(wafer2,0,6,-1,-1,0,4) Characteristics

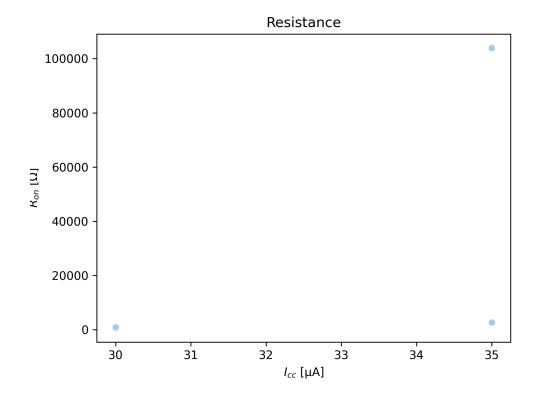
• Cell Size: 10um

Times Accessed: 42

Last Measurement: 2022/April/01 at 12:41:33PM

Summary

Cycle #	# Set Icc (μA)	Set Voltage (V)	R_on (Ω)	R2
1	30.0	4.95	637.42	1.000
2	30.0	2.65	676.31	1.000
3	30.0	2.70	792.79	1.000
4	30.0	3.00	692.48	1.000
5	30.0	4.35	929.06	1.000
6	35.0	4.50	2451379.75	0.765
7	35.0	4.55	2709.65	1.000
8	35.0	1.10	103906.56	0.985
9	35.0	3.45	18268.06	0.964
10	45.0	0.45	1437178.17	0.819
11	45.0	2.95	318657.37	0.840
12	1.0	1.85	679709.59	0.547



form

• Time: 05:10:15PM

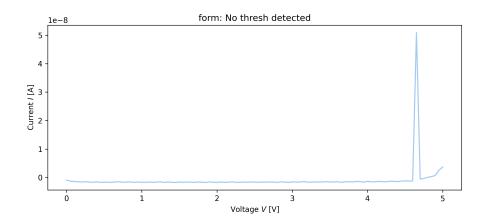
• **Icc**: 30.0uA

Voltage Range: 0V → 5V
Target Ramp Rate: 1V/s
True Ramp Rate: 1.069 V/s*

• **Cycle:** 1

• Error: Set failed

Not conducting



form

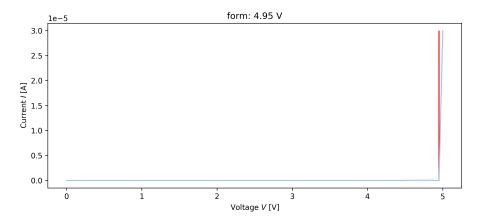
• Time: 05:10:39PM

• **Icc**: 30.0uA

Voltage Range: 0V → 5V
Target Ramp Rate: 1V/s
True Ramp Rate: 1.069 V/s*

• Cycle: 1

• Set Voltage: 4.95 V Formed, but at the end ~5V



• Time: 05:11:17PM

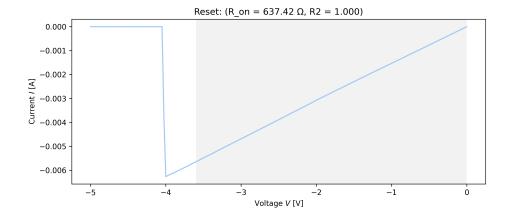
• **Icc:** 10.0mA

Voltage Range: 0V → -5V
Target Ramp Rate: 1V/s
True Ramp Rate: -0.703 V/s*

• Cycle: 1

Resistance: 637.42 Ω
Linear Fit R2: 1.000

Did reset



• **Time:** 05:11:35PM

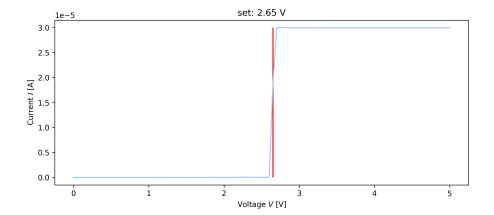
• **Icc:** 30.0uA

Voltage Range: 0V → 5V
Target Ramp Rate: 1V/s
True Ramp Rate: 1.069 V/s*

• **Cycle:** 2

• Set Voltage: 2.65 V

successfully Set



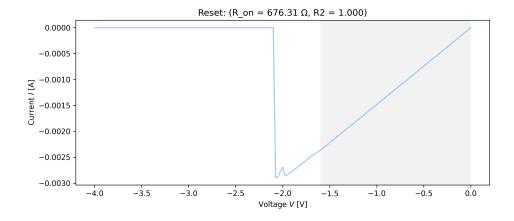
• Time: 05:12:18PM

• **Icc:** 8.0mA

Voltage Range: 0V → -4V
Target Ramp Rate: 1V/s
True Ramp Rate: -0.694 V/s*

• **Cycle:** 2

Resistance: 676.31 Ω
Linear Fit R2: 1.000
Did reset, slope maintained



• **Time:** 05:12:47PM

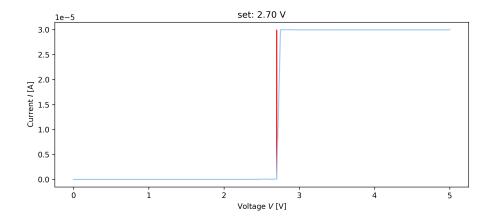
• **Icc:** 30.0uA

Voltage Range: 0V → 5V
Target Ramp Rate: 1V/s
True Ramp Rate: 1.069 V/s*

• **Cycle:** 3

• Set Voltage: 2.70 V

Set, 2.75V



• Time: 05:13:39PM

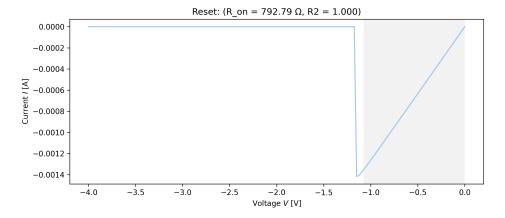
• **Icc:** 8.0mA

Voltage Range: 0V → -4V
Target Ramp Rate: 1V/s
True Ramp Rate: -0.659 V/s*

• **Cycle:** 3

Resistance: 792.79 Ω
Linear Fit R2: 1.000

Did reset, different slope from previous



• Time: 05:14:21PM

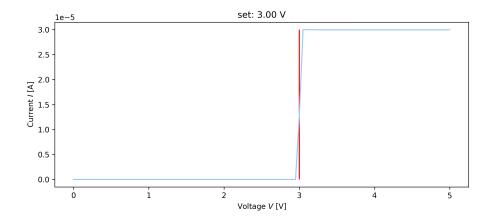
• **Icc**: 30.0uA

Voltage Range: 0V → 5V
Target Ramp Rate: 1V/s
True Ramp Rate: 1.069 V/s*

• Cycle: 4

• Set Voltage: 3.00 V

Set, 3.05V



• Time: 05:15:02PM

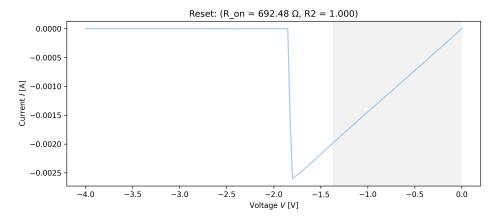
• **Icc:** 8.0mA

Voltage Range: 0V → -4V
Target Ramp Rate: 1V/s
True Ramp Rate: -0.684 V/s*

• Cycle: 4

Resistance: 692.48 Ω
Linear Fit R2: 1.000

Did reset, slope maintained from previous



• Time: 11:43:59AM

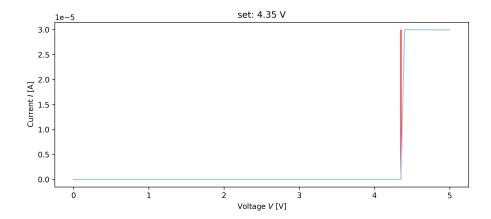
• **Icc:** 30.0uA

Voltage Range: 0V → 5V
Target Ramp Rate: 1V/s
True Ramp Rate: 1.069 V/s*

• **Cycle:** 5

• Set Voltage: 4.35 V

Did set, 4.4V



• Time: 11:45:15AM

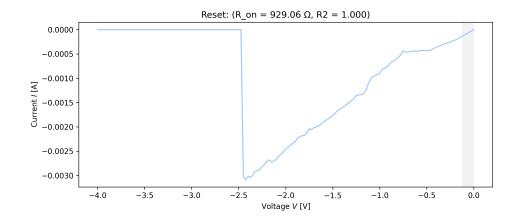
• **Icc:** 8.0mA

Voltage Range: 0V → -4V
Target Ramp Rate: 1V/s
True Ramp Rate: -0.566 V/s*

• **Cycle:** 5

Resistance: 929.06 Ω
Linear Fit R2: 1.000

Resets



• Time: 11:47:55AM

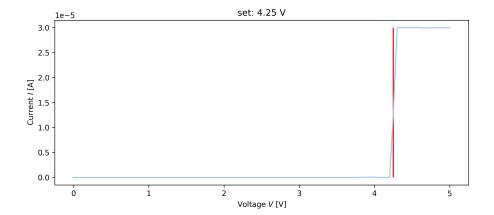
• **Icc**: 30.0uA

Voltage Range: 0V → 5V
Target Ramp Rate: 1V/s
True Ramp Rate: 1.069 V/s*

• **Cycle:** 6

• Set Voltage: 4.25 V

Does set, 4.3V



• Time: 12:22:13PM

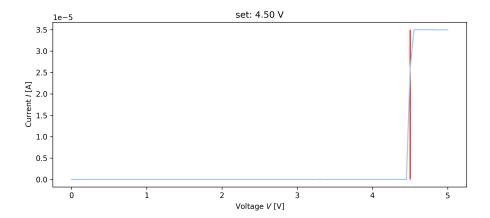
• **Icc**: 35.0uA

Voltage Range: 0V → 5V
Target Ramp Rate: 1V/s
True Ramp Rate: 1.068 V/s*

• **Cycle:** 6

• Set Voltage: 4.50 V

set at 4.55V



• Time: 12:23:01PM

• **Icc:** 8.0mA

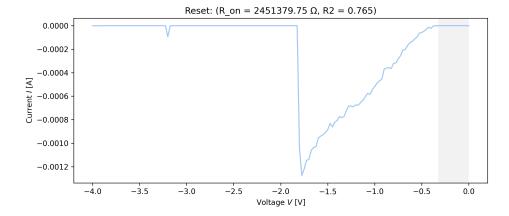
Voltage Range: 0V → -4V
Target Ramp Rate: 1V/s
True Ramp Rate: -0.553 V/s*

• **Cycle**: 6

• **Resistance:** 2451379.75 Ω

• Linear Fit R2: 0.765

Kind weird Reset



• Time: 12:23:23PM

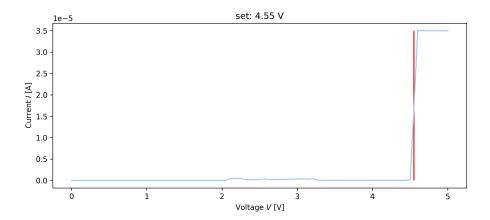
• **Icc**: 35.0uA

Voltage Range: 0V → 5V
Target Ramp Rate: 1V/s
True Ramp Rate: 1.069 V/s*

• Cycle: 7

• Set Voltage: 4.55 V

set at 4.6V



• Time: 12:24:04PM

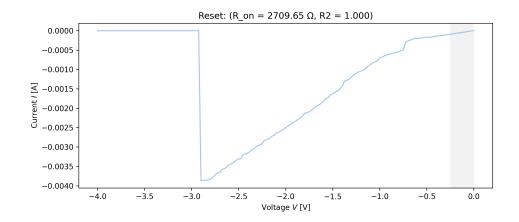
• **Icc:** 8.0mA

Voltage Range: 0V → -4V
Target Ramp Rate: 1V/s
True Ramp Rate: -0.558 V/s*

• Cycle: 7

Resistance: 2709.65 Ω
Linear Fit R2: 1.000

Reset



• Time: 12:24:53PM

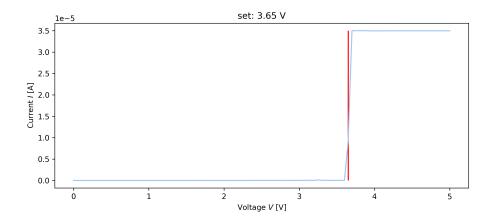
• **Icc:** 35.0uA

Voltage Range: 0V → 5V
Target Ramp Rate: 1V/s
True Ramp Rate: 1.069 V/s*

• **Cycle**: 8

• Set Voltage: 3.65 V

set at 3.7V



• Time: 12:27:22PM

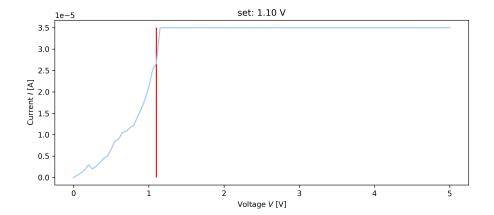
• **Icc:** 35.0uA

Voltage Range: 0V → 5V
Target Ramp Rate: 1V/s
True Ramp Rate: 1.353 V/s*

• **Cycle**: 8

• Set Voltage: 1.10 V

weird set, 1.15V



• Time: 12:28:09PM

• **Icc:** 8.0mA

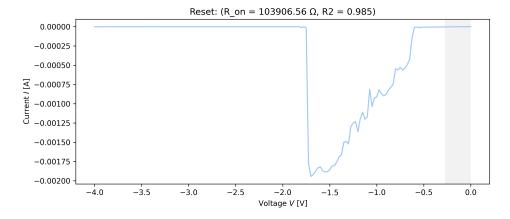
Voltage Range: 0V → -4V
Target Ramp Rate: 1V/s
True Ramp Rate: -0.577 V/s*

• **Cycle:** 8

• **Resistance:** 103906.56 Ω

• Linear Fit R2: 0.985

Reset, but it's weird



• Time: 12:28:33PM

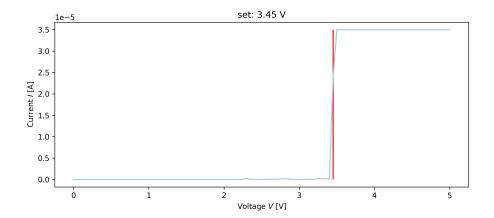
• **Icc:** 35.0uA

Voltage Range: 0V → 5V
Target Ramp Rate: 1V/s
True Ramp Rate: 1.069 V/s*

• **Cycle:** 9

• Set Voltage: 3.45 V

Good set, 3.5V



• Time: 12:29:41PM

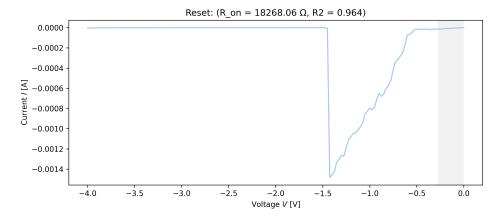
• **Icc:** 8.0mA

Voltage Range: 0V → -4V
Target Ramp Rate: 1V/s
True Ramp Rate: -0.553 V/s*

• **Cycle:** 9

Resistance: 18268.06 Ω
Linear Fit R2: 0.964

Reset, starts with a slope of 0



• Time: 12:30:42PM

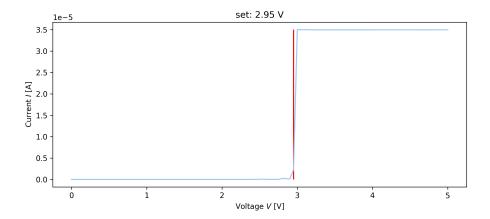
• **Icc**: 35.0uA

Voltage Range: 0V → 5V
Target Ramp Rate: 1V/s
True Ramp Rate: 1.069 V/s*

• **Cycle:** 10

• Set Voltage: 2.95 V

Set at 3V



• **Time:** 12:33:08PM

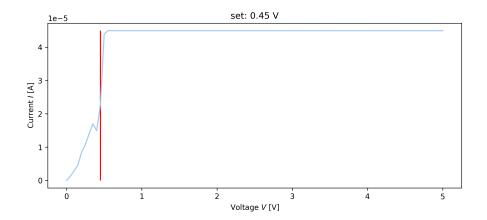
• **Icc**: 45.0uA

Voltage Range: 0V → 5V
Target Ramp Rate: 1V/s
True Ramp Rate: 1.608 V/s*

• **Cycle:** 10

• Set Voltage: 0.45 V

Set really quickly



• Time: 12:33:36PM

• **Icc:** 8.0mA

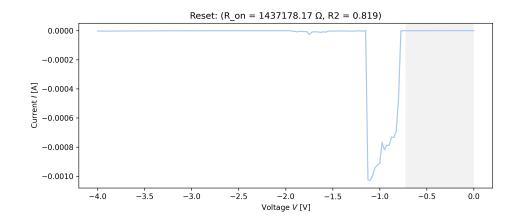
Voltage Range: 0V → -4V
Target Ramp Rate: 1V/s
True Ramp Rate: -0.556 V/s*

• **Cycle:** 10

• Resistance: 1437178.17 Ω

• Linear Fit R2: 0.819

Reset



• Time: 12:33:52PM

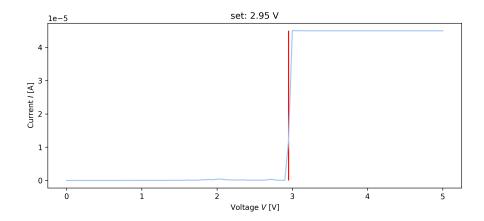
• **Icc:** 45.0uA

Voltage Range: 0V → 5V
Target Ramp Rate: 1V/s
True Ramp Rate: 1.069 V/s*

• Cycle: 11

• Set Voltage: 2.95 V

Set at 3V



• Time: 12:35:37PM

• **Icc:** 8.0mA

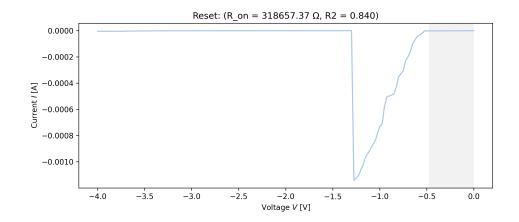
Voltage Range: 0V → -4V
Target Ramp Rate: 1V/s
True Ramp Rate: -0.552 V/s*

• Cycle: 11

• **Resistance:** 318657.37 Ω

• Linear Fit R2: 0.840

Reset



• Time: 12:35:59PM

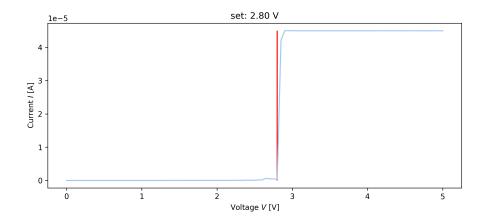
• **Icc:** 45.0uA

Voltage Range: 0V → 5V
Target Ramp Rate: 1V/s
True Ramp Rate: 1.069 V/s*

• **Cycle:** 12

• Set Voltage: 2.80 V

Set at 2.9V



• Time: 12:38:13PM

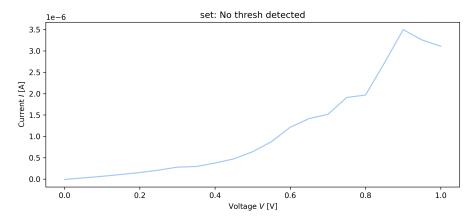
• **Icc:** 1.0mA

Voltage Range: 0V → 1V
Target Ramp Rate: 1V/s
True Ramp Rate: 1.069 V/s*

• **Cycle:** 12

Error: Set failed

Was a test of the already set filament to see if it increased linearly



• Time: 12:39:53PM

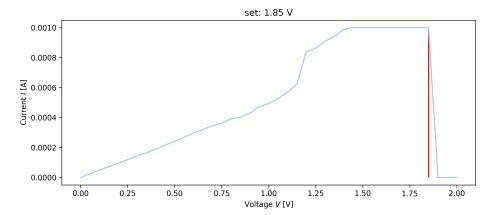
• **Icc:** 1.0mA

Voltage Range: 0V → 2V
Target Ramp Rate: 1V/s
True Ramp Rate: 1.608 V/s*

• **Cycle:** 12

• Set Voltage: 1.85 V

Same test as previous run but going to 2 V



• Time: 12:40:36PM

• **Icc:** 8.0mA

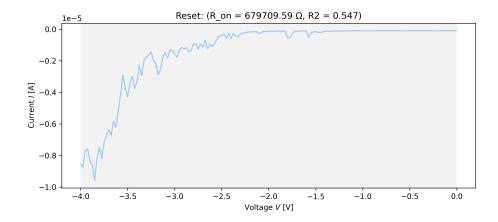
Voltage Range: 0V → -4V
Target Ramp Rate: 1V/s
True Ramp Rate: -0.547 V/s*

• **Cycle:** 12

• Resistance: 679709.59Ω

• Linear Fit R2: 0.547

Already in reset



• **Time:** 12:41:33PM

• **Icc:** 45.0uA

Voltage Range: 0V → 5V
Target Ramp Rate: 1V/s
True Ramp Rate: 1.608 V/s*

• **Cycle:** 13

• Set Voltage: 3.00 V

Set at 3.05V

