www.SeCosGmbH.com

Headquarter Address:
8F.No.33, Lane 155, Sec.3, Bei-Shen Rd.,
Shen Keng Dist, New Taipei City, Taiwan
TEL: +886-2-26620988
FAX: +886-2-26620488

Product/Process Change Notification

PCN#	Effective Date	Issue Date
2016-02-03C-01	2016/5/3	2016/2/3

PCN Classification	Product Category
Major	MOSFET

Subject

Change the assembly house.

Affected Product(s)

SSD12P10

Description of Change(s)

The original assembly house, GTM Corporation, was shut down; thus, we change to the second assembly house.

Content of Change(s)

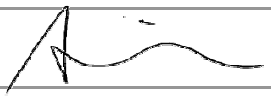
Assembly house.

Impact(s)

None

Attachment(s)

Reliability Test Report.

Approval		
Issued by	Alice Lai	e-mail: alice@secosgmbh.com
Development Engineer		Alice Lai
QA Manager		Peter Yang
General Manger		Mathew Liu
Customer Approval		
Customer's Comment		
Customer's Consent with Signature		

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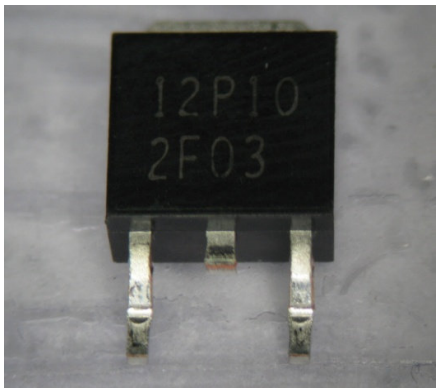
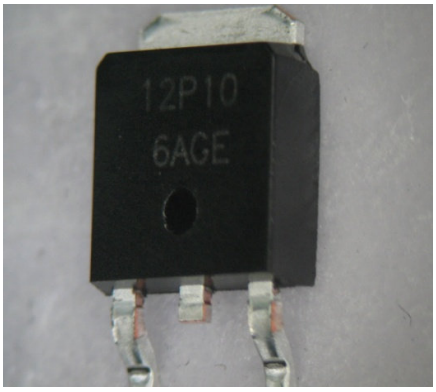
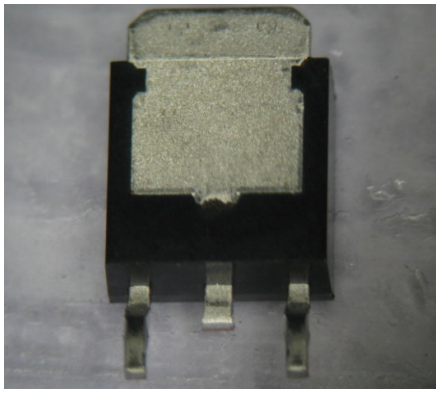
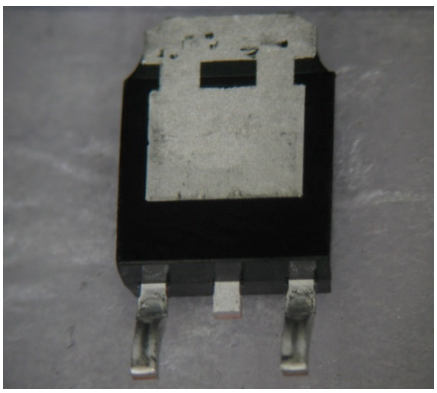
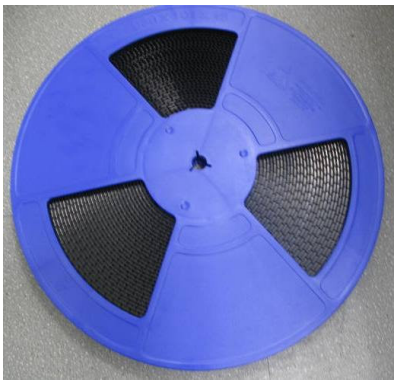
Exterior Comparison Chart	
Original	New
 Top View	 Top View
 Back View	 Back View
 Reel	 Reel

SeCoS Corporation

Reliability Testing Summary Report

Date: 2016/01/22 Document No.: SJ16 -01-011

Test Item	P/N	Test Condition	(LTPD)	Sample Numbers	Allow Fall Numbers	Fall Numbers	Result
HTRB High Temp Reverse Bias	SSD12P10-C	100 ± 5℃, 80%VR, T = 1000hrs		77	0	0	ACC
HTSL High Temperature Storage Life	SSD12P10-C	150℃, T = 1000 hrs		77	0	0	ACC
PCT Pressure Cooker Test	SSD12P10-C	121℃, 29.7PSIG, 168 hrs		77	0	0	ACC
TCT Temperature Cycle Test	SSD12P10-C	-55℃/30min, 150℃/30min, For 1000 Cycle		77	0	0	ACC
THT High Temperature High Humidity Test	SSD12P10-C	85 ± 2℃, RH=85±5%, 1000 hrs		77	0	0	ACC
H3TRB High Temper High Humidity Reverse Bies Test	SSD12P10-C	85 ± 2℃, RH=85±5%, 1000 hrs		77	0	0	ACC
Solderability	SSD12P10-C	245 ± 5℃, 5Sec the inspected area of each lead must have 95% solder coverage minimum		10	0	0	ACC

Judgment:

■ **qualified** □ **unqualified**

Testing Start Date: 2015.12.01 Testing End Date: 2016.01.22

Tester: King Huang Approval: Peter Yang

SeCoS Corporation

Electrical Test Data

Report No : T160122-011
Part No : SSD12P10-C
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)DSS > -100V@ID=-250μA ；IDSS < -1μA@VDS=-100V
RDS(ON) < 210mΩ@VGS=-10V, ID=-8A
Test Condition: 25℃
Test Date: 2015.12.01
Test Standard : Specifications
Operator: Leo Hsia

Test Result: PASS

No	$V_{(BR)DSS}$	I_{DSS}	$R_{DS(ON)}$
1	-109.6V	-0.006uA	195.3mΩ
2	-109.0V	-0.007uA	195.6mΩ
3	-108.3V	-0.023uA	199.6mΩ
4	-108.3V	-0.029uA	198.0mΩ
5	-109.0V	-0.023uA	191.1mΩ
6	-110.2V	-0.005uA	194.8mΩ
7	-109.8V	-0.011uA	194.1mΩ
8	-109.6V	-0.027uA	194.5mΩ
9	-108.4V	-0.002uA	196.2mΩ
10	-108.4V	-0.020uA	196.1mΩ
11	-109.1V	-0.019uA	197.8mΩ
12	-108.7V	-0.008uA	197.8mΩ
13	-109.3V	-0.024uA	194.0mΩ
14	-109.5V	-0.018uA	190.0mΩ
15	-109.8V	-0.014uA	192.9mΩ
16	-108.5V	-0.007uA	194.4mΩ
17	-108.7V	-0.019uA	197.6mΩ
18	-108.9V	-0.012uA	195.1mΩ
19	-108.5V	-0.023uA	199.9mΩ
20	-108.8V	-0.004uA	200.1mΩ
21	-109.7V	-0.016uA	199.0mΩ
22	-108.8V	-0.009uA	194.3mΩ
23	-108.9V	-0.011uA	194.6mΩ
24	-108.6V	-0.022uA	197.5mΩ
25	-109.3V	-0.019uA	190.3mΩ
26	-109.6V	-0.024uA	192.5mΩ
27	-109.8V	-0.023uA	197.0mΩ
28	-109.0V	-0.005uA	192.3mΩ
29	-109.9V	-0.024uA	201.0mΩ
30	-109.8V	-0.021uA	196.6mΩ

SeCoS Corporation

Electrical Test Data

Report No : T160122-011
Part No : SSD12P10-C
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)DSS > -100V@ID=-250μA ；IDSS < -1μA@VDS=-100V
RDS(ON) < 210mΩ@VGS=-10V, ID=-8A
Test Condition: 25℃
Test Date: 2015.12.01
Test Standard : Specifications
Operator: Leo Hsia

Test Result: PASS

No	$V_{(BR)DSS}$	I_{DSS}	$R_{DS(ON)}$
31	-110.0V	-0.010uA	200.8mΩ
32	-109.5V	-0.003uA	190.2mΩ
33	-109.8V	-0.019uA	200.5mΩ
34	-109.5V	-0.026uA	193.8mΩ
35	-108.5V	-0.027uA	199.3mΩ
36	-109.3V	-0.028uA	197.5mΩ
37	-108.8V	-0.007uA	193.0mΩ
38	-108.8V	-0.013uA	197.2mΩ
39	-109.3V	-0.008uA	192.6mΩ
40	-109.1V	-0.021uA	192.2mΩ
41	-109.6V	-0.011uA	200.7mΩ
42	-108.9V	-0.031uA	197.1mΩ
43	-109.0V	-0.010uA	195.4mΩ
44	-109.6V	-0.024uA	193.9mΩ
45	-109.6V	-0.012uA	196.2mΩ
46	-109.8V	-0.016uA	199.6mΩ
47	-108.8V	-0.031uA	191.4mΩ
48	-108.5V	-0.016uA	192.8mΩ
49	-109.9V	-0.015uA	194.6mΩ
50	-109.9V	-0.007uA	195.2mΩ
51	-109.7V	-0.013uA	196.2mΩ
52	-109.7V	-0.025uA	191.7mΩ
53	-109.7V	-0.015uA	194.0mΩ
54	-109.2V	-0.005uA	197.7mΩ
55	-109.2V	-0.027uA	194.2mΩ
56	-108.4V	-0.014uA	200.2mΩ
57	-109.5V	-0.007uA	196.7mΩ
58	-109.5V	-0.004uA	193.0mΩ
59	-108.9V	-0.023uA	191.7mΩ
60	-109.8V	-0.010uA	198.1mΩ

SeCoS Corporation

Electrical Test Data

Report No : T160122-011
Part No : SSD12P10-C
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)DSS > -100V@ID=-250μA ；IDSS < -1μA@VDS=-100V
RDS(ON) < 210mΩ@VGS=-10V, ID=-8A
Test Condition: 25℃
Test Date: 2015.12.01
Test Standard : Specifications
Operator: Leo Hsia

Test Result: PASS

No	$V_{(BR)DSS}$	I_{DSS}	$R_{DS(ON)}$
61	-109.4V	-0.012uA	191.8mΩ
62	-110.2V	-0.025uA	190.3mΩ
63	-109.7V	-0.026uA	193.3mΩ
64	-108.5V	-0.022uA	190.1mΩ
65	-108.5V	-0.027uA	192.6mΩ
66	-109.7V	-0.012uA	190.4mΩ
67	-109.9V	-0.006uA	197.2mΩ
68	-109.5V	-0.009uA	196.7mΩ
69	-110.0V	-0.025uA	196.6mΩ
70	-110.0V	-0.003uA	197.2mΩ
71	-109.5V	-0.009uA	196.0mΩ
72	-108.5V	-0.021uA	196.4mΩ
73	-109.3V	-0.021uA	200.3mΩ
74	-108.9V	-0.029uA	199.8mΩ
75	-110.1V	-0.014uA	193.9mΩ
76	-109.7V	-0.015uA	200.4mΩ
77	-110.2V	-0.006uA	191.4mΩ

Made By: Leo Hsia

Approval: Peter Yang

SeCoS Corporation

High Temperature Reverse Bias Test Data

Report No : T160122-011
Part No : SSD12P10-C
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)DSS > -100V@ID=-250μA ；IDSS < -1μA@VDS=-100V
RDS(ON) < 210mΩ@VGS=-10V, ID=-8A
Test Condition: 100 ± 5℃, 80%VR, T = 1000 hrs
Test Date: 2015.12.01 ~ 2016.01.12
Test Standard : JESD22 STANDARD Method-A108
Operator: Leo Hsia

Test Result: PASS

	Before			After		
No	$V_{(BR)DSS}$	I_{DSS}	$R_{DS(ON)}$	$V_{(BR)DSS}$	I_{DSS}	$R_{DS(ON)}$
1	-109.2V	-0.003uA	190.4mΩ	-110.0V	-0.028uA	193.2mΩ
2	-110.2V	-0.017uA	191.1mΩ	-109.5V	-0.003uA	199.0mΩ
3	-108.8V	-0.022uA	195.4mΩ	-110.1V	-0.022uA	193.6mΩ
4	-108.8V	-0.021uA	198.7mΩ	-109.1V	-0.024uA	191.2mΩ
5	-109.4V	-0.021uA	193.1mΩ	-108.7V	-0.003uA	193.4mΩ
6	-109.9V	-0.025uA	193.5mΩ	-109.7V	-0.022uA	194.2mΩ
7	-108.7V	-0.015uA	193.5mΩ	-108.6V	-0.014uA	196.2mΩ
8	-109.7V	-0.029uA	193.0mΩ	-108.4V	-0.012uA	200.2mΩ
9	-109.0V	-0.002uA	197.8mΩ	-109.2V	-0.007uA	194.1mΩ
10	-110.1V	-0.026uA	193.6mΩ	-110.1V	-0.026uA	191.2mΩ
11	-108.7V	-0.013uA	191.7mΩ	-109.2V	-0.023uA	196.0mΩ
12	-109.1V	-0.018uA	196.1mΩ	-110.0V	-0.024uA	195.2mΩ
13	-109.7V	-0.019uA	193.7mΩ	-109.7V	-0.006uA	190.2mΩ
14	-109.0V	-0.027uA	196.5mΩ	-108.7V	-0.021uA	189.9mΩ
15	-109.3V	-0.017uA	193.8mΩ	-108.4V	-0.006uA	191.1mΩ
16	-108.9V	-0.030uA	198.2mΩ	-109.6V	-0.020uA	198.1mΩ
17	-109.2V	-0.013uA	200.7mΩ	-109.9V	-0.020uA	195.9mΩ
18	-108.9V	-0.024uA	199.7mΩ	-110.0V	-0.009uA	194.6mΩ
19	-109.2V	-0.009uA	190.7mΩ	-109.3V	-0.031uA	199.0mΩ
20	-109.6V	-0.017uA	196.1mΩ	-108.5V	-0.010uA	198.7mΩ
21	-109.6V	-0.016uA	193.3mΩ	-109.5V	-0.015uA	191.1mΩ
22	-108.3V	-0.007uA	199.8mΩ	-109.8V	-0.025uA	197.6mΩ
23	-108.5V	-0.025uA	193.1mΩ	-109.6V	-0.002uA	190.2mΩ
24	-109.7V	-0.025uA	196.8mΩ	-109.1V	-0.002uA	193.2mΩ
25	-109.7V	-0.020uA	194.8mΩ	-110.1V	-0.004uA	195.6mΩ
26	-109.5V	-0.020uA	197.1mΩ	-109.3V	-0.023uA	197.4mΩ
27	-109.4V	-0.022uA	191.5mΩ	-108.5V	-0.012uA	197.9mΩ
28	-109.0V	-0.030uA	194.3mΩ	-108.9V	-0.030uA	192.4mΩ
29	-109.2V	-0.003uA	193.7mΩ	-110.1V	-0.028uA	196.8mΩ

SeCoS Corporation

High Temperature Reverse Bias Test Data

Report No : T160122-011
Part No : SSD12P10-C
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)DSS > -100V@ID=-250μA ；IDSS < -1μA@VDS=-100V
RDS(ON) < 210mΩ@VGS=-10V, ID=-8A
Test Condition: 100 ± 5℃, 80%VR, T = 1000 hrs
Test Date: 2015.12.01 ~ 2016.01.12
Test Standard : JESD22 STANDARD Method-A108
Operator: Leo Hsia

Test Result: PASS

	Before			After		
No	$V_{(BR)DSS}$	I_{DSS}	$R_{DS(ON)}$	$V_{(BR)DSS}$	I_{DSS}	$R_{DS(ON)}$
30	-108.6V	-0.029uA	197.6mΩ	-108.9V	-0.023uA	194.5mΩ
31	-108.6V	-0.006uA	199.7mΩ	-109.3V	-0.005uA	197.7mΩ
32	-110.1V	-0.009uA	190.6mΩ	-109.8V	-0.007uA	190.4mΩ
33	-108.8V	-0.003uA	199.3mΩ	-109.3V	-0.014uA	191.7mΩ
34	-108.4V	-0.008uA	196.0mΩ	-109.7V	-0.018uA	195.1mΩ
35	-109.5V	-0.021uA	194.1mΩ	-109.4V	-0.020uA	196.2mΩ
36	-108.7V	-0.006uA	197.7mΩ	-109.1V	-0.029uA	199.0mΩ
37	-110.0V	-0.024uA	199.3mΩ	-108.9V	-0.015uA	198.8mΩ
38	-108.4V	-0.023uA	198.4mΩ	-109.7V	-0.018uA	200.4mΩ
39	-109.5V	-0.027uA	197.5mΩ	-108.9V	-0.005uA	196.4mΩ
40	-108.9V	-0.023uA	199.6mΩ	-109.4V	-0.029uA	197.3mΩ
41	-109.0V	-0.009uA	192.1mΩ	-108.8V	-0.004uA	193.5mΩ
42	-108.4V	-0.014uA	191.6mΩ	-108.4V	-0.022uA	193.8mΩ
43	-110.2V	-0.007uA	196.2mΩ	-110.1V	-0.002uA	199.9mΩ
44	-109.2V	-0.018uA	195.5mΩ	-108.5V	-0.003uA	199.2mΩ
45	-109.1V	-0.024uA	197.5mΩ	-108.4V	-0.021uA	199.8mΩ
46	-109.5V	-0.017uA	190.8mΩ	-110.1V	-0.028uA	190.4mΩ
47	-109.8V	-0.029uA	191.3mΩ	-108.4V	-0.029uA	191.1mΩ
48	-109.9V	-0.022uA	193.2mΩ	-110.1V	-0.004uA	191.1mΩ
49	-108.6V	-0.015uA	196.3mΩ	-108.8V	-0.017uA	197.7mΩ
50	-109.2V	-0.014uA	190.1mΩ	-109.0V	-0.030uA	190.7mΩ
51	-109.7V	-0.020uA	190.2mΩ	-108.6V	-0.014uA	189.9mΩ
52	-109.7V	-0.007uA	192.9mΩ	-109.6V	-0.007uA	191.1mΩ
53	-109.5V	-0.022uA	193.9mΩ	-108.7V	-0.013uA	199.3mΩ
54	-109.4V	-0.010uA	200.5mΩ	-109.1V	-0.026uA	190.3mΩ
55	-108.9V	-0.016uA	198.8mΩ	-108.6V	-0.024uA	196.9mΩ
56	-108.9V	-0.021uA	200.8mΩ	-109.5V	-0.017uA	194.1mΩ
57	-109.4V	-0.017uA	190.6mΩ	-109.4V	-0.009uA	191.0mΩ
58	-109.4V	-0.022uA	192.9mΩ	-109.9V	-0.019uA	191.2mΩ

SeCoS Corporation

High Temperature Reverse Bias Test Data

Report No : T160122-011
Part No : SSD12P10-C
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)DSS > -100V@ID=-250μA ；IDSS < -1μA@VDS=-100V
RDS(ON) < 210mΩ@VGS=-10V, ID=-8A
Test Condition: 100 ± 5℃, 80%VR, T = 1000 hrs
Test Date: 2015.12.01 ~ 2016.01.12
Test Standard : JESD22 STANDARD Method-A108
Operator: Leo Hsia

Test Result: PASS

	Before			After		
No	$V_{(BR)DSS}$	I_{DSS}	$R_{DS(ON)}$	$V_{(BR)DSS}$	I_{DSS}	$R_{DS(ON)}$
59	-109.1V	-0.024uA	194.8mΩ	-109.2V	-0.022uA	195.7mΩ
60	-108.7V	-0.011uA	200.4mΩ	-109.6V	-0.019uA	191.7mΩ
61	-109.7V	-0.018uA	194.6mΩ	-109.9V	-0.022uA	200.3mΩ
62	-109.1V	-0.018uA	199.7mΩ	-109.5V	-0.010uA	193.6mΩ
63	-110.1V	-0.023uA	197.3mΩ	-108.4V	-0.004uA	199.4mΩ
64	-109.0V	-0.017uA	190.1mΩ	-108.4V	-0.022uA	191.8mΩ
65	-108.7V	-0.024uA	194.5mΩ	-110.0V	-0.009uA	196.2mΩ
66	-108.6V	-0.028uA	190.8mΩ	-109.7V	-0.008uA	199.5mΩ
67	-108.9V	-0.005uA	192.7mΩ	-110.2V	-0.020uA	195.1mΩ
68	-108.3V	-0.015uA	192.2mΩ	-108.4V	-0.007uA	196.5mΩ
69	-108.3V	-0.027uA	198.9mΩ	-109.2V	-0.029uA	192.4mΩ
70	-108.5V	-0.026uA	198.1mΩ	-109.5V	-0.023uA	198.5mΩ
71	-109.8V	-0.019uA	199.3mΩ	-109.7V	-0.014uA	198.2mΩ
72	-110.1V	-0.023uA	198.8mΩ	-109.5V	-0.029uA	197.0mΩ
73	-109.7V	-0.025uA	199.8mΩ	-109.8V	-0.015uA	200.2mΩ
74	-110.0V	-0.030uA	199.3mΩ	-109.5V	-0.022uA	190.3mΩ
75	-109.2V	-0.001uA	200.3mΩ	-108.4V	-0.025uA	195.7mΩ
76	-110.2V	-0.010uA	191.6mΩ	-108.6V	-0.008uA	198.2mΩ
77	-109.8V	-0.011uA	190.7mΩ	-108.6V	-0.004uA	193.0mΩ

Made By: Leo Hsia

Approval: Peter Yang

SeCoS Corporation

High Temperature Storage Life Test Data

Report No : T160122-011
Part No : SSD12P10-C
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)DSS > -100V@ID=-250μA ；IDSS < -1μA@VDS=-100V
RDS(ON) < 210mΩ@VGS=-10V, ID=-8A
Test Condition: 150℃, 1000Hrs
Test Date: 2015.12.01 ~ 2016.01.12
Test Standard : JESD22 STANDARD Method-A103
Operator: Leo Hsia

Test Result: PASS

	Before			After		
No	I_{DSS}	$V_{GS(th)}$	$R_{DS(ON)}$	I_{DSS}	$V_{GS(th)}$	$R_{DS(ON)}$
1	-109.0V	-0.007uA	192.8mΩ	-109.9V	-0.027uA	190.3mΩ
2	-109.7V	-0.027uA	190.0mΩ	-109.8V	-0.028uA	193.4mΩ
3	-108.4V	-0.021uA	198.3mΩ	-110.1V	-0.021uA	200.9mΩ
4	-109.9V	-0.024uA	199.9mΩ	-108.5V	-0.020uA	192.7mΩ
5	-108.4V	-0.002uA	193.3mΩ	-109.0V	-0.028uA	193.4mΩ
6	-109.1V	-0.008uA	199.6mΩ	-108.5V	-0.007uA	193.9mΩ
7	-109.5V	-0.017uA	197.1mΩ	-109.2V	-0.004uA	191.8mΩ
8	-109.3V	-0.007uA	194.5mΩ	-109.1V	-0.020uA	196.2mΩ
9	-109.9V	-0.014uA	197.9mΩ	-109.6V	-0.031uA	194.0mΩ
10	-108.8V	-0.010uA	191.5mΩ	-109.6V	-0.018uA	194.8mΩ
11	-109.4V	-0.014uA	200.5mΩ	-109.2V	-0.001uA	196.2mΩ
12	-108.5V	-0.028uA	194.3mΩ	-108.6V	-0.002uA	190.7mΩ
13	-109.1V	-0.005uA	197.9mΩ	-108.5V	-0.011uA	196.2mΩ
14	-108.9V	-0.013uA	193.5mΩ	-108.9V	-0.023uA	192.5mΩ
15	-108.9V	-0.009uA	195.5mΩ	-109.1V	-0.017uA	197.5mΩ
16	-109.9V	-0.016uA	197.2mΩ	-109.4V	-0.019uA	194.4mΩ
17	-109.4V	-0.008uA	189.8mΩ	-108.5V	-0.012uA	196.1mΩ
18	-109.5V	-0.002uA	198.0mΩ	-108.3V	-0.003uA	193.1mΩ
19	-108.3V	-0.012uA	198.9mΩ	-110.0V	-0.015uA	190.8mΩ
20	-109.0V	-0.025uA	191.0mΩ	-109.6V	-0.021uA	200.1mΩ
21	-108.5V	-0.025uA	195.6mΩ	-110.0V	-0.029uA	199.6mΩ
22	-109.7V	-0.006uA	195.2mΩ	-108.7V	-0.021uA	190.4mΩ
23	-108.8V	-0.021uA	198.2mΩ	-109.6V	-0.003uA	195.6mΩ
24	-109.2V	-0.013uA	190.9mΩ	-108.5V	-0.003uA	191.4mΩ
25	-109.1V	-0.031uA	195.9mΩ	-109.8V	-0.007uA	192.2mΩ
26	-109.3V	-0.008uA	193.8mΩ	-109.4V	-0.026uA	194.1mΩ
27	-109.2V	-0.029uA	196.3mΩ	-108.5V	-0.027uA	201.0mΩ
28	-110.0V	-0.003uA	195.3mΩ	-110.2V	-0.022uA	190.1mΩ
29	-108.3V	-0.028uA	195.3mΩ	-110.0V	-0.006uA	199.0mΩ

SeCoS Corporation

High Temperature Storage Life Test Data

Report No : T160122-011
Part No : SSD12P10-C
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)DSS > -100V@ID=-250μA ；IDSS < -1μA@VDS=-100V
RDS(ON) < 210mΩ@VGS=-10V, ID=-8A
Test Condition: 150℃, 1000Hrs
Test Date: 2015.12.01 ~ 2016.01.12
Test Standard : JESD22 STANDARD Method-A103
Operator: Leo Hsia

Test Result: PASS

	Before			After		
No	I_{DSS}	$V_{GS(th)}$	$R_{DS(ON)}$	I_{DSS}	$V_{GS(th)}$	$R_{DS(ON)}$
30	-109.2V	-0.024uA	191.8mΩ	-110.1V	-0.003uA	194.5mΩ
31	-108.8V	-0.013uA	196.6mΩ	-108.6V	-0.027uA	189.9mΩ
32	-109.6V	-0.009uA	197.8mΩ	-109.2V	-0.024uA	198.6mΩ
33	-108.5V	-0.031uA	195.2mΩ	-108.9V	-0.020uA	200.3mΩ
34	-109.4V	-0.012uA	198.1mΩ	-109.2V	-0.004uA	189.9mΩ
35	-110.2V	-0.008uA	196.3mΩ	-108.7V	-0.011uA	192.3mΩ
36	-109.0V	-0.025uA	194.5mΩ	-109.6V	-0.002uA	190.3mΩ
37	-109.1V	-0.022uA	192.9mΩ	-108.9V	-0.030uA	191.5mΩ
38	-109.8V	-0.018uA	193.1mΩ	-109.9V	-0.015uA	190.8mΩ
39	-109.9V	-0.019uA	199.1mΩ	-109.8V	-0.026uA	198.3mΩ
40	-109.0V	-0.021uA	198.2mΩ	-109.9V	-0.013uA	197.0mΩ
41	-108.5V	-0.024uA	193.8mΩ	-108.5V	-0.025uA	195.4mΩ
42	-110.2V	-0.016uA	190.4mΩ	-108.9V	-0.011uA	200.2mΩ
43	-109.0V	-0.008uA	190.5mΩ	-110.1V	-0.012uA	199.4mΩ
44	-108.8V	-0.012uA	198.3mΩ	-108.7V	-0.010uA	200.5mΩ
45	-109.2V	-0.010uA	199.4mΩ	-108.4V	-0.002uA	191.6mΩ
46	-108.6V	-0.023uA	195.8mΩ	-108.3V	-0.029uA	197.6mΩ
47	-109.2V	-0.024uA	197.8mΩ	-109.3V	-0.005uA	196.2mΩ
48	-109.0V	-0.024uA	195.4mΩ	-108.5V	-0.020uA	193.1mΩ
49	-109.0V	-0.008uA	195.3mΩ	-109.1V	-0.004uA	191.3mΩ
50	-109.3V	-0.015uA	193.8mΩ	-109.6V	-0.018uA	195.4mΩ
51	-109.1V	-0.013uA	200.6mΩ	-108.9V	-0.023uA	191.4mΩ
52	-109.0V	-0.016uA	194.2mΩ	-108.8V	-0.014uA	196.4mΩ
53	-108.8V	-0.015uA	191.8mΩ	-108.7V	-0.027uA	191.3mΩ
54	-108.4V	-0.008uA	194.3mΩ	-108.7V	-0.028uA	191.1mΩ
55	-109.7V	-0.013uA	191.0mΩ	-110.1V	-0.028uA	191.2mΩ
56	-110.0V	-0.011uA	197.8mΩ	-108.7V	-0.007uA	196.1mΩ
57	-109.3V	-0.004uA	195.8mΩ	-108.7V	-0.013uA	198.8mΩ
58	-110.0V	-0.021uA	200.3mΩ	-108.9V	-0.021uA	197.2mΩ

SeCoS Corporation

High Temperature Storage Life Test Data

Report No : T160122-011
Part No : SSD12P10-C
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)DSS > -100V@ID=-250μA ；IDSS < -1μA@VDS=-100V
RDS(ON) < 210mΩ@VGS=-10V, ID=-8A
Test Condition: 150℃, 1000Hrs
Test Date: 2015.12.01 ~ 2016.01.12
Test Standard : JESD22 STANDARD Method-A103
Operator: Leo Hsia

Test Result: PASS

	Before			After		
No	I_{DSS}	$V_{GS(th)}$	$R_{DS(ON)}$	I_{DSS}	$V_{GS(th)}$	$R_{DS(ON)}$
59	-109.0V	-0.007uA	196.0mΩ	-109.2V	-0.004uA	199.2mΩ
60	-108.8V	-0.023uA	195.6mΩ	-109.4V	-0.030uA	190.9mΩ
61	-108.4V	-0.003uA	198.8mΩ	-109.3V	-0.010uA	193.1mΩ
62	-108.3V	-0.004uA	190.2mΩ	-108.9V	-0.025uA	192.0mΩ
63	-108.6V	-0.011uA	199.4mΩ	-110.1V	-0.014uA	196.8mΩ
64	-109.7V	-0.011uA	197.3mΩ	-109.1V	-0.024uA	193.3mΩ
65	-108.4V	-0.018uA	198.4mΩ	-109.5V	-0.012uA	199.5mΩ
66	-108.4V	-0.018uA	193.9mΩ	-108.9V	-0.024uA	193.2mΩ
67	-109.7V	-0.022uA	195.0mΩ	-108.4V	-0.001uA	200.5mΩ
68	-110.1V	-0.008uA	197.8mΩ	-109.8V	-0.016uA	192.5mΩ
69	-108.9V	-0.016uA	193.5mΩ	-109.3V	-0.030uA	192.4mΩ
70	-109.8V	-0.030uA	197.3mΩ	-109.0V	-0.005uA	198.2mΩ
71	-109.4V	-0.026uA	194.0mΩ	-109.2V	-0.005uA	198.6mΩ
72	-108.9V	-0.009uA	198.2mΩ	-109.6V	-0.016uA	192.7mΩ
73	-110.1V	-0.003uA	194.0mΩ	-109.7V	-0.022uA	189.8mΩ
74	-109.7V	-0.005uA	199.0mΩ	-108.5V	-0.004uA	190.1mΩ
75	-109.9V	-0.019uA	194.6mΩ	-109.5V	-0.029uA	200.5mΩ
76	-108.8V	-0.014uA	197.6mΩ	-108.5V	-0.007uA	194.2mΩ
77	-110.1V	-0.027uA	195.8mΩ	-110.2V	-0.019uA	196.7mΩ

Made By: Leo Hsia

Approval: Peter Yang

SeCoS Corporation

Pressure Cooker Test Data

Report No : T160122-011
Part No : SSD12P10-C
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)DSS > -100V@ID=-250μA ；IDSS < -1μA@VDS=-100V
RDS(ON) < 210mΩ@VGS=-10V, ID=-8A
Test Condition: 121℃, 100%RH, 29.7PSIG, 168Hrs
Test Date: 2015.12.01 ~ 2015.12.09
Test Standard : JESD22 STANDARD Method-A102
Operator: Leo Hsia

Test Result: PASS

	Before			After		
No	I_{DSS}	$V_{GS(th)}$	$R_{DS(ON)}$	I_{DSS}	$V_{GS(th)}$	$R_{DS(ON)}$
1	-109.7V	-0.028uA	196.4mΩ	-109.0V	-0.024uA	197.2mΩ
2	-109.2V	-0.003uA	200.7mΩ	-109.5V	-0.019uA	193.9mΩ
3	-108.8V	-0.018uA	194.1mΩ	-109.5V	-0.028uA	199.8mΩ
4	-108.4V	-0.003uA	198.8mΩ	-109.4V	-0.012uA	191.7mΩ
5	-109.9V	-0.002uA	200.3mΩ	-109.8V	-0.019uA	199.2mΩ
6	-108.8V	-0.017uA	195.6mΩ	-109.0V	-0.017uA	192.6mΩ
7	-110.0V	-0.012uA	196.5mΩ	-109.0V	-0.031uA	194.0mΩ
8	-108.9V	-0.003uA	193.8mΩ	-109.1V	-0.017uA	194.9mΩ
9	-109.7V	-0.012uA	190.6mΩ	-110.2V	-0.004uA	198.6mΩ
10	-109.0V	-0.002uA	194.0mΩ	-109.3V	-0.009uA	199.6mΩ
11	-109.2V	-0.024uA	198.7mΩ	-108.8V	-0.016uA	194.2mΩ
12	-108.4V	-0.013uA	194.9mΩ	-108.3V	-0.014uA	200.7mΩ
13	-108.8V	-0.003uA	197.1mΩ	-109.7V	-0.023uA	195.3mΩ
14	-109.0V	-0.008uA	193.9mΩ	-108.8V	-0.013uA	199.0mΩ
15	-108.4V	-0.027uA	192.5mΩ	-109.6V	-0.010uA	194.0mΩ
16	-109.2V	-0.008uA	198.5mΩ	-109.6V	-0.020uA	191.9mΩ
17	-109.0V	-0.019uA	194.8mΩ	-109.8V	-0.006uA	198.0mΩ
18	-108.4V	-0.003uA	197.0mΩ	-109.5V	-0.004uA	193.1mΩ
19	-109.7V	-0.011uA	198.4mΩ	-109.6V	-0.019uA	199.0mΩ
20	-109.4V	-0.014uA	193.0mΩ	-109.4V	-0.002uA	191.2mΩ
21	-109.8V	-0.023uA	199.1mΩ	-108.5V	-0.017uA	194.6mΩ
22	-109.5V	-0.002uA	195.1mΩ	-108.5V	-0.012uA	196.6mΩ
23	-109.9V	-0.023uA	200.3mΩ	-109.5V	-0.008uA	196.4mΩ
24	-109.9V	-0.016uA	192.2mΩ	-108.4V	-0.013uA	190.5mΩ
25	-108.3V	-0.003uA	192.9mΩ	-109.0V	-0.008uA	190.5mΩ
26	-109.8V	-0.010uA	194.6mΩ	-109.9V	-0.016uA	194.8mΩ
27	-109.8V	-0.023uA	197.1mΩ	-109.9V	-0.013uA	198.1mΩ
28	-109.3V	-0.012uA	197.3mΩ	-110.0V	-0.013uA	194.0mΩ
29	-109.1V	-0.024uA	199.7mΩ	-109.5V	-0.018uA	200.5mΩ

SeCoS Corporation

Pressure Cooker Test Data

Report No : T160122-011
Part No : SSD12P10-C
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)DSS > -100V@ID=-250μA ；IDSS < -1μA@VDS=-100V
RDS(ON) < 210mΩ@VGS=-10V, ID=-8A
Test Condition: 121℃, 100%RH, 29.7PSIG, 168Hrs
Test Date: 2015.12.01 ~ 2015.12.09
Test Standard : JESD22 STANDARD Method-A102
Operator: Leo Hsia

Test Result: PASS

	Before			After		
No	I_{DSS}	$V_{GS(th)}$	$R_{DS(ON)}$	I_{DSS}	$V_{GS(th)}$	$R_{DS(ON)}$
30	-109.6V	-0.002uA	191.6mΩ	-109.8V	-0.006uA	199.5mΩ
31	-109.8V	-0.016uA	196.6mΩ	-109.3V	-0.028uA	198.7mΩ
32	-109.9V	-0.018uA	193.4mΩ	-109.2V	-0.003uA	198.9mΩ
33	-108.9V	-0.001uA	195.5mΩ	-109.1V	-0.008uA	198.3mΩ
34	-109.9V	-0.020uA	199.7mΩ	-108.7V	-0.015uA	194.2mΩ
35	-108.9V	-0.028uA	193.3mΩ	-109.8V	-0.021uA	195.9mΩ
36	-108.5V	-0.014uA	195.3mΩ	-108.3V	-0.015uA	196.2mΩ
37	-109.0V	-0.017uA	192.7mΩ	-110.2V	-0.024uA	194.8mΩ
38	-109.8V	-0.017uA	198.5mΩ	-109.8V	-0.009uA	195.0mΩ
39	-109.6V	-0.004uA	200.6mΩ	-108.5V	-0.016uA	200.5mΩ
40	-109.3V	-0.009uA	192.5mΩ	-108.6V	-0.022uA	199.2mΩ
41	-109.9V	-0.015uA	192.4mΩ	-108.8V	-0.002uA	196.8mΩ
42	-109.4V	-0.023uA	197.6mΩ	-110.1V	-0.014uA	194.3mΩ
43	-108.9V	-0.017uA	191.0mΩ	-108.3V	-0.030uA	195.9mΩ
44	-108.7V	-0.029uA	195.5mΩ	-109.8V	-0.022uA	193.7mΩ
45	-108.6V	-0.016uA	199.2mΩ	-109.4V	-0.004uA	199.1mΩ
46	-108.6V	-0.004uA	194.2mΩ	-110.1V	-0.022uA	192.1mΩ
47	-109.1V	-0.031uA	192.3mΩ	-109.8V	-0.024uA	194.8mΩ
48	-110.1V	-0.014uA	195.4mΩ	-109.1V	-0.016uA	196.4mΩ
49	-108.7V	-0.026uA	190.2mΩ	-109.5V	-0.024uA	197.2mΩ
50	-108.6V	-0.017uA	199.6mΩ	-108.5V	-0.010uA	194.8mΩ
51	-108.5V	-0.013uA	198.9mΩ	-108.5V	-0.020uA	196.7mΩ
52	-108.5V	-0.001uA	190.3mΩ	-108.5V	-0.015uA	198.7mΩ
53	-109.2V	-0.008uA	200.0mΩ	-109.5V	-0.017uA	195.7mΩ
54	-108.6V	-0.017uA	194.0mΩ	-108.9V	-0.009uA	192.2mΩ
55	-109.2V	-0.029uA	196.8mΩ	-108.5V	-0.002uA	198.0mΩ
56	-108.5V	-0.027uA	199.6mΩ	-108.9V	-0.009uA	194.2mΩ
57	-109.3V	-0.017uA	190.9mΩ	-109.8V	-0.027uA	199.9mΩ
58	-110.2V	-0.006uA	200.9mΩ	-108.9V	-0.017uA	199.7mΩ

SeCoS Corporation

Pressure Cooker Test Data

Report No : T160122-011
Part No : SSD12P10-C
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)DSS > -100V@ID=-250μA ；IDSS < -1μA@VDS=-100V
RDS(ON) < 210mΩ@VGS=-10V, ID=-8A
Test Condition: 121℃, 100%RH, 29.7PSIG, 168Hrs
Test Date: 2015.12.01 ~ 2015.12.09
Test Standard : JESD22 STANDARD Method-A102
Operator: Leo Hsia

Test Result: PASS

	Before			After		
No	I_{DSS}	$V_{GS(th)}$	$R_{DS(ON)}$	I_{DSS}	$V_{GS(th)}$	$R_{DS(ON)}$
59	-108.5V	-0.011uA	190.4mΩ	-109.0V	-0.003uA	193.4mΩ
60	-108.4V	-0.016uA	194.9mΩ	-108.9V	-0.010uA	200.2mΩ
61	-108.3V	-0.018uA	191.6mΩ	-109.2V	-0.008uA	192.9mΩ
62	-109.1V	-0.021uA	198.7mΩ	-108.6V	-0.026uA	197.9mΩ
63	-109.7V	-0.028uA	200.2mΩ	-108.9V	-0.006uA	194.8mΩ
64	-109.8V	-0.021uA	196.5mΩ	-109.0V	-0.025uA	200.6mΩ
65	-109.4V	-0.008uA	191.6mΩ	-109.3V	-0.017uA	195.2mΩ
66	-110.1V	-0.021uA	194.7mΩ	-109.5V	-0.021uA	199.1mΩ
67	-109.1V	-0.014uA	193.0mΩ	-110.1V	-0.018uA	197.0mΩ
68	-109.5V	-0.006uA	200.3mΩ	-109.7V	-0.009uA	194.2mΩ
69	-108.8V	-0.023uA	196.6mΩ	-108.9V	-0.024uA	191.7mΩ
70	-109.9V	-0.006uA	195.0mΩ	-108.9V	-0.019uA	200.8mΩ
71	-108.7V	-0.020uA	190.3mΩ	-108.5V	-0.005uA	199.1mΩ
72	-109.1V	-0.002uA	193.3mΩ	-108.5V	-0.022uA	193.7mΩ
73	-109.2V	-0.023uA	196.9mΩ	-109.5V	-0.027uA	196.3mΩ
74	-109.5V	-0.029uA	190.2mΩ	-108.7V	-0.029uA	194.7mΩ
75	-109.3V	-0.029uA	199.0mΩ	-108.9V	-0.021uA	196.4mΩ
76	-109.5V	-0.030uA	196.8mΩ	-108.6V	-0.019uA	192.6mΩ
77	-108.7V	-0.025uA	192.9mΩ	-109.4V	-0.026uA	191.9mΩ

Made By: Leo Hsia

Approval: Peter Yang

SeCoS Corporation

Temperature Cycle Test Data

Report No : T160122-011
Part No : SSD12P10-C
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)DSS > -100V@ID=-250μA ；IDSS < -1μA@VDS=-100V
RDS(ON) < 210mΩ@VGS=-10V, ID=-8A
Test Condition: -55℃/30min, 150℃/30min, for1000 Cycle
Test Date: 2015.12.01 ~ 2016.01.22
Test Standard : JESD22 STANDARD Method-A104
Operator: Leo Hsia

Test Result: PASS

	Before			After		
No	I_{DSS}	$V_{GS(th)}$	$R_{DS(ON)}$	I_{DSS}	$V_{GS(th)}$	$R_{DS(ON)}$
1	-109.8V	-0.031uA	199.4mΩ	-108.5V	-0.011uA	190.8mΩ
2	-108.4V	-0.020uA	193.8mΩ	-110.0V	-0.028uA	195.3mΩ
3	-109.8V	-0.015uA	193.4mΩ	-110.0V	-0.022uA	199.5mΩ
4	-108.4V	-0.019uA	190.1mΩ	-108.6V	-0.029uA	199.1mΩ
5	-109.1V	-0.009uA	198.5mΩ	-108.6V	-0.007uA	192.4mΩ
6	-108.7V	-0.013uA	200.2mΩ	-110.1V	-0.015uA	196.8mΩ
7	-109.8V	-0.007uA	199.8mΩ	-108.7V	-0.002uA	192.1mΩ
8	-108.5V	-0.009uA	191.2mΩ	-109.3V	-0.021uA	191.6mΩ
9	-108.9V	-0.030uA	192.8mΩ	-109.7V	-0.029uA	192.2mΩ
10	-108.5V	-0.008uA	190.3mΩ	-109.5V	-0.016uA	197.9mΩ
11	-109.7V	-0.020uA	196.3mΩ	-108.9V	-0.026uA	190.2mΩ
12	-109.0V	-0.026uA	198.5mΩ	-110.0V	-0.009uA	198.3mΩ
13	-110.0V	-0.002uA	194.9mΩ	-110.0V	-0.018uA	192.8mΩ
14	-108.6V	-0.008uA	199.3mΩ	-109.9V	-0.014uA	193.8mΩ
15	-108.9V	-0.019uA	194.4mΩ	-109.8V	-0.007uA	194.8mΩ
16	-109.2V	-0.018uA	196.9mΩ	-108.8V	-0.017uA	198.8mΩ
17	-109.2V	-0.012uA	190.2mΩ	-109.6V	-0.020uA	193.6mΩ
18	-109.9V	-0.027uA	191.6mΩ	-109.4V	-0.025uA	195.8mΩ
19	-109.9V	-0.011uA	195.3mΩ	-108.5V	-0.005uA	196.1mΩ
20	-109.7V	-0.002uA	197.6mΩ	-109.2V	-0.024uA	196.6mΩ
21	-109.7V	-0.024uA	191.8mΩ	-109.7V	-0.023uA	190.9mΩ
22	-109.0V	-0.015uA	200.6mΩ	-108.8V	-0.009uA	193.4mΩ
23	-110.2V	-0.013uA	196.8mΩ	-109.7V	-0.003uA	190.3mΩ
24	-108.6V	-0.029uA	196.8mΩ	-108.7V	-0.027uA	192.0mΩ
25	-109.8V	-0.008uA	192.6mΩ	-109.4V	-0.014uA	200.5mΩ
26	-109.0V	-0.013uA	193.4mΩ	-109.8V	-0.017uA	190.7mΩ
27	-109.7V	-0.009uA	193.4mΩ	-108.8V	-0.013uA	197.7mΩ
28	-109.8V	-0.026uA	194.6mΩ	-109.6V	-0.021uA	193.4mΩ
29	-109.8V	-0.007uA	194.3mΩ	-109.9V	-0.030uA	192.4mΩ

SeCoS Corporation

Temperature Cycle Test Data

Report No : T160122-011
Part No : SSD12P10-C
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)DSS > -100V@ID=-250μA ；IDSS < -1μA@VDS=-100V
RDS(ON) < 210mΩ@VGS=-10V, ID=-8A
Test Condition: -55℃/30min, 150℃/30min, for1000 Cycle
Test Date: 2015.12.01 ~ 2016.01.22
Test Standard : JESD22 STANDARD Method-A104
Operator: Leo Hsia

Test Result: PASS

	Before			After		
No	I_{DSS}	$V_{GS(th)}$	$R_{DS(ON)}$	I_{DSS}	$V_{GS(th)}$	$R_{DS(ON)}$
30	-108.6V	-0.012uA	198.5mΩ	-108.9V	-0.019uA	191.1mΩ
31	-108.8V	-0.015uA	197.9mΩ	-109.7V	-0.026uA	192.8mΩ
32	-108.8V	-0.005uA	195.1mΩ	-108.4V	-0.027uA	198.5mΩ
33	-109.9V	-0.029uA	195.4mΩ	-108.3V	-0.006uA	192.6mΩ
34	-109.8V	-0.028uA	200.4mΩ	-109.0V	-0.030uA	191.7mΩ
35	-109.5V	-0.025uA	197.8mΩ	-109.9V	-0.015uA	194.0mΩ
36	-109.0V	-0.024uA	191.2mΩ	-110.1V	-0.024uA	194.5mΩ
37	-109.9V	-0.016uA	200.1mΩ	-108.5V	-0.029uA	190.8mΩ
38	-109.8V	-0.015uA	191.9mΩ	-109.0V	-0.023uA	191.5mΩ
39	-109.2V	-0.028uA	195.9mΩ	-108.4V	-0.025uA	200.0mΩ
40	-109.1V	-0.009uA	198.6mΩ	-109.9V	-0.024uA	198.8mΩ
41	-108.6V	-0.017uA	195.3mΩ	-108.5V	-0.029uA	197.0mΩ
42	-108.3V	-0.007uA	200.7mΩ	-110.1V	-0.029uA	191.7mΩ
43	-109.7V	-0.027uA	190.5mΩ	-109.3V	-0.015uA	196.0mΩ
44	-109.1V	-0.017uA	194.9mΩ	-110.0V	-0.009uA	200.9mΩ
45	-109.3V	-0.024uA	192.0mΩ	-108.8V	-0.028uA	190.6mΩ
46	-108.8V	-0.030uA	199.8mΩ	-108.4V	-0.004uA	199.2mΩ
47	-109.3V	-0.023uA	194.8mΩ	-109.1V	-0.023uA	191.9mΩ
48	-109.0V	-0.026uA	194.0mΩ	-109.1V	-0.004uA	198.2mΩ
49	-109.8V	-0.008uA	195.4mΩ	-110.2V	-0.005uA	199.7mΩ
50	-109.5V	-0.012uA	192.3mΩ	-110.1V	-0.024uA	195.0mΩ
51	-108.5V	-0.030uA	190.5mΩ	-108.6V	-0.009uA	191.6mΩ
52	-109.4V	-0.021uA	196.0mΩ	-108.5V	-0.009uA	197.9mΩ
53	-108.9V	-0.016uA	196.6mΩ	-109.5V	-0.012uA	200.7mΩ
54	-109.7V	-0.027uA	196.8mΩ	-109.6V	-0.023uA	199.4mΩ
55	-109.1V	-0.029uA	191.1mΩ	-108.6V	-0.008uA	192.6mΩ
56	-109.6V	-0.008uA	194.8mΩ	-109.6V	-0.025uA	192.0mΩ
57	-108.4V	-0.023uA	191.7mΩ	-108.9V	-0.025uA	192.9mΩ
58	-108.3V	-0.028uA	198.3mΩ	-108.5V	-0.026uA	191.2mΩ

SeCoS Corporation

Temperature Cycle Test Data

Report No : T160122-011
Part No : SSD12P10-C
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)DSS > -100V@ID=-250μA ；IDSS < -1μA@VDS=-100V
RDS(ON) < 210mΩ@VGS=-10V, ID=-8A
Test Condition: -55℃/30min, 150℃/30min, for1000 Cycle
Test Date: 2015.12.01 ~ 2016.01.22
Test Standard : JESD22 STANDARD Method-A104
Operator: Leo Hsia

Test Result: PASS

	Before			After		
No	I_{DSS}	$V_{GS(th)}$	$R_{DS(ON)}$	I_{DSS}	$V_{GS(th)}$	$R_{DS(ON)}$
59	-110.1V	-0.007uA	192.4mΩ	-109.0V	-0.024uA	196.5mΩ
60	-109.4V	-0.018uA	199.1mΩ	-108.3V	-0.029uA	197.3mΩ
61	-109.3V	-0.010uA	194.8mΩ	-110.1V	-0.031uA	195.7mΩ
62	-108.8V	-0.013uA	197.2mΩ	-109.7V	-0.025uA	196.0mΩ
63	-108.3V	-0.030uA	198.4mΩ	-109.6V	-0.015uA	198.5mΩ
64	-110.2V	-0.016uA	191.0mΩ	-109.7V	-0.002uA	190.4mΩ
65	-108.7V	-0.003uA	197.3mΩ	-109.0V	-0.022uA	190.3mΩ
66	-109.5V	-0.006uA	190.4mΩ	-109.8V	-0.012uA	193.6mΩ
67	-109.3V	-0.009uA	197.9mΩ	-109.6V	-0.028uA	198.8mΩ
68	-109.2V	-0.026uA	199.3mΩ	-109.4V	-0.011uA	193.5mΩ
69	-110.2V	-0.018uA	195.5mΩ	-109.7V	-0.024uA	195.8mΩ
70	-108.9V	-0.030uA	197.7mΩ	-109.5V	-0.030uA	193.8mΩ
71	-109.7V	-0.018uA	198.5mΩ	-109.4V	-0.027uA	196.7mΩ
72	-109.9V	-0.020uA	190.1mΩ	-109.4V	-0.006uA	192.5mΩ
73	-109.1V	-0.011uA	200.7mΩ	-109.6V	-0.008uA	196.9mΩ
74	-109.4V	-0.002uA	199.8mΩ	-108.3V	-0.019uA	198.3mΩ
75	-109.5V	-0.012uA	191.7mΩ	-109.9V	-0.024uA	198.6mΩ
76	-108.4V	-0.029uA	199.7mΩ	-108.5V	-0.014uA	193.6mΩ
77	-109.9V	-0.027uA	191.8mΩ	-109.8V	-0.026uA	190.9mΩ

Made By: Leo Hsia

Approval: Peter Yang

SeCoS Corporation

High Temperature High Humidity Test Data

Report No : T160122-011
Part No : SSD12P10-C
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)DSS > -100V@ID=-250μA ；IDSS < -1μA@VDS=-100V
RDS(ON) < 210mΩ@VGS=-10V, ID=-8A
Test Condition: 85±2℃, 85±5%RH, 1000Hrs
Test Date: 2015.12.09 ~ 2016.01.20
Test Standard : JESD22 STANDARD Method-A101
Operator: Leo Hsia

Test Result: PASS

	Before			After		
No	I_{DSS}	$V_{GS(th)}$	$R_{DS(ON)}$	I_{DSS}	$V_{GS(th)}$	$R_{DS(ON)}$
1	-108.3V	-0.028uA	196.2mΩ	-109.2V	-0.024uA	193.9mΩ
2	-109.8V	-0.005uA	190.3mΩ	-109.4V	-0.022uA	196.5mΩ
3	-109.3V	-0.022uA	196.6mΩ	-109.8V	-0.012uA	196.2mΩ
4	-109.7V	-0.019uA	195.1mΩ	-109.8V	-0.016uA	193.2mΩ
5	-108.7V	-0.024uA	191.3mΩ	-108.6V	-0.013uA	190.0mΩ
6	-108.9V	-0.026uA	198.5mΩ	-108.9V	-0.003uA	194.5mΩ
7	-109.6V	-0.013uA	194.5mΩ	-110.2V	-0.010uA	199.1mΩ
8	-108.5V	-0.027uA	197.8mΩ	-109.5V	-0.010uA	200.9mΩ
9	-109.4V	-0.001uA	200.7mΩ	-109.9V	-0.024uA	192.6mΩ
10	-109.4V	-0.004uA	195.4mΩ	-109.4V	-0.003uA	192.5mΩ
11	-108.8V	-0.015uA	195.2mΩ	-108.6V	-0.027uA	193.8mΩ
12	-108.9V	-0.019uA	193.3mΩ	-109.2V	-0.017uA	191.4mΩ
13	-108.4V	-0.008uA	196.5mΩ	-109.6V	-0.010uA	191.9mΩ
14	-109.8V	-0.018uA	200.9mΩ	-109.3V	-0.028uA	190.9mΩ
15	-108.4V	-0.030uA	192.0mΩ	-109.6V	-0.004uA	195.3mΩ
16	-108.5V	-0.006uA	195.7mΩ	-108.9V	-0.002uA	198.0mΩ
17	-108.6V	-0.019uA	198.1mΩ	-108.5V	-0.015uA	198.2mΩ
18	-109.7V	-0.007uA	192.0mΩ	-108.8V	-0.030uA	196.3mΩ
19	-109.4V	-0.010uA	199.5mΩ	-110.1V	-0.018uA	196.0mΩ
20	-109.2V	-0.024uA	197.2mΩ	-109.3V	-0.002uA	200.4mΩ
21	-108.7V	-0.010uA	196.3mΩ	-108.8V	-0.028uA	191.1mΩ
22	-108.5V	-0.010uA	199.4mΩ	-109.1V	-0.021uA	194.4mΩ
23	-108.4V	-0.030uA	198.6mΩ	-109.3V	-0.008uA	195.3mΩ
24	-109.1V	-0.011uA	194.3mΩ	-109.7V	-0.023uA	200.8mΩ
25	-109.0V	-0.018uA	194.6mΩ	-109.1V	-0.012uA	195.5mΩ
26	-109.0V	-0.005uA	193.5mΩ	-108.8V	-0.020uA	197.8mΩ
27	-109.4V	-0.014uA	191.7mΩ	-109.1V	-0.029uA	193.3mΩ
28	-108.5V	-0.014uA	194.6mΩ	-108.8V	-0.008uA	194.6mΩ
29	-108.4V	-0.009uA	195.5mΩ	-108.9V	-0.025uA	197.4mΩ

SeCoS Corporation

High Temperature High Humidity Test Data

Report No : T160122-011
Part No : SSD12P10-C
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)DSS > -100V@ID=-250μA ；IDSS < -1μA@VDS=-100V
RDS(ON) < 210mΩ@VGS=-10V, ID=-8A
Test Condition: 85±2℃, 85±5%RH, 1000Hrs
Test Date: 2015.12.09 ~ 2016.01.20
Test Standard : JESD22 STANDARD Method-A101
Operator: Leo Hsia

Test Result: PASS

	Before			After		
No	I_{DSS}	$V_{GS(th)}$	$R_{DS(ON)}$	I_{DSS}	$V_{GS(th)}$	$R_{DS(ON)}$
30	-109.3V	-0.005uA	193.8mΩ	-108.4V	-0.003uA	192.5mΩ
31	-109.5V	-0.025uA	190.6mΩ	-109.0V	-0.003uA	196.5mΩ
32	-109.7V	-0.029uA	194.5mΩ	-110.0V	-0.026uA	196.0mΩ
33	-109.3V	-0.022uA	194.8mΩ	-110.1V	-0.005uA	192.7mΩ
34	-109.2V	-0.021uA	197.7mΩ	-108.9V	-0.012uA	198.7mΩ
35	-110.1V	-0.030uA	199.4mΩ	-108.6V	-0.006uA	199.0mΩ
36	-108.8V	-0.004uA	195.7mΩ	-108.4V	-0.030uA	198.3mΩ
37	-108.5V	-0.021uA	196.1mΩ	-108.8V	-0.027uA	195.6mΩ
38	-109.0V	-0.002uA	198.0mΩ	-109.3V	-0.006uA	194.7mΩ
39	-109.0V	-0.029uA	194.5mΩ	-109.6V	-0.020uA	198.6mΩ
40	-109.4V	-0.025uA	198.5mΩ	-109.9V	-0.015uA	192.4mΩ
41	-109.5V	-0.026uA	194.6mΩ	-109.6V	-0.018uA	200.6mΩ
42	-109.6V	-0.002uA	195.6mΩ	-109.9V	-0.023uA	196.2mΩ
43	-108.4V	-0.024uA	192.7mΩ	-109.8V	-0.028uA	197.7mΩ
44	-108.4V	-0.025uA	200.8mΩ	-109.7V	-0.017uA	198.6mΩ
45	-109.3V	-0.014uA	193.1mΩ	-108.6V	-0.018uA	199.7mΩ
46	-109.7V	-0.018uA	197.3mΩ	-109.7V	-0.009uA	190.0mΩ
47	-109.8V	-0.002uA	200.2mΩ	-108.9V	-0.020uA	199.0mΩ
48	-108.3V	-0.010uA	193.7mΩ	-109.3V	-0.003uA	194.9mΩ
49	-109.4V	-0.026uA	192.8mΩ	-109.9V	-0.005uA	198.9mΩ
50	-108.7V	-0.014uA	196.1mΩ	-108.4V	-0.007uA	190.8mΩ
51	-109.8V	-0.027uA	199.8mΩ	-108.7V	-0.015uA	200.0mΩ
52	-108.4V	-0.017uA	191.6mΩ	-110.2V	-0.002uA	190.7mΩ
53	-108.9V	-0.008uA	193.0mΩ	-109.0V	-0.010uA	192.5mΩ
54	-108.3V	-0.012uA	196.7mΩ	-109.8V	-0.029uA	192.9mΩ
55	-109.1V	-0.016uA	198.2mΩ	-109.9V	-0.014uA	191.7mΩ
56	-109.4V	-0.012uA	196.2mΩ	-108.3V	-0.018uA	198.7mΩ
57	-109.0V	-0.030uA	195.2mΩ	-109.8V	-0.010uA	200.7mΩ
58	-110.1V	-0.005uA	191.5mΩ	-109.6V	-0.029uA	195.8mΩ

SeCoS Corporation

High Temperature High Humidity Test Data

Report No : T160122-011
Part No : SSD12P10-C
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)DSS > -100V@ID=-250μA ；IDSS < -1μA@VDS=-100V
RDS(ON) < 210mΩ@VGS=-10V, ID=-8A
Test Condition: 85±2℃, 85±5%RH, 1000Hrs
Test Date: 2015.12.09 ~ 2016.01.20
Test Standard : JESD22 STANDARD Method-A101
Operator: Leo Hsia

Test Result: PASS

	Before			After		
No	I_{DSS}	$V_{GS(th)}$	$R_{DS(ON)}$	I_{DSS}	$V_{GS(th)}$	$R_{DS(ON)}$
59	-109.5V	-0.007uA	195.2mΩ	-109.9V	-0.005uA	190.9mΩ
60	-109.8V	-0.013uA	200.1mΩ	-110.1V	-0.001uA	190.3mΩ
61	-109.0V	-0.007uA	196.2mΩ	-108.7V	-0.022uA	195.1mΩ
62	-108.8V	-0.006uA	194.0mΩ	-109.6V	-0.008uA	190.6mΩ
63	-109.8V	-0.030uA	199.4mΩ	-109.5V	-0.013uA	194.8mΩ
64	-109.3V	-0.005uA	196.7mΩ	-109.3V	-0.023uA	197.1mΩ
65	-109.3V	-0.009uA	190.0mΩ	-109.4V	-0.014uA	198.5mΩ
66	-109.7V	-0.021uA	199.4mΩ	-109.8V	-0.013uA	192.3mΩ
67	-108.4V	-0.024uA	194.0mΩ	-108.8V	-0.016uA	195.5mΩ
68	-108.8V	-0.027uA	194.2mΩ	-108.4V	-0.022uA	194.4mΩ
69	-109.7V	-0.009uA	198.2mΩ	-108.6V	-0.006uA	199.9mΩ
70	-110.2V	-0.028uA	196.5mΩ	-108.5V	-0.018uA	191.5mΩ
71	-109.7V	-0.006uA	197.4mΩ	-110.1V	-0.025uA	192.0mΩ
72	-108.8V	-0.025uA	200.0mΩ	-108.3V	-0.026uA	192.1mΩ
73	-108.9V	-0.016uA	200.5mΩ	-110.0V	-0.023uA	200.8mΩ
74	-109.8V	-0.011uA	196.6mΩ	-109.7V	-0.006uA	198.2mΩ
75	-108.8V	-0.020uA	195.4mΩ	-108.6V	-0.016uA	193.3mΩ
76	-108.4V	-0.018uA	198.9mΩ	-108.7V	-0.027uA	189.8mΩ
77	-108.8V	-0.020uA	191.5mΩ	-110.0V	-0.011uA	195.5mΩ

Made By: Leo Hsia

Approval: Peter Yang

SeCoS Corporation

High Temper High Humidity Reverse Bies Test Data

Report No : T160122-011
Part No : SSD12P10-C
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)DSS > -100V@ID=-250μA ；IDSS < -1μA@VDS=-100V
RDS(ON) < 210mΩ@VGS=-10V, ID=-8A
Test Condition: 85±2℃, 85±5%RH, 1000Hrs
Test Date: 2015.12.09 ~ 2016.01.20
Test Standard : JESD22 STANDARD Method-A101
Operator: Leo Hsia

Test Result: PASS

	Before			After		
No	I_{DSS}	$V_{GS(th)}$	$R_{DS(ON)}$	I_{DSS}	$V_{GS(th)}$	$R_{DS(ON)}$
1	-108.7V	-0.013uA	192.1mΩ	-109.2V	-0.018uA	190.9mΩ
2	-109.7V	-0.013uA	196.3mΩ	-109.2V	-0.030uA	194.0mΩ
3	-108.9V	-0.005uA	197.5mΩ	-109.0V	-0.029uA	199.5mΩ
4	-109.7V	-0.027uA	190.1mΩ	-109.7V	-0.005uA	190.1mΩ
5	-109.0V	-0.030uA	191.5mΩ	-108.6V	-0.020uA	199.5mΩ
6	-109.1V	-0.030uA	190.0mΩ	-108.4V	-0.029uA	196.8mΩ
7	-109.9V	-0.026uA	195.6mΩ	-108.7V	-0.023uA	192.1mΩ
8	-108.9V	-0.027uA	194.3mΩ	-109.8V	-0.013uA	199.7mΩ
9	-109.5V	-0.014uA	190.7mΩ	-108.5V	-0.019uA	193.1mΩ
10	-108.3V	-0.027uA	190.0mΩ	-109.2V	-0.017uA	199.6mΩ
11	-110.0V	-0.019uA	192.8mΩ	-109.3V	-0.011uA	195.7mΩ
12	-109.5V	-0.026uA	199.0mΩ	-108.4V	-0.015uA	198.9mΩ
13	-108.6V	-0.015uA	193.0mΩ	-108.8V	-0.007uA	199.9mΩ
14	-108.7V	-0.001uA	200.7mΩ	-108.9V	-0.023uA	194.5mΩ
15	-108.6V	-0.025uA	196.1mΩ	-109.6V	-0.016uA	196.4mΩ
16	-108.6V	-0.005uA	198.5mΩ	-108.6V	-0.003uA	191.4mΩ
17	-109.7V	-0.023uA	200.2mΩ	-108.9V	-0.030uA	195.4mΩ
18	-109.2V	-0.024uA	190.2mΩ	-109.5V	-0.019uA	198.3mΩ
19	-110.1V	-0.019uA	191.1mΩ	-109.3V	-0.018uA	199.6mΩ
20	-108.7V	-0.014uA	192.0mΩ	-109.2V	-0.004uA	195.9mΩ
21	-110.2V	-0.024uA	200.7mΩ	-108.6V	-0.016uA	192.5mΩ
22	-109.4V	-0.028uA	197.9mΩ	-110.2V	-0.013uA	191.0mΩ
23	-109.8V	-0.027uA	191.4mΩ	-109.6V	-0.028uA	194.1mΩ
24	-108.3V	-0.007uA	193.2mΩ	-108.7V	-0.007uA	197.5mΩ
25	-109.6V	-0.005uA	200.7mΩ	-108.4V	-0.026uA	192.6mΩ
26	-108.5V	-0.022uA	194.7mΩ	-108.7V	-0.017uA	194.5mΩ
27	-109.0V	-0.029uA	194.9mΩ	-109.4V	-0.015uA	197.4mΩ
28	-109.6V	-0.024uA	191.6mΩ	-108.6V	-0.013uA	195.7mΩ
29	-110.0V	-0.020uA	199.6mΩ	-108.5V	-0.022uA	195.1mΩ

SeCoS Corporation

High Temper High Humidity Reverse Bies Test Data

Report No : T160122-011
Part No : SSD12P10-C
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)DSS > -100V@ID=-250μA ；IDSS < -1μA@VDS=-100V
RDS(ON) < 210mΩ@VGS=-10V, ID=-8A
Test Condition: 85±2℃, 85±5%RH, 1000Hrs
Test Date: 2015.12.09 ~ 2016.01.20
Test Standard : JESD22 STANDARD Method-A101
Operator: Leo Hsia

Test Result: PASS

	Before			After		
No	I_{DSS}	$V_{GS(th)}$	$R_{DS(ON)}$	I_{DSS}	$V_{GS(th)}$	$R_{DS(ON)}$
30	-108.6V	-0.009uA	192.9mΩ	-108.9V	-0.020uA	189.9mΩ
31	-108.6V	-0.011uA	196.8mΩ	-109.9V	-0.012uA	190.6mΩ
32	-109.3V	-0.013uA	198.0mΩ	-108.8V	-0.017uA	199.4mΩ
33	-110.0V	-0.014uA	190.8mΩ	-109.1V	-0.008uA	197.0mΩ
34	-109.9V	-0.012uA	195.8mΩ	-109.9V	-0.010uA	191.0mΩ
35	-110.2V	-0.009uA	196.3mΩ	-108.8V	-0.006uA	193.1mΩ
36	-109.4V	-0.028uA	195.2mΩ	-109.4V	-0.026uA	197.1mΩ
37	-108.6V	-0.013uA	200.7mΩ	-109.7V	-0.014uA	197.5mΩ
38	-108.4V	-0.002uA	196.7mΩ	-109.9V	-0.016uA	190.2mΩ
39	-109.5V	-0.025uA	194.2mΩ	-108.3V	-0.025uA	198.7mΩ
40	-109.6V	-0.018uA	193.7mΩ	-109.6V	-0.008uA	190.7mΩ
41	-108.3V	-0.015uA	192.3mΩ	-108.6V	-0.026uA	194.3mΩ
42	-109.8V	-0.022uA	191.9mΩ	-110.2V	-0.029uA	195.7mΩ
43	-110.1V	-0.012uA	200.3mΩ	-108.4V	-0.016uA	194.2mΩ
44	-108.6V	-0.025uA	194.1mΩ	-108.5V	-0.023uA	197.4mΩ
45	-109.3V	-0.006uA	193.4mΩ	-108.9V	-0.012uA	191.3mΩ
46	-108.9V	-0.007uA	194.7mΩ	-109.4V	-0.016uA	194.2mΩ
47	-109.9V	-0.003uA	199.2mΩ	-109.8V	-0.029uA	190.9mΩ
48	-108.8V	-0.016uA	190.9mΩ	-109.5V	-0.021uA	191.5mΩ
49	-109.4V	-0.024uA	192.6mΩ	-109.9V	-0.018uA	200.4mΩ
50	-109.9V	-0.021uA	196.8mΩ	-109.5V	-0.030uA	196.4mΩ
51	-109.6V	-0.017uA	195.5mΩ	-110.1V	-0.011uA	190.1mΩ
52	-109.0V	-0.003uA	199.1mΩ	-108.6V	-0.029uA	191.9mΩ
53	-109.6V	-0.015uA	189.9mΩ	-108.7V	-0.019uA	193.6mΩ
54	-109.2V	-0.024uA	198.6mΩ	-109.6V	-0.016uA	197.8mΩ
55	-109.4V	-0.025uA	191.6mΩ	-109.9V	-0.018uA	191.5mΩ
56	-109.3V	-0.022uA	193.1mΩ	-109.9V	-0.018uA	195.5mΩ
57	-109.8V	-0.012uA	196.1mΩ	-109.0V	-0.005uA	191.8mΩ
58	-108.5V	-0.019uA	191.6mΩ	-109.7V	-0.007uA	194.9mΩ

SeCoS Corporation

High Temper High Humidity Reverse Bies Test Data

Report No : T160122-011
Part No : SSD12P10-C
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)DSS > -100V@ID=-250μA ；IDSS < -1μA@VDS=-100V
RDS(ON) < 210mΩ@VGS=-10V, ID=-8A
Test Condition: 85±2℃, 85±5%RH, 1000Hrs
Test Date: 2015.12.09 ~ 2016.01.20
Test Standard : JESD22 STANDARD Method-A101
Operator: Leo Hsia

Test Result: PASS

	Before			After		
No	I_{DSS}	$V_{GS(th)}$	$R_{DS(ON)}$	I_{DSS}	$V_{GS(th)}$	$R_{DS(ON)}$
59	-109.2V	-0.009uA	199.8mΩ	-108.9V	-0.012uA	190.6mΩ
60	-109.7V	-0.008uA	193.2mΩ	-110.1V	-0.024uA	195.4mΩ
61	-109.3V	-0.021uA	192.9mΩ	-110.1V	-0.030uA	196.1mΩ
62	-110.2V	-0.021uA	192.3mΩ	-110.1V	-0.023uA	191.8mΩ
63	-108.3V	-0.031uA	191.2mΩ	-109.6V	-0.003uA	190.7mΩ
64	-109.0V	-0.009uA	191.6mΩ	-109.9V	-0.021uA	193.8mΩ
65	-108.3V	-0.002uA	192.8mΩ	-109.1V	-0.023uA	191.5mΩ
66	-108.4V	-0.005uA	200.7mΩ	-110.1V	-0.021uA	194.9mΩ
67	-110.0V	-0.013uA	191.1mΩ	-108.6V	-0.029uA	190.3mΩ
68	-109.5V	-0.010uA	192.0mΩ	-108.9V	-0.021uA	190.6mΩ
69	-109.8V	-0.005uA	197.6mΩ	-109.4V	-0.008uA	195.4mΩ
70	-108.8V	-0.001uA	190.3mΩ	-110.0V	-0.008uA	192.8mΩ
71	-109.3V	-0.021uA	195.5mΩ	-109.2V	-0.022uA	194.9mΩ
72	-109.3V	-0.016uA	200.9mΩ	-110.0V	-0.015uA	193.3mΩ
73	-109.9V	-0.018uA	193.5mΩ	-109.7V	-0.030uA	189.9mΩ
74	-108.4V	-0.007uA	200.3mΩ	-109.6V	-0.015uA	197.6mΩ
75	-110.0V	-0.009uA	198.0mΩ	-109.5V	-0.022uA	197.2mΩ
76	-109.7V	-0.021uA	200.6mΩ	-109.6V	-0.006uA	199.4mΩ
77	-110.1V	-0.024uA	199.5mΩ	-109.3V	-0.016uA	192.5mΩ

Made By: Leo Hsia

Approval: Peter Yang

SeCoS Corporation

Solderability Test Data

Report No : T160122-011
Part No : SSD12P10-C
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)DSS > -100V@ID=-250μA ；IDSS < -1μA@VDS=-100V
RDS(ON) < 210mΩ@VGS=-10V, ID=-8A
Test Condition: 245℃ ± 5℃, 5Sec
Test Date: 2016.01.22
Test Standard : JESD22 STANDER Method-B102
Operator: Leo Hsia

Test Result: PASS

	Before			After		
No	I_{DSS}	$V_{GS(th)}$	$R_{DS(ON)}$	I_{DSS}	$V_{GS(th)}$	$R_{DS(ON)}$
1	-110.0V	-0.029uA	200.3mΩ	-108.9V	-0.021uA	194.9mΩ
2	-109.1V	-0.020uA	192.9mΩ	-109.3V	-0.003uA	195.3mΩ
3	-109.4V	-0.014uA	193.8mΩ	-108.9V	-0.007uA	193.6mΩ
4	-109.5V	-0.011uA	192.1mΩ	-108.8V	-0.002uA	199.5mΩ
5	-110.2V	-0.021uA	200.4mΩ	-108.9V	-0.002uA	193.8mΩ
6	-109.0V	-0.024uA	196.6mΩ	-109.1V	-0.019uA	190.3mΩ
7	-109.1V	-0.014uA	196.5mΩ	-109.8V	-0.022uA	198.6mΩ
8	-110.2V	-0.029uA	194.3mΩ	-109.8V	-0.030uA	192.8mΩ
9	-108.7V	-0.012uA	191.4mΩ	-109.3V	-0.029uA	197.2mΩ
10	-109.3V	-0.006uA	198.8mΩ	-108.8V	-0.030uA	192.0mΩ

Made By: Leo Hsia

Approval: Peter Yang