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

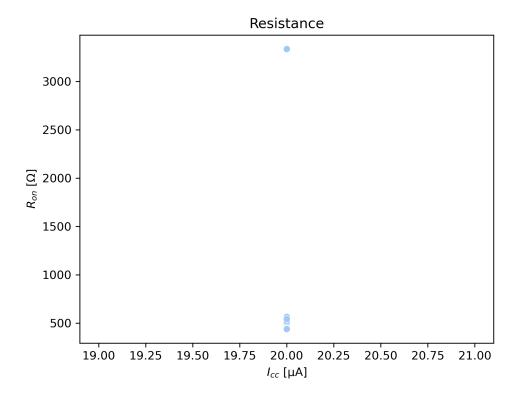
• Cell Size: 15um

Times Accessed: 26

Last Measurement: 2022/March/01 at 03:26:18PM

## Summary

Cycle #	Set Icc (µA)	Set Voltage (V)	R_on ( $\Omega$ )	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



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• Time: 02:57:08PM

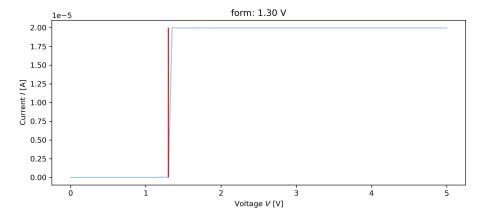
• **Icc:** 20.0uA

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



• Time: 02:58:34PM

• **Icc:** 5.0mA

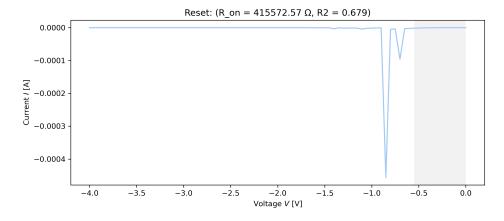
Voltage Range: 0V → -4V
Target Ramp Rate: 1V/s
True Ramp Rate: -1.069 V/s\*

• Cycle: 1

• **Resistance:** 415572.57 Ω

Linear Fit R2: 0.679

Cell did not conduct



• Time: 03:00:01PM

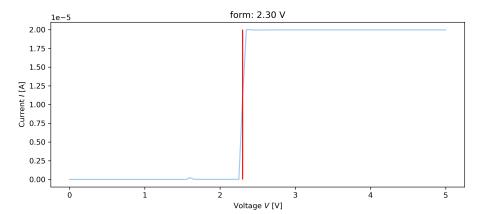
• **Icc:** 20.0uA

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



• Time: 03:00:49PM

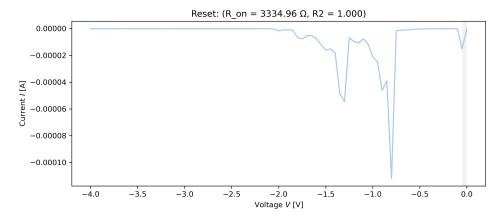
• **Icc:** 5.0mA

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



• Time: 03:01:49PM

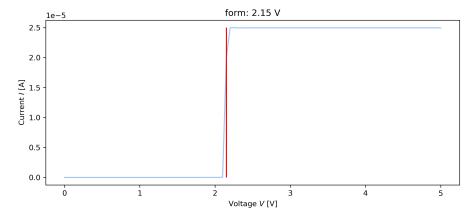
• **Icc**: 25.0uA

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



• Time: 03:02:52PM

• **Icc:** 5.0mA

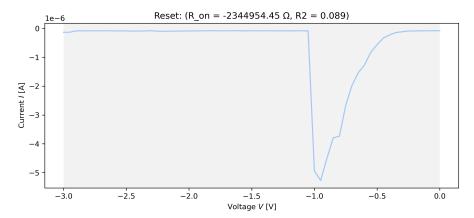
Voltage Range: 0V → -3V
Target Ramp Rate: 1V/s
True Ramp Rate: -1.067 V/s\*

• **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



• Time: 03:03:52PM

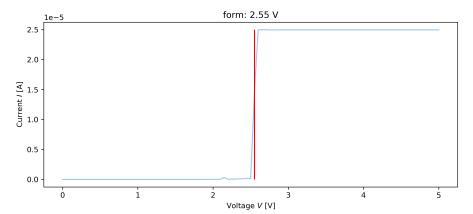
• **Icc**: 25.0uA

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



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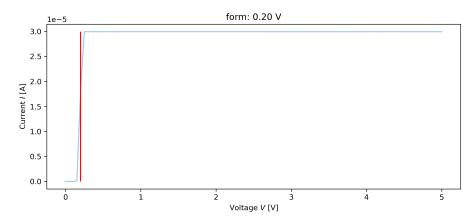
• Time: 03:06:05PM

• **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



• Time: 03:10:31PM

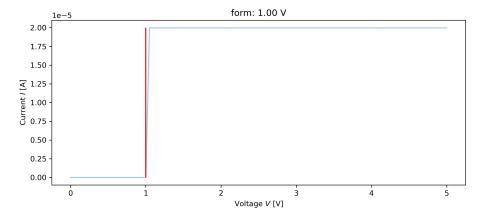
• **Icc**: 20.0uA

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



• Time: 03:12:21PM

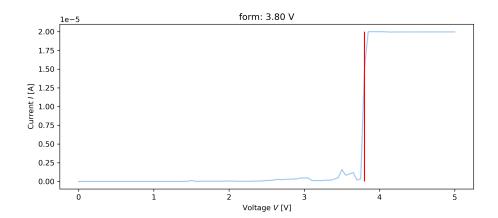
• **Icc**: 20.0uA

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



• Time: 03:15:33PM

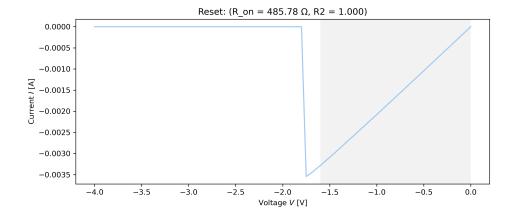
• **Icc:** 5.0mA

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

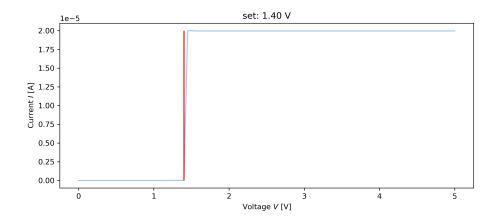
• **Icc**: 20.0uA

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



• Time: 03:18:44PM

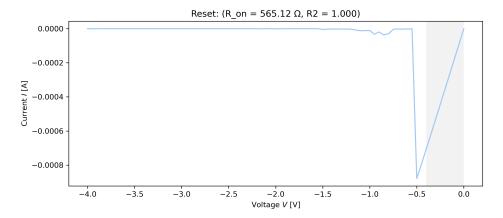
• **Icc:** 5.0mA

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

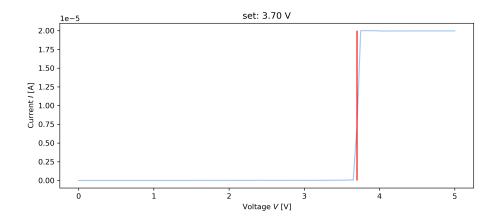
• **Icc**: 20.0uA

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



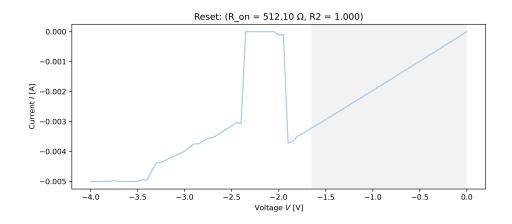
• Time: 03:20:44PM

• **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



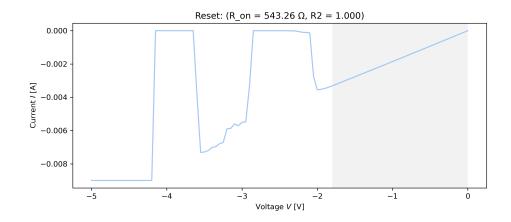
• Time: 03:21:22PM

• **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



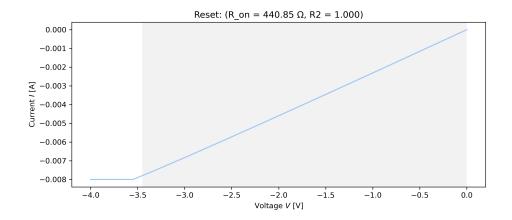
• Time: 03:22:34PM

• **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



• Time: 03:24:39PM

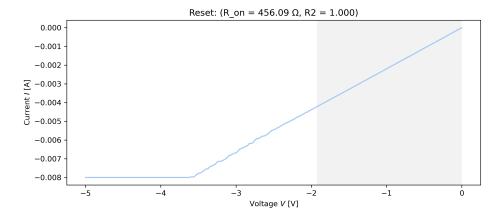
• **Icc:** 8.0mA

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



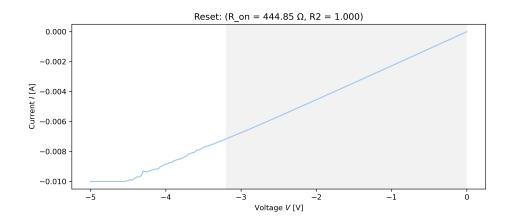
• Time: 03:25:42PM

• **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



• 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

