- **I<sub>cc</sub>:** 6.0mA
- **Voltage Range:** 0V → -3V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** -0.813 V/s\*
- **Cycle:** 3
- **Resistance:** 315.02 Ω
- **Linear Fit R<sup>2</sup>:** 1.000

Reset, rr not maintained

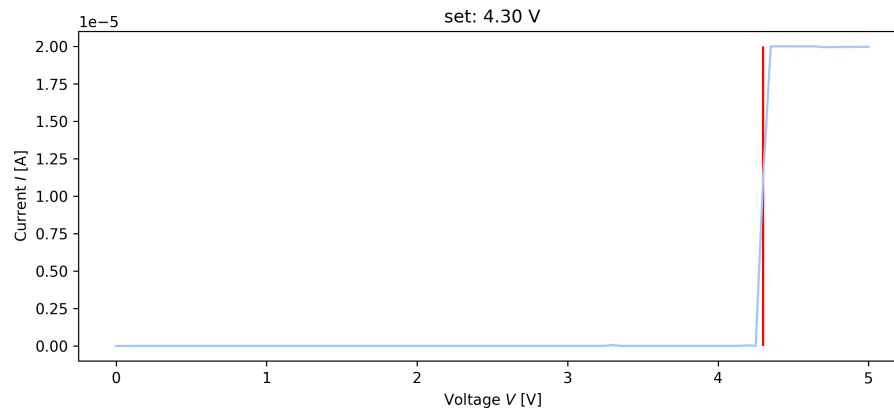


## set

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- **Time:** 05:03:10PM
- **Icc:** 20.0uA
- **Voltage Range:** 0V  $\rightarrow$  5V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** 1.069 V/s\*
- **Cycle:** 4
- **Set Voltage:** 4.30 V

Set at 4.35V

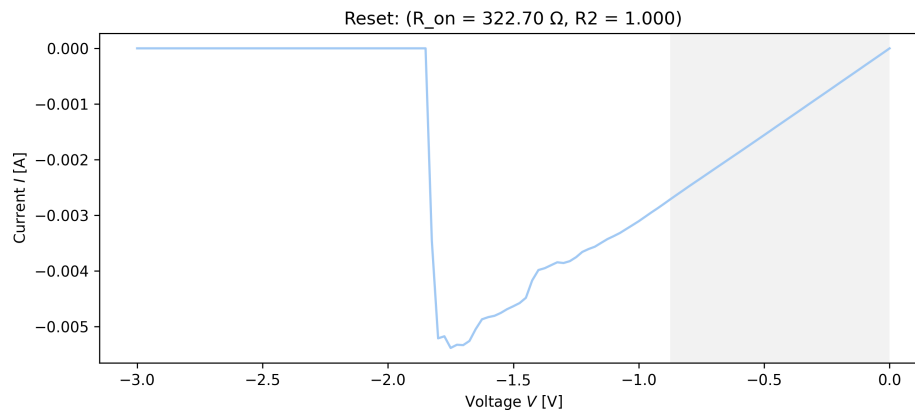


## reset

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- **Time:** 05:03:48PM
- **I<sub>cc</sub>:** 6.0mA
- **Voltage Range:** 0V → -3V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** -0.813 V/s\*
- **Cycle:** 4
- **Resistance:** 322.70 Ω
- **Linear Fit R<sup>2</sup>:** 1.000

Reset, similar slope to previous reset

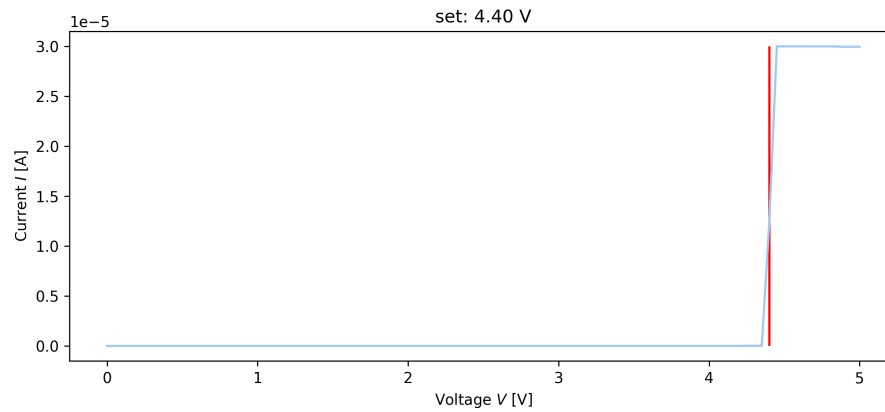


## set

---

- **Time:** 05:51:10PM
- **Icc:** 30.0uA
- **Voltage Range:** 0V  $\rightarrow$  5V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** 1.069 V/s\*
- **Cycle:** 5
- **Set Voltage:** 4.40 V

Set at 4.45V

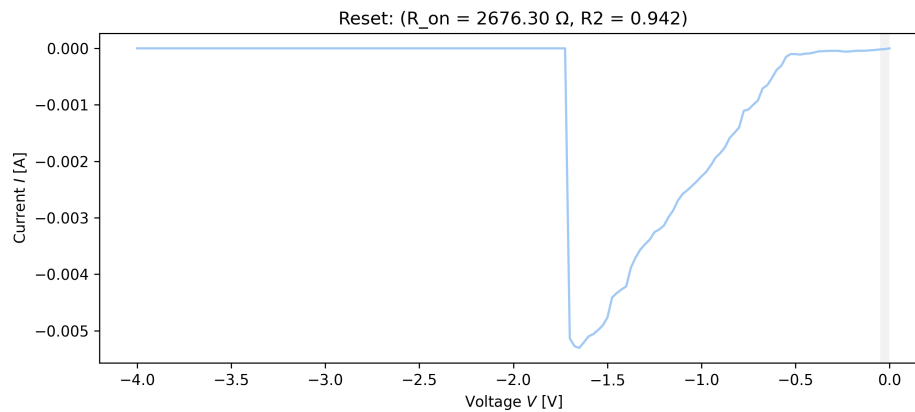


## reset

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- **Time:** 05:51:42PM
- **Icc:** 8.0mA
- **Voltage Range:** 0V  $\rightarrow$  -4V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** -0.636 V/s\*
- **Cycle:** 5
- **Resistance:** 2676.30  $\Omega$
- **Linear Fit R2:** 0.942

Reset, not constant slope

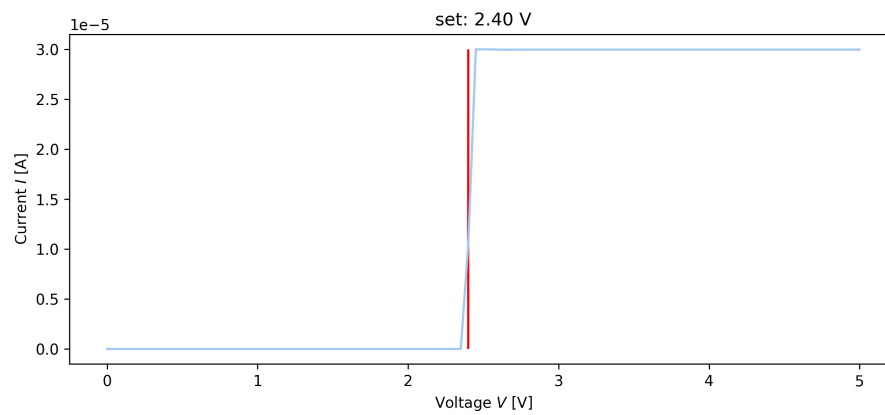


## set

---

- **Time:** 05:52:30PM
- **Icc:** 30.0uA
- **Voltage Range:** 0V  $\rightarrow$  5V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** 1.069 V/s\*
- **Cycle:** 6
- **Set Voltage:** 2.40 V

Set at 2.45V

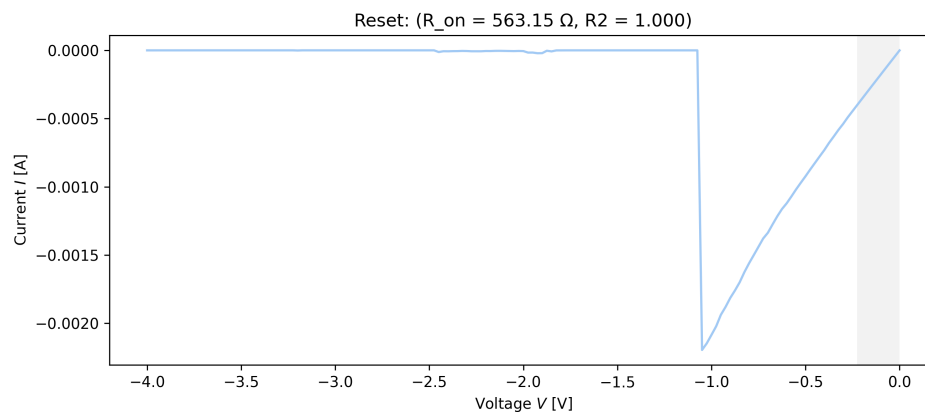


## reset

---

- **Time:** 05:52:56PM
- **I<sub>cc</sub>:** 8.0mA
- **Voltage Range:** 0V → -4V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** -0.733 V/s\*
- **Cycle:** 6
- **Resistance:** 563.15 Ω
- **Linear Fit R<sup>2</sup>:** 1.000

Reset, slope opposite of expected



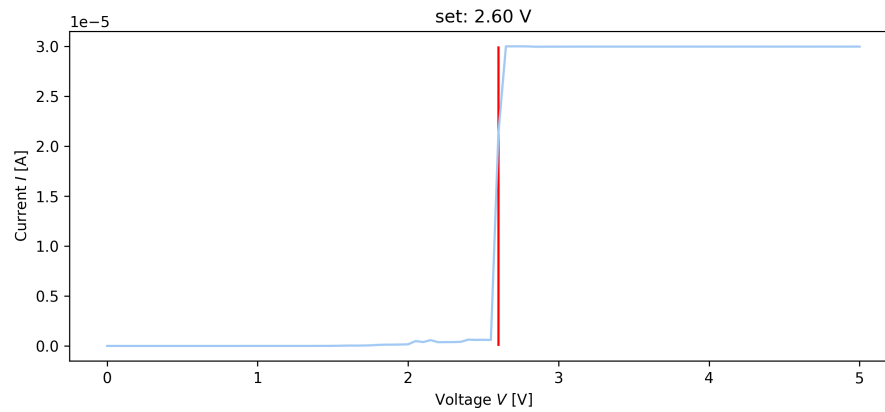


## set

---

- **Time:** 05:54:33PM
- **Icc:** 30.0uA
- **Voltage Range:** 0V  $\rightarrow$  5V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** 1.069 V/s\*
- **Cycle:** 7
- **Set Voltage:** 2.60 V

Set at 2.65V

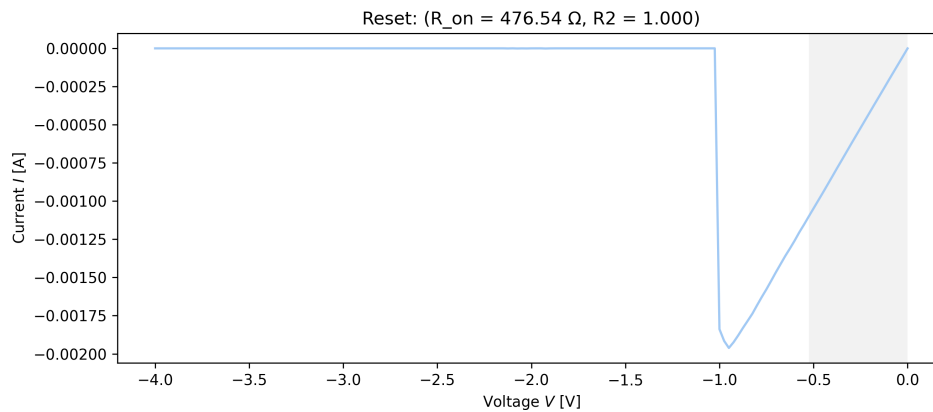


## reset

---

- **Time:** 05:54:57PM
- **Icc:** 8.0mA
- **Voltage Range:** 0V  $\rightarrow$  -4V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** -0.754 V/s\*
- **Cycle:** 7
- **Resistance:** 476.54  $\Omega$
- **Linear Fit R2:** 1.000

Reset similar to previous run

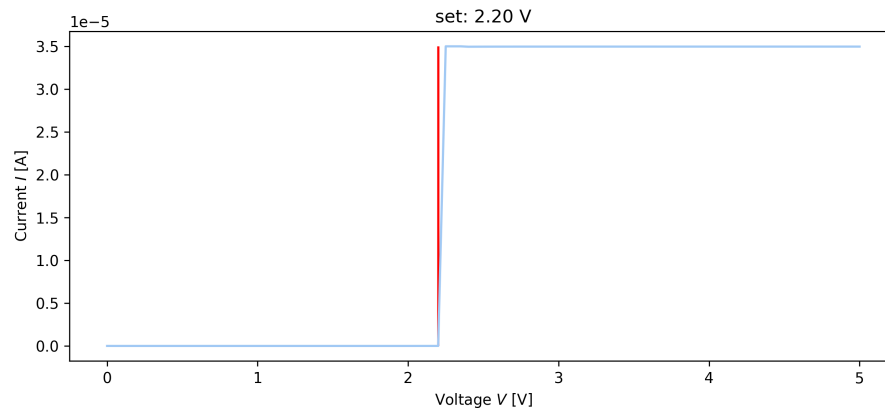


## set

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- **Time:** 05:56:26PM
- **Icc:** 35.0uA
- **Voltage Range:** 0V  $\rightarrow$  5V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** 1.069 V/s\*
- **Cycle:** 8
- **Set Voltage:** 2.20 V

Set at 2.25V

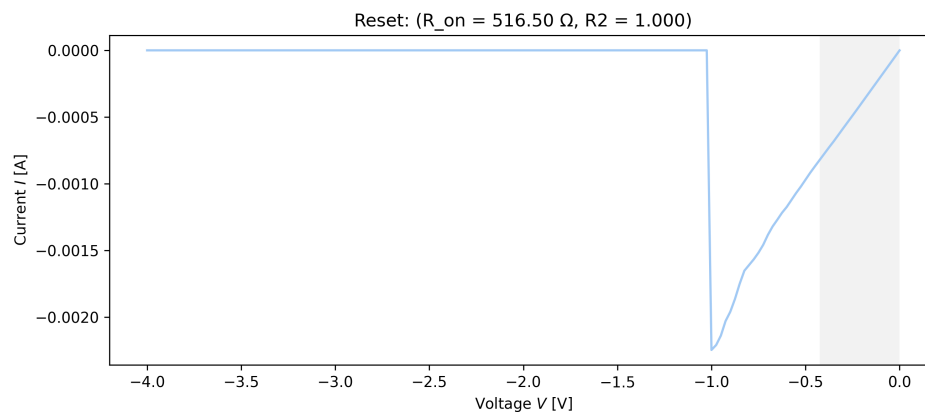


## reset

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- **Time:** 05:57:04PM
- **I<sub>cc</sub>:** 8.0mA
- **Voltage Range:** 0V → -4V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** -0.743 V/s\*
- **Cycle:** 8
- **Resistance:** 516.50 Ω
- **Linear Fit R2:** 1.000

Reset

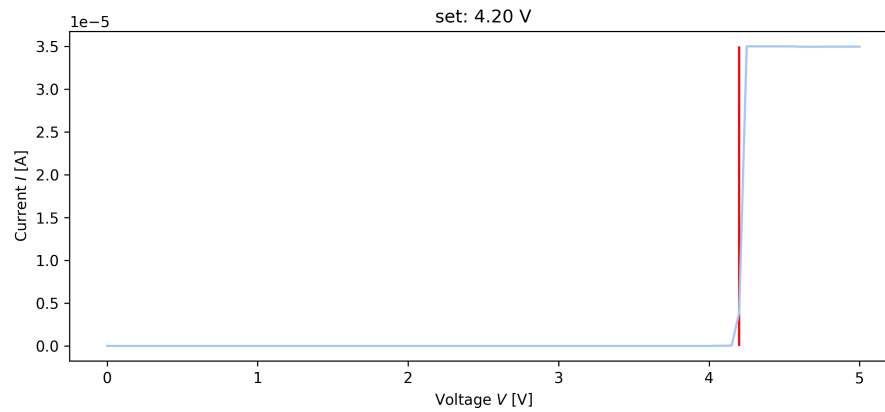


## set

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- **Time:** 05:57:32PM
- **Icc:** 35.0uA
- **Voltage Range:** 0V  $\rightarrow$  5V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** 1.069 V/s\*
- **Cycle:** 9
- **Set Voltage:** 4.20 V

set at 4.25V

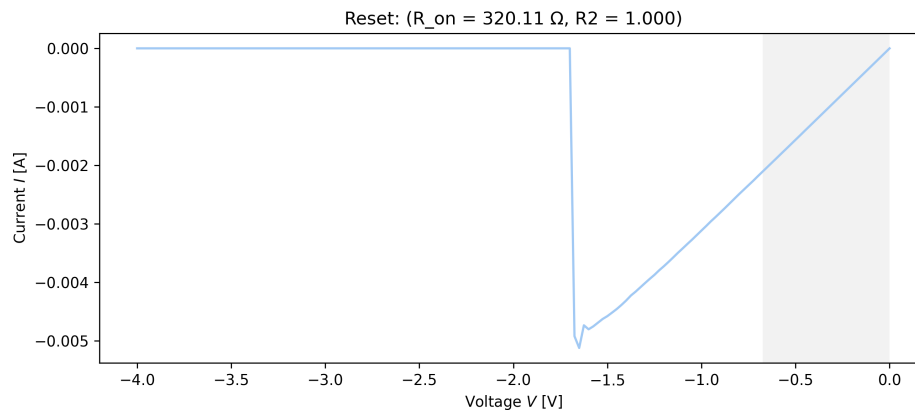


## reset

---

- **Time:** 05:57:58PM
- **I<sub>cc</sub>:** 8.0mA
- **Voltage Range:** 0V → -4V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** -0.812 V/s\*
- **Cycle:** 9
- **Resistance:** 320.11 Ω
- **Linear Fit R<sup>2</sup>:** 1.000

Reset

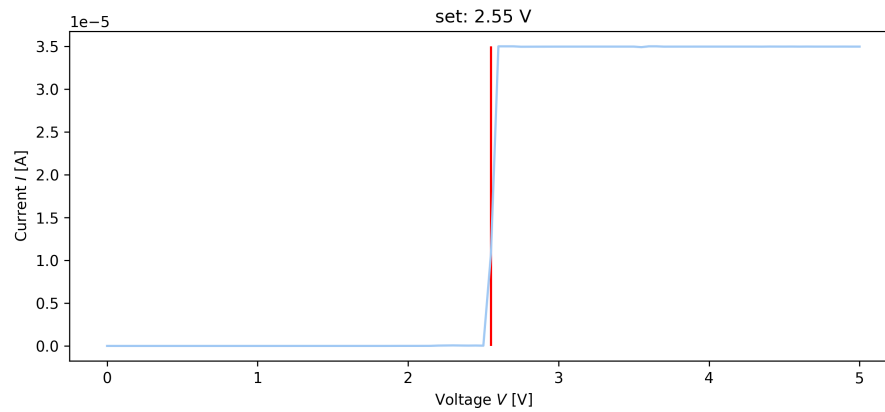


## set

---

- **Time:** 05:58:48PM
- **Icc:** 35.0uA
- **Voltage Range:** 0V  $\rightarrow$  5V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** 1.069 V/s\*
- **Cycle:** 10
- **Set Voltage:** 2.55 V

Set at 2.6V

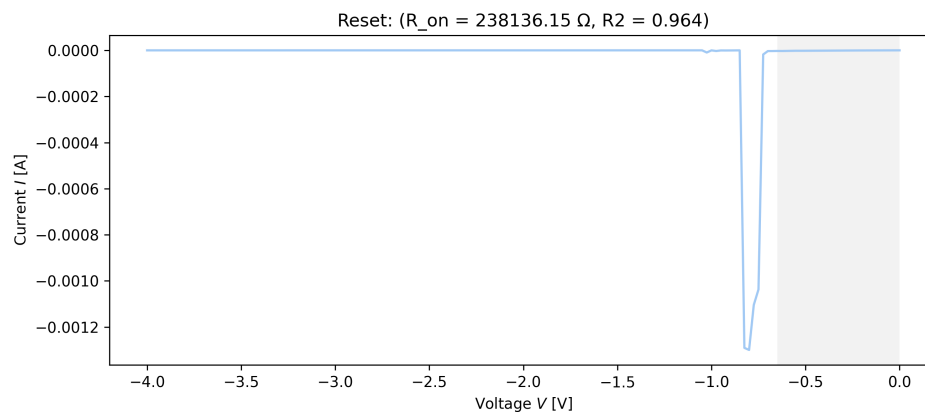


## reset

---

- **Time:** 05:59:12PM
- **I<sub>cc</sub>:** 8.0mA
- **Voltage Range:** 0V → -4V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** -0.574 V/s\*
- **Cycle:** 10
- **Resistance:** 238136.15 Ω
- **Linear Fit R<sup>2</sup>:** 0.964

Reset, but weird



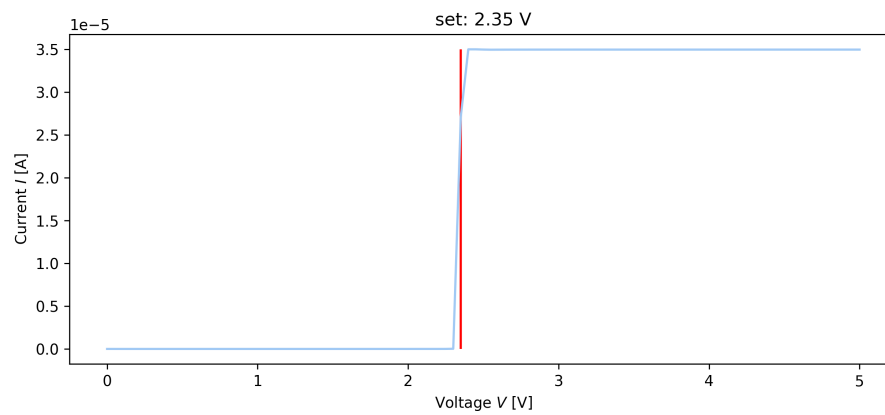


## set

---

- **Time:** 05:59:35PM
- **Icc:** 35.0uA
- **Voltage Range:** 0V  $\rightarrow$  5V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** 1.069 V/s\*
- **Cycle:** 11
- **Set Voltage:** 2.35 V

Set at 2.4V, (ignore)

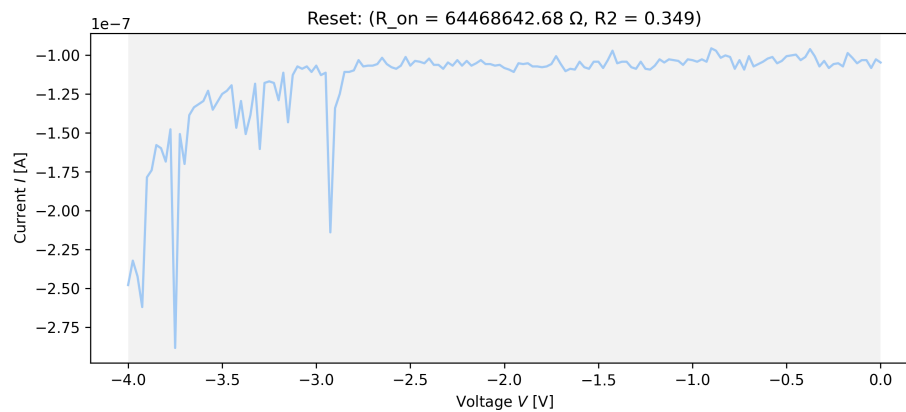


## reset

---

- **Time:** 06:00:32PM
- **I<sub>cc</sub>:** 8.0mA
- **Voltage Range:** 0V → -4V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** -0.547 V/s\*
- **Cycle:** 11
- **Resistance:** 64468642.68 Ω
- **Linear Fit R<sup>2</sup>:** 0.349

Connection Issues (ignore)

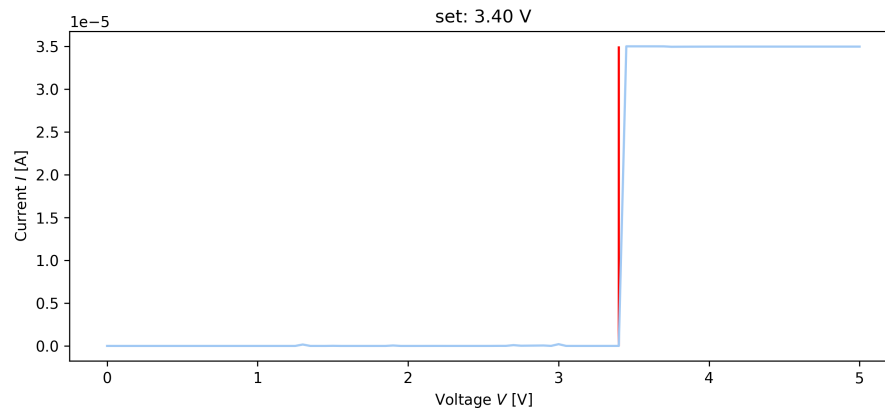


## set

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- **Time:** 06:03:27PM
- **Icc:** 35.0uA
- **Voltage Range:** 0V  $\rightarrow$  5V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** 1.069 V/s\*
- **Cycle:** 12
- **Set Voltage:** 3.40 V

Set at 3.45V, (ignore)

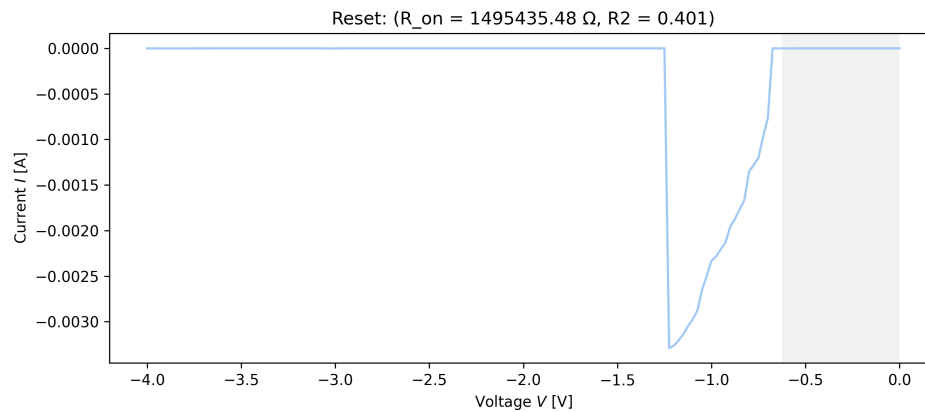


## reset

---

- **Time:** 06:04:05PM
- **I<sub>cc</sub>:** 8.0mA
- **Voltage Range:** 0V → -4V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** -0.624 V/s\*
- **Cycle:** 12
- **Resistance:** 1495435.48 Ω
- **Linear Fit R2:** 0.401

Reset, looks odd

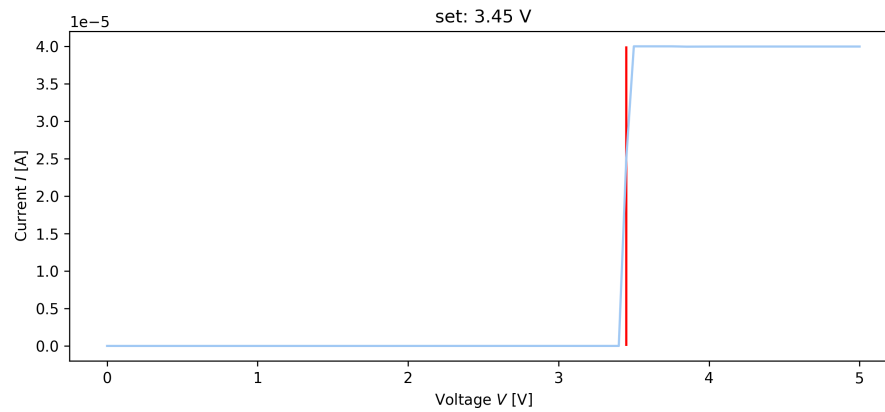


## set

---

- **Time:** 06:05:15PM
- **Icc:** 40.0uA
- **Voltage Range:** 0V  $\rightarrow$  5V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** 1.069 V/s\*
- **Cycle:** 13
- **Set Voltage:** 3.45 V

Set at 3.5V

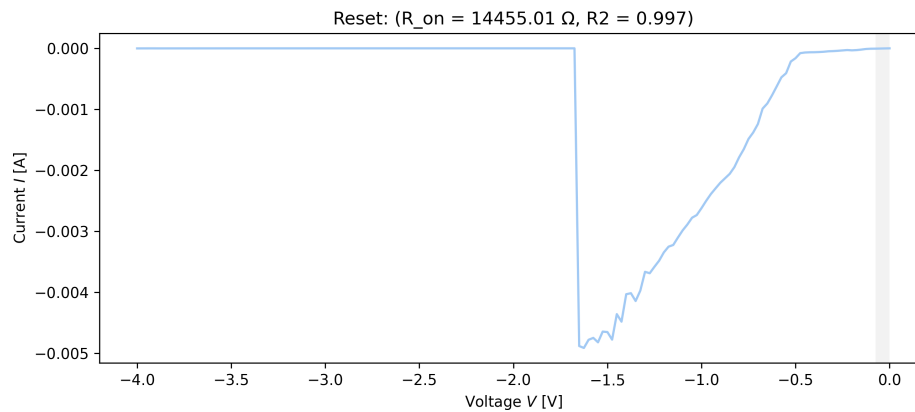


## reset

---

- **Time:** 06:05:39PM
- **Icc:** 8.0mA
- **Voltage Range:** 0V  $\rightarrow$  -4V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** -0.643 V/s\*
- **Cycle:** 13
- **Resistance:** 14455.01  $\Omega$
- **Linear Fit R2:** 0.997

Reset

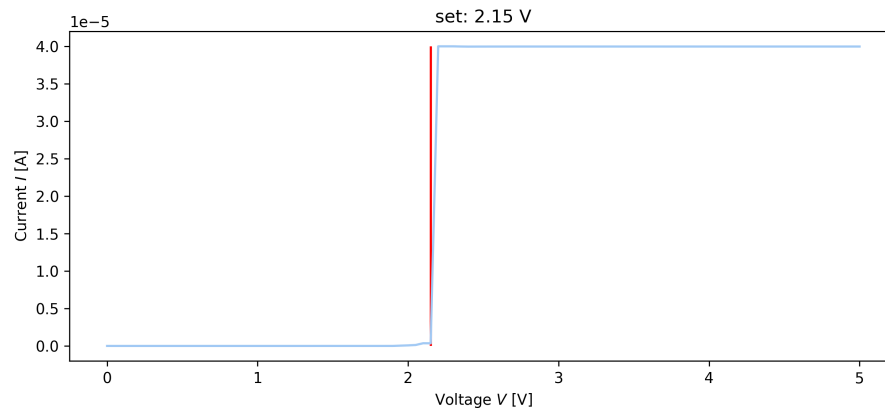


## set

---

- **Time:** 06:06:01PM
- **Icc:** 40.0uA
- **Voltage Range:** 0V  $\rightarrow$  5V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** 1.069 V/s\*
- **Cycle:** 14
- **Set Voltage:** 2.15 V

Set at 2.2V

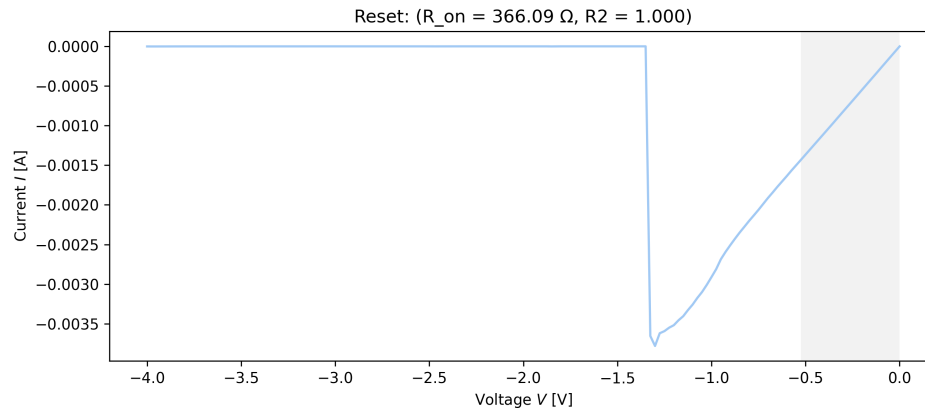


## reset

---

- **Time:** 06:06:24PM
- **I<sub>cc</sub>:** 8.0mA
- **Voltage Range:** 0V → -4V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** -0.800 V/s\*
- **Cycle:** 14
- **Resistance:** 366.09 Ω
- **Linear Fit R<sup>2</sup>:** 1.000

Reset nicely



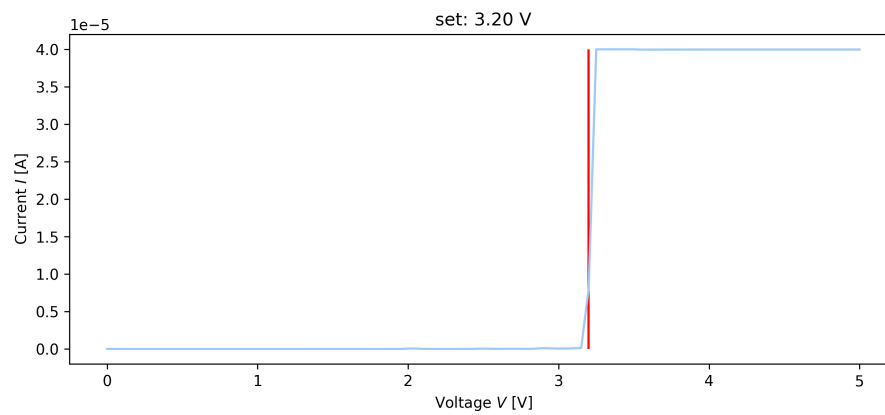


## set

---

- **Time:** 06:06:43PM
- **Icc:** 40.0uA
- **Voltage Range:** 0V  $\rightarrow$  5V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** 1.069 V/s\*
- **Cycle:** 15
- **Set Voltage:** 3.20 V

Set at 3.25V

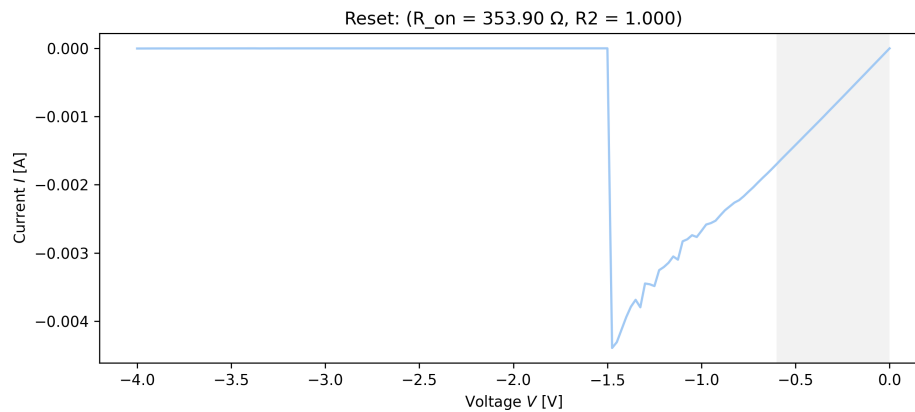


## reset

---

- **Time:** 06:07:10PM
- **I<sub>cc</sub>:** 8.0mA
- **Voltage Range:** 0V → -4V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** -0.800 V/s\*
- **Cycle:** 15
- **Resistance:** 353.90 Ω
- **Linear Fit R<sup>2</sup>:** 1.000

Good Reset, really close slope to previous reset

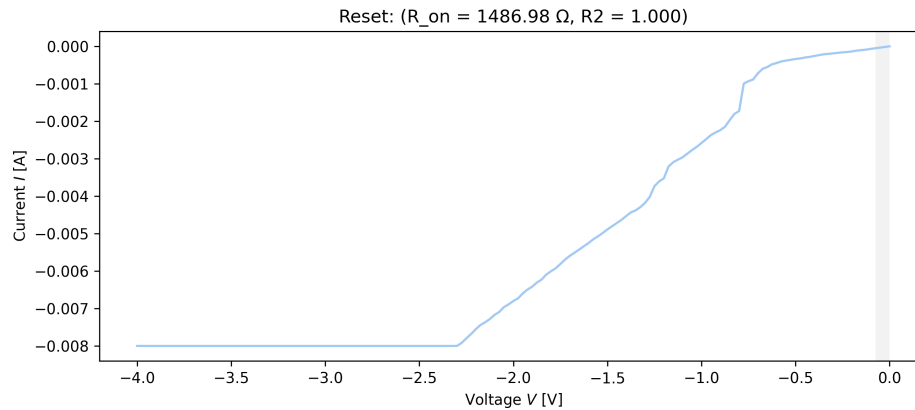


## reset

---

- **Time:** 04:55:05PM
- **I<sub>cc</sub>:** 8.0mA
- **Voltage Range:** 0V → -4V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** -0.634 V/s\*
- **Cycle:** 16
- **Resistance:** 1486.98 Ω
- **Linear Fit R<sup>2</sup>:** 1.000

Decided not to Reset

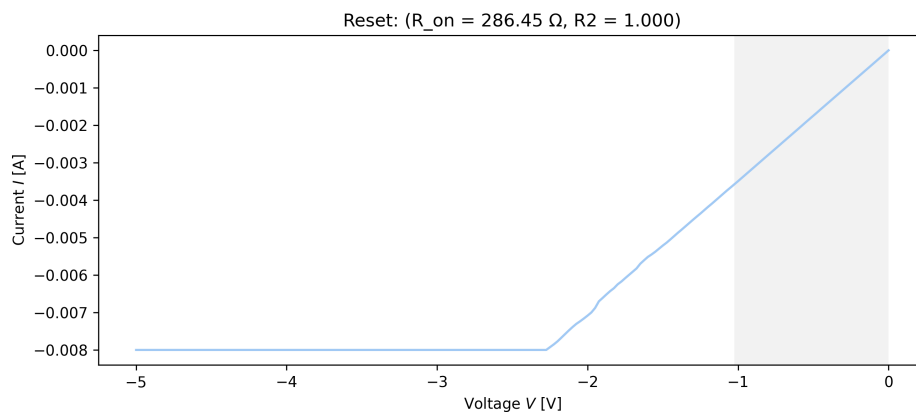


## reset

---

- **Time:** 04:55:38PM
- **Icc:** 8.0mA
- **Voltage Range:** 0V  $\rightarrow$  -5V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** -0.826 V/s\*
- **Cycle:** 17
- **Resistance:** 286.45  $\Omega$
- **Linear Fit R2:** 1.000

Didn't Reset



## reset

---

- **Time:** 04:56:29PM
- **I<sub>cc</sub>:** 10.0mA
- **Voltage Range:** 0V → -5V
- **Target Ramp Rate:** 1V/s
- **True Ramp Rate:** -0.826 V/s\*
- **Cycle:** 18
- **Resistance:** 285.70 Ω
- **Linear Fit R<sup>2</sup>:** 1.000

Didn't Reset, following Ohms law

