www.SeCosGmbH.com

Headquarter Address:
8F.No.33, Lane 155, Sec.3, Bei-Shen Rd.,
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Product/Process Change Notification

PCN#	Effective Date	Issue Date
2016-01-20C-01	2016/4/20	2016/1/20

PCN Classification	Product Category
Major	MOSFET

Subject
Change the wafer size and the marking.

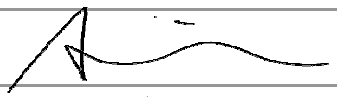
Affected Product(s)
SMG2328

Description of Change(s)
To offer our customers the better products, we improved the wafer production process by replacing the orignal 6 inch wafer with 8 inch wafer.

Content of Change(s)
Wafer(from 6 inch to 8 inch) and marking.

Impact(s)
None

Attachment(s)
Reliability Test Report. Package Information.

Approval		
Issue 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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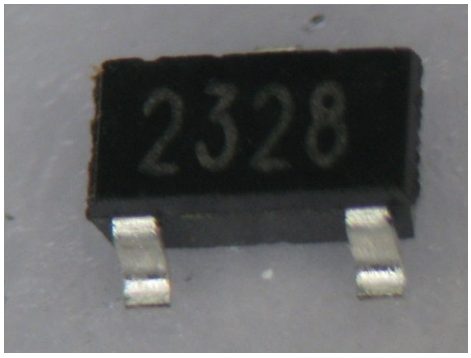
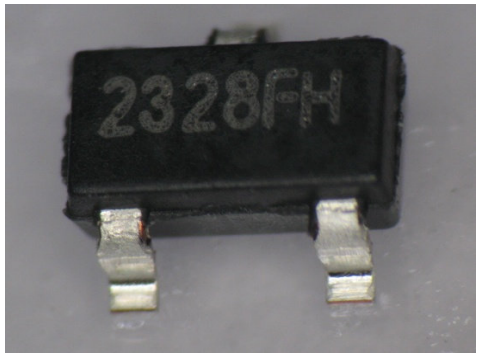
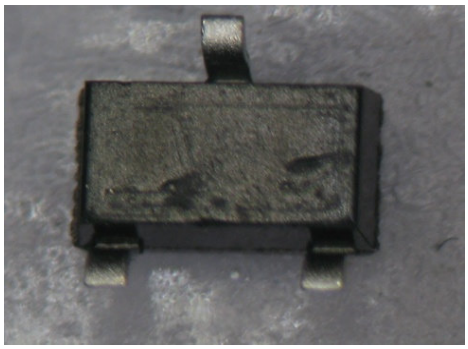
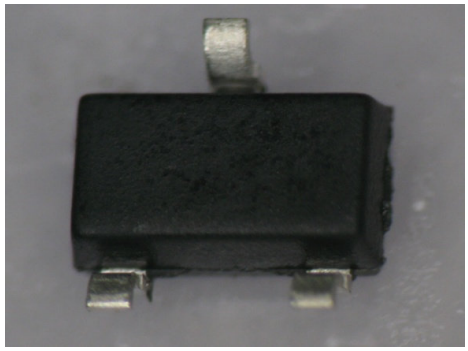
Exterior Comparison Chart	
Original	New
 Top View	 Top View
 Back View	 Back View

SeCoS Corporation

Reliability Testing Summary Report

Date: 2015/12/31 Document No.: SI15 -12- 06

Test Item	P/N	Test Condition	(LTPD)	Sample Numbers	Allow Fall Numbers	Fall Numbers	Result
HTRB High Temp Reverse Bias	SMG2328	100 ± 5℃, 80%VR, T = 1000hrs		77	0	0	ACC
HTSL High Temperature Storage Life	SMG2328	150℃, T = 1000 hrs		77	0	0	ACC
PCT Pressure Cooker Test	SMG2328	121℃, 29.7PSIG, 168 hrs		77	0	0	ACC
TCT Temperature Cycle Test	SMG2328	-55℃/30min, 150℃/30min, For 1000 Cycle		77	0	0	ACC
THT High Temperature High Humidity Test	SMG2328	85 ± 2℃, RH=85±5%, 1000 hrs		77	0	0	ACC
H3TRB High Temper High Humidity Reverse Bies Test	SMG2328	85 ± 2℃, RH=85±5%, 1000 hrs		77	0	0	ACC
Solderability	SMG2328	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: 2015.11.02 Testing End Date: 2015.12.31

Tester: King Huang Approval: Peter Yang

SeCoS Corporation

Electrical Test Data

Report No : T151230-006
Part No : SMG2328
Test Equipment: JUNO Test System DTS-1000
Test Condition : 100V <V(BR)DSS @ID=-250μA ；IDSS < 1.0μA@VDS=80V
RDS(ON) < 250mΩ@VGS=10V, ID=1.5A
Test Condition: 25℃
Test Date: 2015.11.02
Test Standard : Specifications
Operator: Leo Hsia

Test Result: PASS

No	$V_{(BR)DSS}$	I_{DSS}	$R_{DS(ON)}$
1	117.2V	0.007uA	163.9mΩ
2	114.1V	0.036uA	157.0mΩ
3	118.0V	0.058uA	161.8mΩ
4	111.1V	0.022uA	157.1mΩ
5	113.8V	0.041uA	161.1mΩ
6	119.1V	0.031uA	164.6mΩ
7	115.6V	0.035uA	161.2mΩ
8	113.3V	0.028uA	157.8mΩ
9	112.6V	0.001uA	157.0mΩ
10	113.5V	0.031uA	165.4mΩ
11	113.6V	0.036uA	163.1mΩ
12	117.8V	0.067uA	162.3mΩ
13	118.4V	0.043uA	155.6mΩ
13	115.5V	0.024uA	165.5mΩ
15	114.3V	0.068uA	156.9mΩ
16	111.0V	0.053uA	155.7mΩ
17	118.6V	0.055uA	161.9mΩ
18	118.3V	0.047uA	165.0mΩ
19	117.1V	0.058uA	163.3mΩ
20	119.2V	0.008uA	164.0mΩ
21	112.2V	0.015uA	162.6mΩ
22	112.4V	0.042uA	163.3mΩ
23	115.6V	0.018uA	159.4mΩ
24	111.3V	0.068uA	157.6mΩ
25	111.3V	0.067uA	156.9mΩ
26	114.2V	0.033uA	158.1mΩ
27	113.1V	0.023uA	162.4mΩ
28	112.8V	0.014uA	164.4mΩ
29	116.7V	0.021uA	156.0mΩ
30	115.9V	0.060uA	164.8mΩ

SeCoS Corporation

Electrical Test Data

Report No : T151230-006
Part No : SMG2328
Test Equipment: JUNO Test System DTS-1000
Test Condition : 100V <V(BR)DSS @ID=-250μA ；IDSS < 1.0μA@VDS=80V
RDS(ON) < 250mΩ@VGS=10V, ID=1.5A
Test Condition: 25℃
Test Date: 2015.11.02
Test Standard : Specifications
Operator: Leo Hsia

Test Result: PASS

No	$V_{(BR)DSS}$	I_{DSS}	$R_{DS(ON)}$
31	111.5V	0.033uA	164.8mΩ
32	115.4V	0.018uA	160.9mΩ
33	119.9V	0.070uA	159.9mΩ
34	111.0V	0.016uA	155.6mΩ
35	119.4V	0.046uA	163.3mΩ
36	112.6V	0.016uA	161.4mΩ
37	114.9V	0.008uA	161.1mΩ
38	113.9V	0.022uA	158.7mΩ
39	112.2V	0.052uA	162.8mΩ
40	116.5V	0.065uA	160.5mΩ
41	119.7V	0.035uA	158.4mΩ
42	117.5V	0.048uA	157.2mΩ
43	115.5V	0.005uA	158.3mΩ
44	116.4V	0.054uA	158.4mΩ
45	115.1V	0.001uA	159.9mΩ
46	113.7V	0.018uA	161.7mΩ
47	115.4V	0.055uA	160.6mΩ
48	118.4V	0.030uA	162.3mΩ
49	116.6V	0.020uA	165.6mΩ
50	118.2V	0.057uA	161.0mΩ
51	112.7V	0.053uA	162.3mΩ
52	115.3V	0.026uA	159.1mΩ
53	113.0V	0.038uA	159.9mΩ
54	117.3V	0.022uA	156.6mΩ
55	118.8V	0.024uA	155.7mΩ
56	111.5V	0.025uA	159.1mΩ
57	118.1V	0.035uA	159.8mΩ
58	116.5V	0.061uA	155.8mΩ
59	117.6V	0.068uA	165.6mΩ
60	118.2V	0.045uA	156.4mΩ

SeCoS Corporation

Electrical Test Data

Report No : T151230-006
Part No : SMG2328
Test Equipment: JUNO Test System DTS-1000
Test Condition : 100V <V(BR)DSS @ID=-250μA ；IDSS < 1.0μA@VDS=80V
RDS(ON) < 250mΩ@VGS=10V, ID=1.5A
Test Condition: 25℃
Test Date: 2015.11.02
Test Standard : Specifications
Operator: Leo Hsia

Test Result: PASS

No	$V_{(BR)DSS}$	I_{DSS}	$R_{DS(ON)}$
61	118.2V	0.009uA	158.7mΩ
62	114.8V	0.033uA	162.3mΩ
63	111.7V	0.005uA	160.9mΩ
64	119.8V	0.055uA	164.3mΩ
65	113.8V	0.030uA	157.7mΩ
66	112.5V	0.002uA	157.4mΩ
67	119.0V	0.038uA	164.2mΩ
68	118.5V	0.014uA	157.9mΩ
69	112.6V	0.039uA	157.2mΩ
70	118.9V	0.050uA	158.9mΩ
71	117.9V	0.010uA	155.8mΩ
72	113.3V	0.006uA	157.1mΩ
73	116.3V	0.014uA	156.3mΩ
74	111.0V	0.013uA	160.1mΩ
75	118.1V	0.060uA	164.3mΩ
76	116.2V	0.050uA	164.0mΩ
77	117.0V	0.047uA	157.3mΩ

Made By: King Huang

Approval: Peter Yang

SeCoS Corporation

High Temperature Reverse Bias Test Data

Report No : T151230-006
Part No : SMG2328
Test Equipment: JUNO Test System DTS-1000
Test Condition : 100V <V(BR)DSS @ID=-250μA ；IDSS < 1.0μA@VDS=80V
RDS(ON) < 250mΩ@VGS=10V, ID=1.5A
Test Condition: 100 ± 5℃, 80%VR, T = 1000 hrs
Test Date: 2015.11.02 ~ 2015.12.14
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	114.1V	0.046uA	156.2mΩ	117.1V	0.019uA	163.9mΩ
2	117.5V	0.002uA	165.2mΩ	118.7V	0.003uA	163.3mΩ
3	115.6V	0.005uA	156.8mΩ	111.3V	0.034uA	157.9mΩ
4	118.9V	0.046uA	161.1mΩ	118.4V	0.059uA	165.0mΩ
5	113.8V	0.015uA	158.8mΩ	119.5V	0.033uA	164.4mΩ
6	114.8V	0.041uA	164.0mΩ	118.0V	0.040uA	163.6mΩ
7	117.7V	0.013uA	160.0mΩ	116.8V	0.052uA	165.3mΩ
8	112.0V	0.024uA	155.5mΩ	114.6V	0.006uA	164.0mΩ
9	115.2V	0.050uA	157.7mΩ	117.5V	0.057uA	156.1mΩ
10	112.9V	0.003uA	165.2mΩ	113.8V	0.006uA	160.2mΩ
11	116.4V	0.049uA	156.7mΩ	111.8V	0.042uA	163.8mΩ
12	113.6V	0.051uA	163.6mΩ	112.4V	0.001uA	158.8mΩ
13	118.7V	0.051uA	157.6mΩ	114.1V	0.040uA	156.6mΩ
13	118.9V	0.014uA	158.4mΩ	117.9V	0.022uA	158.1mΩ
15	119.7V	0.041uA	158.4mΩ	117.5V	0.042uA	161.6mΩ
16	112.2V	0.060uA	164.0mΩ	111.6V	0.037uA	164.5mΩ
17	119.3V	0.054uA	161.7mΩ	119.7V	0.035uA	164.0mΩ
18	111.9V	0.044uA	165.7mΩ	112.2V	0.016uA	158.3mΩ
19	112.4V	0.047uA	159.3mΩ	111.0V	0.025uA	162.2mΩ
20	118.9V	0.014uA	163.0mΩ	118.6V	0.048uA	159.0mΩ
21	117.5V	0.067uA	163.9mΩ	114.9V	0.030uA	157.6mΩ
22	117.8V	0.058uA	160.5mΩ	115.3V	0.015uA	157.9mΩ
23	116.4V	0.050uA	163.2mΩ	114.1V	0.044uA	157.3mΩ
24	117.2V	0.059uA	161.2mΩ	113.8V	0.016uA	157.2mΩ
25	119.3V	0.046uA	159.4mΩ	115.6V	0.045uA	161.1mΩ
26	118.6V	0.034uA	162.3mΩ	113.0V	0.051uA	164.7mΩ
27	112.8V	0.060uA	163.7mΩ	117.5V	0.018uA	159.8mΩ
28	113.8V	0.064uA	163.2mΩ	117.2V	0.034uA	161.4mΩ
29	111.3V	0.057uA	160.6mΩ	111.2V	0.009uA	158.4mΩ

SeCoS Corporation

High Temperature Reverse Bias Test Data

Report No : T151230-006
Part No : SMG2328
Test Equipment: JUNO Test System DTS-1000
Test Condition : 100V <V(BR)DSS @ID=-250μA ；IDSS < 1.0μA@VDS=80V
RDS(ON) < 250mΩ@VGS=10V, ID=1.5A
Test Condition: 100 ± 5℃, 80%VR, T = 1000 hrs
Test Date: 2015.11.02 ~ 2015.12.14
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	118.8V	0.044uA	159.5mΩ	119.6V	0.046uA	162.9mΩ
31	112.5V	0.031uA	162.8mΩ	115.1V	0.002uA	157.0mΩ
32	116.7V	0.000uA	156.9mΩ	116.5V	0.008uA	163.8mΩ
33	114.0V	0.058uA	157.3mΩ	113.6V	0.049uA	160.6mΩ
34	111.6V	0.032uA	159.9mΩ	113.0V	0.026uA	160.8mΩ
35	111.9V	0.051uA	164.0mΩ	117.4V	0.064uA	163.3mΩ
36	116.4V	0.067uA	157.3mΩ	115.4V	0.057uA	164.7mΩ
37	115.2V	0.009uA	161.5mΩ	116.5V	0.001uA	164.1mΩ
38	115.8V	0.004uA	158.9mΩ	111.2V	0.033uA	162.7mΩ
39	113.8V	0.016uA	163.6mΩ	116.0V	0.006uA	164.2mΩ
40	112.1V	0.026uA	155.5mΩ	114.3V	0.040uA	156.9mΩ
41	111.3V	0.011uA	162.1mΩ	119.7V	0.008uA	164.7mΩ
42	119.0V	0.000uA	162.1mΩ	118.6V	0.066uA	158.7mΩ
43	119.0V	0.014uA	158.0mΩ	112.4V	0.037uA	159.8mΩ
44	113.0V	0.006uA	159.7mΩ	119.2V	0.013uA	165.5mΩ
45	116.9V	0.018uA	161.7mΩ	119.1V	0.035uA	160.0mΩ
46	112.2V	0.061uA	157.4mΩ	117.4V	0.038uA	164.2mΩ
47	113.4V	0.009uA	157.0mΩ	114.3V	0.032uA	156.2mΩ
48	113.9V	0.008uA	157.5mΩ	112.8V	0.028uA	164.9mΩ
49	111.7V	0.008uA	156.8mΩ	113.8V	0.040uA	165.1mΩ
50	116.8V	0.049uA	161.2mΩ	112.4V	0.056uA	162.3mΩ
51	112.7V	0.025uA	160.9mΩ	119.2V	0.065uA	159.0mΩ
52	115.4V	0.053uA	159.5mΩ	118.8V	0.013uA	161.6mΩ
53	112.6V	0.031uA	162.3mΩ	118.9V	0.030uA	158.8mΩ
54	116.5V	0.035uA	163.5mΩ	119.1V	0.060uA	161.3mΩ
55	113.1V	0.008uA	158.9mΩ	113.4V	0.038uA	159.9mΩ
56	111.7V	0.066uA	156.0mΩ	118.7V	0.000uA	161.9mΩ
57	111.6V	0.034uA	161.4mΩ	115.4V	0.010uA	162.3mΩ
58	113.8V	0.046uA	159.3mΩ	113.1V	0.025uA	162.2mΩ

SeCoS Corporation

High Temperature Reverse Bias Test Data

Report No : T151230-006
Part No : SMG2328
Test Equipment: JUNO Test System DTS-1000
Test Condition : 100V <V(BR)DSS @ID=-250μA ；IDSS < 1.0μA@VDS=80V
RDS(ON) < 250mΩ@VGS=10V, ID=1.5A
Test Condition: 100 ± 5℃, 80%VR, T = 1000 hrs
Test Date: 2015.11.02 ~ 2015.12.14
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	115.5V	0.032uA	159.2mΩ	119.4V	0.053uA	161.9mΩ
60	115.3V	0.020uA	157.2mΩ	112.7V	0.053uA	160.8mΩ
61	117.4V	0.003uA	161.3mΩ	117.0V	0.061uA	156.2mΩ
62	116.9V	0.015uA	157.8mΩ	112.4V	0.049uA	164.6mΩ
63	118.9V	0.064uA	165.5mΩ	112.6V	0.031uA	163.7mΩ
64	119.2V	0.015uA	157.5mΩ	114.9V	0.004uA	157.5mΩ
65	113.5V	0.034uA	158.7mΩ	118.7V	0.065uA	159.7mΩ
66	116.5V	0.000uA	159.4mΩ	117.5V	0.040uA	165.2mΩ
67	118.5V	0.017uA	163.4mΩ	118.0V	0.032uA	164.8mΩ
68	112.0V	0.034uA	165.0mΩ	117.8V	0.014uA	161.2mΩ
69	115.1V	0.055uA	158.3mΩ	116.6V	0.002uA	162.4mΩ
70	119.1V	0.003uA	160.8mΩ	118.6V	0.031uA	162.1mΩ
71	117.4V	0.069uA	159.8mΩ	111.3V	0.018uA	164.1mΩ
72	116.2V	0.050uA	161.3mΩ	115.4V	0.037uA	164.6mΩ
73	114.0V	0.014uA	162.5mΩ	116.8V	0.047uA	157.1mΩ
74	113.0V	0.034uA	155.5mΩ	114.7V	0.046uA	155.6mΩ
75	119.0V	0.006uA	155.5mΩ	114.0V	0.035uA	164.3mΩ
76	118.7V	0.023uA	159.1mΩ	114.2V	0.064uA	164.7mΩ
77	111.3V	0.004uA	156.4mΩ	114.7V	0.036uA	162.9mΩ

Made By: King Huang

Approval: Peter Yang

SeCoS Corporation

High Temperature Storage Life Test Data

Report No : T151230-006
Part No : SMG2328
Test Equipment: JUNO Test System DTS-1000
Test Condition : 100V <V(BR)DSS @ID=-250μA ；IDSS < 1.0μA@VDS=80V
RDS(ON) < 250mΩ@VGS=10V, ID=1.5A
Test Condition: 150℃, 1000Hrs
Test Date: 2015.11.02 ~ 2015.12.14
Test Standard : JESD22 STANDARD Method-A103
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	115.6V	0.034uA	161.5mΩ	117.7V	0.022uA	162.8mΩ
2	116.5V	0.042uA	162.7mΩ	118.9V	0.047uA	159.8mΩ
3	111.8V	0.021uA	159.1mΩ	113.8V	0.052uA	156.9mΩ
4	114.9V	0.044uA	160.8mΩ	116.0V	0.024uA	155.6mΩ
5	112.7V	0.015uA	159.0mΩ	115.3V	0.003uA	163.1mΩ
6	112.5V	0.034uA	155.9mΩ	111.6V	0.067uA	162.2mΩ
7	111.4V	0.036uA	155.7mΩ	117.6V	0.025uA	160.7mΩ
8	114.2V	0.021uA	161.0mΩ	115.9V	0.031uA	159.4mΩ
9	116.9V	0.060uA	157.0mΩ	111.5V	0.009uA	159.5mΩ
10	119.5V	0.021uA	160.1mΩ	115.9V	0.025uA	160.1mΩ
11	112.8V	0.045uA	163.6mΩ	112.1V	0.051uA	160.9mΩ
12	113.4V	0.028uA	162.9mΩ	118.3V	0.032uA	160.8mΩ
13	115.8V	0.001uA	156.0mΩ	112.2V	0.022uA	165.2mΩ
13	116.9V	0.062uA	157.7mΩ	113.4V	0.005uA	162.7mΩ
15	112.8V	0.029uA	160.0mΩ	114.4V	0.029uA	163.7mΩ
16	115.7V	0.009uA	161.2mΩ	116.7V	0.041uA	158.5mΩ
17	116.4V	0.002uA	155.5mΩ	111.6V	0.061uA	160.1mΩ
18	111.4V	0.014uA	156.9mΩ	117.5V	0.050uA	158.6mΩ
19	114.8V	0.006uA	165.5mΩ	114.0V	0.059uA	161.9mΩ
20	113.8V	0.058uA	165.3mΩ	110.9V	0.029uA	162.7mΩ
21	111.8V	0.064uA	161.4mΩ	113.5V	0.038uA	161.4mΩ
22	116.8V	0.019uA	161.6mΩ	116.9V	0.044uA	156.6mΩ
23	117.0V	0.054uA	160.2mΩ	119.9V	0.067uA	165.5mΩ
24	113.4V	0.006uA	156.0mΩ	119.8V	0.005uA	157.8mΩ
25	114.1V	0.010uA	163.0mΩ	116.3V	0.042uA	156.3mΩ
26	116.1V	0.021uA	165.2mΩ	119.3V	0.029uA	160.6mΩ
27	116.0V	0.051uA	155.6mΩ	115.2V	0.060uA	158.5mΩ
28	118.8V	0.011uA	165.3mΩ	118.8V	0.037uA	162.5mΩ
29	118.3V	0.006uA	160.2mΩ	119.1V	0.021uA	155.6mΩ

SeCoS Corporation

High Temperature Storage Life Test Data

Report No : T151230-006
Part No : SMG2328
Test Equipment: JUNO Test System DTS-1000
Test Condition : 100V <V(BR)DSS @ID=-250μA ；IDSS < 1.0μA@VDS=80V
RDS(ON) < 250mΩ@VGS=10V, ID=1.5A
Test Condition: 150℃, 1000Hrs
Test Date: 2015.11.02 ~ 2015.12.14
Test Standard : JESD22 STANDARD Method-A103
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	116.0V	0.034uA	161.2mΩ	118.4V	0.065uA	160.6mΩ
31	118.5V	0.069uA	162.9mΩ	113.5V	0.049uA	157.0mΩ
32	114.2V	0.036uA	157.7mΩ	118.5V	0.038uA	159.8mΩ
33	112.5V	0.042uA	163.1mΩ	119.3V	0.043uA	165.0mΩ
34	115.2V	0.064uA	162.4mΩ	114.2V	0.011uA	159.5mΩ
35	117.8V	0.016uA	157.3mΩ	119.4V	0.039uA	164.0mΩ
36	118.3V	0.018uA	163.8mΩ	113.5V	0.051uA	158.0mΩ
37	112.3V	0.028uA	159.4mΩ	111.4V	0.038uA	163.6mΩ
38	115.3V	0.068uA	164.1mΩ	113.5V	0.002uA	157.5mΩ
39	114.6V	0.045uA	164.9mΩ	113.2V	0.013uA	158.7mΩ
40	114.1V	0.038uA	165.3mΩ	111.2V	0.019uA	155.5mΩ
41	111.9V	0.045uA	160.8mΩ	116.5V	0.066uA	156.4mΩ
42	117.0V	0.003uA	161.5mΩ	113.2V	0.031uA	162.8mΩ
43	113.1V	0.003uA	156.3mΩ	110.9V	0.036uA	165.6mΩ
44	115.9V	0.065uA	156.1mΩ	112.8V	0.004uA	161.2mΩ
45	115.0V	0.027uA	161.7mΩ	117.6V	0.023uA	160.2mΩ
46	118.9V	0.058uA	159.6mΩ	111.2V	0.012uA	163.1mΩ
47	117.2V	0.055uA	162.5mΩ	114.7V	0.033uA	165.1mΩ
48	118.0V	0.041uA	165.0mΩ	119.1V	0.020uA	158.7mΩ
49	113.8V	0.053uA	162.4mΩ	119.3V	0.067uA	165.2mΩ
50	117.1V	0.029uA	160.4mΩ	113.7V	0.055uA	162.1mΩ
51	111.3V	0.041uA	155.6mΩ	118.5V	0.047uA	162.2mΩ
52	119.2V	0.031uA	158.6mΩ	112.0V	0.012uA	163.8mΩ
53	112.5V	0.030uA	164.8mΩ	113.3V	0.018uA	163.5mΩ
54	116.4V	0.034uA	155.7mΩ	117.4V	0.026uA	157.7mΩ
55	119.6V	0.001uA	163.9mΩ	112.7V	0.008uA	161.4mΩ
56	112.6V	0.009uA	161.8mΩ	119.8V	0.035uA	157.7mΩ
57	117.2V	0.039uA	160.3mΩ	114.3V	0.045uA	162.9mΩ
58	115.8V	0.059uA	162.6mΩ	111.2V	0.046uA	162.1mΩ

SeCoS Corporation

High Temperature Storage Life Test Data

Report No : T151230-006
Part No : SMG2328
Test Equipment: JUNO Test System DTS-1000
Test Condition : 100V <V(BR)DSS @ID=-250μA ；IDSS < 1.0μA@VDS=80V
RDS(ON) < 250mΩ@VGS=10V, ID=1.5A
Test Condition: 150℃, 1000Hrs
Test Date: 2015.11.02 ~ 2015.12.14
Test Standard : JESD22 STANDARD Method-A103
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	119.0V	0.045uA	163.0mΩ	116.5V	0.009uA	161.7mΩ
60	113.1V	0.053uA	161.9mΩ	111.4V	0.070uA	160.6mΩ
61	115.3V	0.046uA	165.5mΩ	119.9V	0.006uA	162.0mΩ
62	111.7V	0.052uA	157.5mΩ	114.3V	0.070uA	161.9mΩ
63	111.3V	0.013uA	158.6mΩ	116.3V	0.001uA	157.1mΩ
64	118.1V	0.069uA	165.2mΩ	116.5V	0.047uA	157.6mΩ
65	118.9V	0.005uA	157.6mΩ	111.9V	0.035uA	162.1mΩ
66	112.6V	0.045uA	164.5mΩ	113.5V	0.020uA	161.7mΩ
67	116.8V	0.005uA	159.6mΩ	112.5V	0.016uA	163.9mΩ
68	115.7V	0.056uA	165.6mΩ	119.4V	0.057uA	163.9mΩ
69	117.6V	0.027uA	161.7mΩ	115.8V	0.002uA	156.6mΩ
70	113.1V	0.024uA	160.1mΩ	112.5V	0.041uA	165.7mΩ
71	114.3V	0.055uA	163.6mΩ	112.8V	0.005uA	163.0mΩ
72	118.7V	0.064uA	162.5mΩ	117.6V	0.008uA	159.1mΩ
73	115.8V	0.028uA	164.7mΩ	115.9V	0.058uA	164.4mΩ
74	117.3V	0.038uA	164.2mΩ	115.5V	0.017uA	157.4mΩ
75	111.5V	0.026uA	162.9mΩ	110.9V	0.015uA	162.0mΩ
76	111.1V	0.020uA	158.4mΩ	118.4V	0.014uA	157.4mΩ
77	113.6V	0.056uA	164.7mΩ	113.2V	0.013uA	162.0mΩ

Made By: King Huang

Approval: Peter Yang

SeCoS Corporation

Pressure Cooker Test Data

Report No : T151230-006
Part No : SMG2328
Test Equipment: JUNO Test System DTS-1000
Test Condition : 100V <V(BR)DSS @ID=-250μA ；IDSS < 1.0μA@VDS=80V
RDS(ON) < 250mΩ@VGS=10V, ID=1.5A
Test Condition: 121℃, 100%RH, 29.7PSIG, 168Hrs
Test Date: 2015.11.03 ~ 2015.11.11
Test Standard : JESD22 STANDARD Method-A102
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	117.0V	0.052uA	160.4mΩ	113.3V	0.019uA	163.7mΩ
2	113.5V	0.052uA	156.0mΩ	116.0V	0.037uA	155.8mΩ
3	119.0V	0.060uA	156.5mΩ	118.7V	0.065uA	159.5mΩ
4	111.5V	0.024uA	164.7mΩ	118.1V	0.066uA	157.9mΩ
5	114.3V	0.044uA	161.7mΩ	113.9V	0.040uA	161.2mΩ
6	113.7V	0.064uA	161.3mΩ	112.9V	0.040uA	163.5mΩ
7	111.8V	0.030uA	164.8mΩ	113.2V	0.054uA	162.5mΩ
8	119.2V	0.066uA	165.5mΩ	114.3V	0.013uA	156.2mΩ
9	112.7V	0.047uA	155.8mΩ	111.3V	0.047uA	163.6mΩ
10	119.8V	0.005uA	163.9mΩ	118.5V	0.050uA	165.5mΩ
11	118.3V	0.042uA	159.8mΩ	119.0V	0.029uA	161.9mΩ
12	114.2V	0.023uA	156.4mΩ	116.7V	0.032uA	160.1mΩ
13	116.5V	0.019uA	162.6mΩ	111.6V	0.016uA	158.6mΩ
13	118.5V	0.043uA	160.6mΩ	116.1V	0.030uA	163.2mΩ
15	119.5V	0.037uA	156.8mΩ	115.9V	0.044uA	155.6mΩ
16	113.8V	0.030uA	162.0mΩ	116.9V	0.015uA	158.1mΩ
17	111.2V	0.032uA	159.2mΩ	112.6V	0.056uA	163.9mΩ
18	115.1V	0.052uA	157.8mΩ	117.6V	0.070uA	159.4mΩ
19	112.7V	0.063uA	163.7mΩ	112.5V	0.017uA	158.3mΩ
20	117.2V	0.048uA	160.5mΩ	113.3V	0.009uA	160.7mΩ
21	115.3V	0.049uA	158.3mΩ	118.9V	0.065uA	164.4mΩ
22	119.5V	0.053uA	159.3mΩ	117.9V	0.048uA	164.6mΩ
23	114.0V	0.006uA	157.5mΩ	116.2V	0.038uA	163.8mΩ
24	118.0V	0.046uA	156.2mΩ	113.4V	0.046uA	163.7mΩ
25	112.8V	0.012uA	159.7mΩ	119.0V	0.051uA	161.1mΩ
26	119.5V	0.027uA	158.1mΩ	112.9V	0.040uA	162.2mΩ
27	113.2V	0.009uA	162.6mΩ	119.2V	0.014uA	164.9mΩ
28	118.6V	0.042uA	158.1mΩ	119.8V	0.019uA	164.2mΩ
29	116.4V	0.033uA	161.2mΩ	116.5V	0.041uA	163.3mΩ

SeCoS Corporation

Pressure Cooker Test Data

Report No : T151230-006
Part No : SMG2328
Test Equipment: JUNO Test System DTS-1000
Test Condition : 100V <V(BR)DSS @ID=-250μA ；IDSS < 1.0μA@VDS=80V
RDS(ON) < 250mΩ@VGS=10V, ID=1.5A
Test Condition: 121℃, 100%RH, 29.7PSIG, 168Hrs
Test Date: 2015.11.03 ~ 2015.11.11
Test Standard : JESD22 STANDARD Method-A102
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	117.5V	0.047uA	159.0mΩ	113.6V	0.012uA	163.3mΩ
31	116.7V	0.038uA	158.1mΩ	112.0V	0.029uA	165.3mΩ
32	113.7V	0.020uA	163.2mΩ	118.5V	0.021uA	162.5mΩ
33	111.9V	0.032uA	165.1mΩ	114.6V	0.032uA	159.3mΩ
34	116.1V	0.047uA	158.0mΩ	113.4V	0.047uA	161.7mΩ
35	112.1V	0.050uA	162.4mΩ	112.7V	0.052uA	161.4mΩ
36	119.4V	0.004uA	164.2mΩ	115.2V	0.055uA	157.2mΩ
37	119.5V	0.026uA	163.4mΩ	113.9V	0.067uA	161.5mΩ
38	116.6V	0.033uA	157.0mΩ	118.2V	0.025uA	165.3mΩ
39	112.5V	0.048uA	165.1mΩ	119.7V	0.055uA	162.0mΩ
40	112.0V	0.050uA	165.0mΩ	114.3V	0.066uA	155.8mΩ
41	117.0V	0.018uA	161.8mΩ	113.8V	0.021uA	161.6mΩ
42	115.3V	0.003uA	159.6mΩ	113.7V	0.045uA	163.2mΩ
43	115.2V	0.041uA	163.8mΩ	119.2V	0.057uA	158.8mΩ
44	115.2V	0.020uA	158.9mΩ	114.5V	0.004uA	158.1mΩ
45	113.1V	0.002uA	164.9mΩ	111.0V	0.032uA	158.8mΩ
46	111.9V	0.034uA	158.3mΩ	119.5V	0.009uA	157.4mΩ
47	113.9V	0.018uA	160.6mΩ	118.4V	0.019uA	157.1mΩ
48	118.9V	0.011uA	165.1mΩ	111.5V	0.067uA	155.9mΩ
49	116.6V	0.055uA	161.9mΩ	114.9V	0.042uA	159.5mΩ
50	113.7V	0.045uA	164.8mΩ	117.1V	0.001uA	162.8mΩ
51	111.3V	0.041uA	162.0mΩ	115.7V	0.024uA	163.9mΩ
52	118.9V	0.018uA	156.5mΩ	117.3V	0.042uA	164.9mΩ
53	111.6V	0.020uA	164.9mΩ	112.1V	0.021uA	165.0mΩ
54	111.9V	0.057uA	160.1mΩ	112.8V	0.015uA	157.6mΩ
55	118.1V	0.033uA	164.7mΩ	116.1V	0.001uA	158.8mΩ
56	111.6V	0.045uA	159.6mΩ	116.8V	0.054uA	161.0mΩ
57	118.4V	0.051uA	160.2mΩ	116.3V	0.032uA	159.3mΩ
58	119.8V	0.022uA	164.9mΩ	118.5V	0.019uA	160.4mΩ

SeCoS Corporation

Pressure Cooker Test Data

Report No : T151230-006
Part No : SMG2328
Test Equipment: JUNO Test System DTS-1000
Test Condition : 100V <V(BR)DSS @ID=-250μA ；IDSS < 1.0μA@VDS=80V
RDS(ON) < 250mΩ@VGS=10V, ID=1.5A
Test Condition: 121℃, 100%RH, 29.7PSIG, 168Hrs
Test Date: 2015.11.03 ~ 2015.11.11
Test Standard : JESD22 STANDARD Method-A102
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	119.7V	0.058uA	156.9mΩ	111.1V	0.052uA	161.1mΩ
60	115.8V	0.001uA	164.2mΩ	113.4V	0.068uA	155.6mΩ
61	115.4V	0.022uA	164.5mΩ	113.7V	0.055uA	159.4mΩ
62	114.1V	0.019uA	165.1mΩ	117.1V	0.040uA	163.8mΩ
63	112.1V	0.020uA	157.9mΩ	111.6V	0.052uA	161.2mΩ
64	112.1V	0.063uA	165.7mΩ	113.0V	0.065uA	163.5mΩ
65	118.3V	0.041uA	158.5mΩ	117.4V	0.054uA	163.6mΩ
66	113.7V	0.037uA	158.4mΩ	114.6V	0.028uA	159.0mΩ
67	114.6V	0.010uA	159.5mΩ	113.9V	0.031uA	164.8mΩ
68	114.7V	0.021uA	163.8mΩ	116.1V	0.029uA	158.6mΩ
69	113.3V	0.043uA	159.2mΩ	115.4V	0.016uA	156.9mΩ
70	112.9V	0.031uA	161.6mΩ	118.3V	0.033uA	164.8mΩ
71	112.7V	0.053uA	164.5mΩ	119.3V	0.053uA	162.7mΩ
72	115.7V	0.067uA	164.9mΩ	115.4V	0.015uA	161.9mΩ
73	113.6V	0.063uA	159.5mΩ	112.5V	0.005uA	156.1mΩ
74	111.7V	0.016uA	156.3mΩ	115.9V	0.058uA	161.3mΩ
75	114.2V	0.008uA	157.8mΩ	119.3V	0.042uA	162.6mΩ
76	118.6V	0.032uA	163.2mΩ	116.5V	0.014uA	163.8mΩ
77	119.7V	0.060uA	158.6mΩ	116.3V	0.029uA	164.2mΩ

Made By: King Huang

Approval: Peter Yang

SeCoS Corporation

Temperature Cycle Test Data

Report No : T151230-006
Part No : SMG2328
Test Equipment: JUNO Test System DTS-1000
Test Condition : 100V <V(BR)DSS @ID=-250μA ；IDSS < 1.0μA@VDS=80V
RDS(ON) < 250mΩ@VGS=10V, ID=1.5A
Test Condition: -55℃/30min, 150℃/30min, for1000 Cycle
Test Date: 2015.11.09 ~ 2015.12.30
Test Standard : JESD22 STANDARD Method-A104
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	113.3V	0.052uA	157.2mΩ	116.2V	0.049uA	161.7mΩ
2	111.5V	0.020uA	162.4mΩ	119.2V	0.015uA	163.5mΩ
3	116.1V	0.024uA	160.9mΩ	118.4V	0.001uA	165.6mΩ
4	119.8V	0.061uA	156.2mΩ	113.6V	0.036uA	163.5mΩ
5	112.9V	0.037uA	163.0mΩ	112.1V	0.033uA	162.3mΩ
6	115.6V	0.023uA	163.5mΩ	117.2V	0.053uA	156.2mΩ
7	115.5V	0.027uA	165.0mΩ	112.5V	0.004uA	160.5mΩ
8	111.9V	0.053uA	162.9mΩ	112.7V	0.028uA	162.7mΩ
9	113.9V	0.010uA	161.5mΩ	111.7V	0.049uA	156.3mΩ
10	116.4V	0.029uA	156.2mΩ	118.6V	0.037uA	163.0mΩ
11	111.7V	0.030uA	162.7mΩ	112.1V	0.044uA	160.8mΩ
12	115.5V	0.027uA	163.6mΩ	117.1V	0.052uA	161.3mΩ
13	112.6V	0.007uA	158.5mΩ	118.3V	0.062uA	156.8mΩ
13	114.7V	0.025uA	160.5mΩ	118.5V	0.024uA	164.4mΩ
15	112.0V	0.000uA	163.3mΩ	114.3V	0.019uA	163.9mΩ
16	115.7V	0.069uA	161.4mΩ	112.9V	0.022uA	159.9mΩ
17	114.4V	0.051uA	156.2mΩ	116.9V	0.010uA	162.5mΩ
18	111.7V	0.064uA	160.8mΩ	119.5V	0.010uA	165.5mΩ
19	115.4V	0.054uA	160.4mΩ	111.7V	0.054uA	165.1mΩ
20	115.6V	0.056uA	163.1mΩ	112.2V	0.016uA	163.4mΩ
21	114.6V	0.014uA	161.1mΩ	114.8V	0.001uA	157.7mΩ
22	118.1V	0.014uA	158.9mΩ	119.1V	0.023uA	162.7mΩ
23	117.9V	0.052uA	157.0mΩ	119.5V	0.050uA	165.3mΩ
24	114.9V	0.020uA	159.2mΩ	111.1V	0.069uA	162.0mΩ
25	116.3V	0.019uA	156.6mΩ	119.3V	0.025uA	157.0mΩ
26	115.2V	0.008uA	165.0mΩ	115.7V	0.055uA	161.7mΩ
27	115.5V	0.054uA	163.4mΩ	114.9V	0.032uA	165.1mΩ
28	115.0V	0.068uA	162.6mΩ	118.6V	0.026uA	165.2mΩ
29	114.9V	0.036uA	158.5mΩ	114.2V	0.015uA	164.0mΩ

SeCoS Corporation

Temperature Cycle Test Data

Report No : T151230-006
Part No : SMG2328
Test Equipment: JUNO Test System DTS-1000
Test Condition : 100V <V(BR)DSS @ID=-250μA ；IDSS < 1.0μA@VDS=80V
RDS(ON) < 250mΩ@VGS=10V, ID=1.5A
Test Condition: -55℃/30min, 150℃/30min, for1000 Cycle
Test Date: 2015.11.09 ~ 2015.12.30
Test Standard : JESD22 STANDARD Method-A104
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	113.6V	0.065uA	159.4mΩ	114.3V	0.015uA	156.6mΩ
31	113.3V	0.053uA	157.5mΩ	117.9V	0.045uA	161.2mΩ
32	112.4V	0.012uA	160.4mΩ	111.5V	0.054uA	163.1mΩ
33	112.7V	0.040uA	158.6mΩ	112.0V	0.000uA	160.2mΩ
34	119.6V	0.047uA	159.5mΩ	113.5V	0.041uA	156.5mΩ
35	112.2V	0.061uA	160.3mΩ	119.0V	0.052uA	160.8mΩ
36	112.3V	0.036uA	164.4mΩ	113.2V	0.021uA	162.9mΩ
37	114.4V	0.044uA	159.0mΩ	117.3V	0.018uA	162.9mΩ
38	115.5V	0.027uA	163.5mΩ	114.8V	0.018uA	161.3mΩ
39	113.2V	0.014uA	161.8mΩ	112.3V	0.016uA	158.2mΩ
40	116.3V	0.064uA	159.0mΩ	112.5V	0.030uA	158.6mΩ
41	116.6V	0.048uA	160.0mΩ	117.8V	0.065uA	158.9mΩ
42	111.3V	0.028uA	163.9mΩ	113.1V	0.060uA	164.8mΩ
43	119.8V	0.036uA	163.8mΩ	116.6V	0.002uA	162.4mΩ
44	117.8V	0.043uA	165.0mΩ	117.9V	0.070uA	163.3mΩ
45	113.3V	0.048uA	159.7mΩ	118.2V	0.028uA	162.4mΩ
46	116.3V	0.060uA	163.4mΩ	117.0V	0.004uA	162.7mΩ
47	117.2V	0.018uA	164.8mΩ	112.5V	0.035uA	164.6mΩ
48	115.3V	0.067uA	162.5mΩ	116.9V	0.026uA	158.3mΩ
49	116.8V	0.029uA	157.0mΩ	116.5V	0.033uA	161.9mΩ
50	116.5V	0.013uA	164.1mΩ	115.1V	0.058uA	163.2mΩ
51	119.6V	0.045uA	159.1mΩ	119.4V	0.059uA	160.6mΩ
52	114.9V	0.006uA	158.1mΩ	112.7V	0.003uA	160.8mΩ
53	119.8V	0.036uA	162.3mΩ	113.3V	0.018uA	158.7mΩ
54	111.0V	0.029uA	165.2mΩ	113.3V	0.029uA	157.1mΩ
55	117.4V	0.048uA	161.7mΩ	117.7V	0.045uA	155.5mΩ
56	113.8V	0.060uA	161.3mΩ	113.2V	0.012uA	160.6mΩ
57	113.4V	0.060uA	165.2mΩ	111.8V	0.044uA	162.6mΩ
58	118.5V	0.009uA	158.4mΩ	111.2V	0.038uA	156.9mΩ

SeCoS Corporation

Temperature Cycle Test Data

Report No : T151230-006
Part No : SMG2328
Test Equipment: JUNO Test System DTS-1000
Test Condition : 100V <V(BR)DSS @ID=-250μA ；IDSS < 1.0μA@VDS=80V
RDS(ON) < 250mΩ@VGS=10V, ID=1.5A
Test Condition: -55℃/30min, 150℃/30min, for1000 Cycle
Test Date: 2015.11.09 ~ 2015.12.30
Test Standard : JESD22 STANDARD Method-A104
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	115.0V	0.052uA	157.5mΩ	119.8V	0.032uA	165.6mΩ
60	112.0V	0.045uA	160.5mΩ	115.4V	0.060uA	155.7mΩ
61	119.6V	0.010uA	165.7mΩ	111.5V	0.026uA	156.7mΩ
62	117.2V	0.020uA	164.1mΩ	113.0V	0.044uA	164.7mΩ
63	118.5V	0.019uA	158.0mΩ	113.1V	0.026uA	163.1mΩ
64	118.1V	0.053uA	163.6mΩ	114.5V	0.053uA	155.7mΩ
65	115.5V	0.033uA	159.9mΩ	117.0V	0.037uA	164.7mΩ
66	112.2V	0.001uA	164.4mΩ	116.7V	0.050uA	160.8mΩ
67	116.4V	0.067uA	165.6mΩ	119.3V	0.055uA	163.4mΩ
68	118.5V	0.037uA	160.3mΩ	111.4V	0.038uA	164.0mΩ
69	113.0V	0.006uA	164.7mΩ	119.2V	0.032uA	160.4mΩ
70	116.5V	0.005uA	164.2mΩ	110.9V	0.031uA	164.2mΩ
71	117.4V	0.022uA	161.0mΩ	118.5V	0.034uA	160.3mΩ
72	118.0V	0.043uA	157.1mΩ	111.2V	0.010uA	161.8mΩ
73	116.9V	0.016uA	159.0mΩ	117.7V	0.028uA	159.4mΩ
74	116.9V	0.026uA	157.3mΩ	119.7V	0.053uA	156.8mΩ
75	115.8V	0.044uA	164.6mΩ	115.9V	0.050uA	156.4mΩ
76	116.4V	0.022uA	157.7mΩ	117.3V	0.036uA	157.8mΩ
77	114.2V	0.051uA	155.9mΩ	116.6V	0.065uA	163.7mΩ

Made By: King Huang

Approval: Peter Yang

SeCoS Corporation

High Temperature High Humidity Test Data

Report No : T151230-006
Part No : SMG2328
Test Equipment: JUNO Test System DTS-1000
Test Condition : 100V <V(BR)DSS @ID=-250μA ；IDSS < 1.0μA@VDS=80V
RDS(ON) < 250mΩ@VGS=10V, ID=1.5A
Test Condition: 85±2℃, 85±5%RH, 1000Hrs
Test Date: 2015.11.10 ~ 2015.12.22
Test Standard : JESD22 STANDARD Method-A101
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	111.1V	0.040uA	163.1mΩ	116.5V	0.018uA	164.5mΩ
2	117.4V	0.058uA	157.4mΩ	118.3V	0.011uA	155.6mΩ
3	118.2V	0.044uA	159.9mΩ	116.2V	0.053uA	162.0mΩ
4	119.8V	0.058uA	158.5mΩ	119.8V	0.023uA	157.7mΩ
5	116.3V	0.002uA	156.9mΩ	116.6V	0.013uA	157.6mΩ
6	117.1V	0.023uA	164.4mΩ	112.6V	0.046uA	157.3mΩ
7	117.8V	0.053uA	162.9mΩ	112.0V	0.003uA	158.8mΩ
8	117.1V	0.066uA	161.4mΩ	115.3V	0.047uA	155.7mΩ
9	118.0V	0.065uA	159.3mΩ	113.5V	0.070uA	158.6mΩ
10	114.6V	0.056uA	156.5mΩ	112.4V	0.025uA	165.1mΩ
11	116.7V	0.047uA	162.1mΩ	113.4V	0.006uA	159.8mΩ
12	118.4V	0.049uA	163.9mΩ	115.0V	0.043uA	162.2mΩ
13	117.6V	0.020uA	164.8mΩ	117.6V	0.030uA	165.7mΩ
13	112.3V	0.048uA	158.6mΩ	112.1V	0.048uA	155.9mΩ
15	119.9V	0.010uA	156.2mΩ	117.0V	0.034uA	158.9mΩ
16	115.6V	0.030uA	160.4mΩ	115.1V	0.063uA	164.9mΩ
17	114.2V	0.014uA	156.4mΩ	112.1V	0.067uA	164.1mΩ
18	118.7V	0.066uA	159.9mΩ	116.6V	0.002uA	163.5mΩ
19	111.0V	0.067uA	164.3mΩ	114.9V	0.012uA	157.4mΩ
20	113.2V	0.032uA	159.6mΩ	115.6V	0.042uA	158.8mΩ
21	112.0V	0.040uA	162.3mΩ	117.2V	0.024uA	165.2mΩ
22	114.7V	0.065uA	158.4mΩ	118.1V	0.019uA	159.0mΩ
23	115.1V	0.012uA	162.9mΩ	116.9V	0.062uA	163.3mΩ
24	116.7V	0.067uA	161.2mΩ	111.6V	0.058uA	162.1mΩ
25	118.2V	0.029uA	159.7mΩ	112.9V	0.019uA	165.1mΩ
26	115.0V	0.010uA	156.2mΩ	112.2V	0.020uA	164.9mΩ
27	118.4V	0.025uA	157.8mΩ	111.2V	0.038uA	163.5mΩ
28	112.0V	0.063uA	158.9mΩ	112.4V	0.031uA	163.6mΩ
29	115.5V	0.005uA	160.2mΩ	116.5V	0.033uA	157.0mΩ

SeCoS Corporation

High Temperature High Humidity Test Data

Report No : T151230-006
Part No : SMG2328
Test Equipment: JUNO Test System DTS-1000
Test Condition : 100V <V(BR)DSS @ID=-250μA ；IDSS < 1.0μA@VDS=80V
RDS(ON) < 250mΩ@VGS=10V, ID=1.5A
Test Condition: 85±2℃, 85±5%RH, 1000Hrs
Test Date: 2015.11.10 ~ 2015.12.22
Test Standard : JESD22 STANDARD Method-A101
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	116.4V	0.063uA	159.6mΩ	111.7V	0.058uA	162.2mΩ
31	117.1V	0.062uA	163.5mΩ	113.8V	0.034uA	157.1mΩ
32	114.1V	0.068uA	158.4mΩ	116.3V	0.029uA	161.2mΩ
33	114.4V	0.058uA	164.7mΩ	119.2V	0.021uA	158.8mΩ
34	117.5V	0.058uA	165.0mΩ	114.4V	0.053uA	155.9mΩ
35	116.4V	0.044uA	161.6mΩ	118.5V	0.039uA	156.5mΩ
36	119.4V	0.035uA	157.1mΩ	118.9V	0.005uA	157.5mΩ
37	118.8V	0.010uA	158.3mΩ	117.2V	0.049uA	163.8mΩ
38	113.1V	0.043uA	158.5mΩ	119.1V	0.043uA	156.8mΩ
39	111.9V	0.055uA	160.5mΩ	112.9V	0.069uA	160.5mΩ
40	118.9V	0.006uA	155.8mΩ	112.5V	0.009uA	156.3mΩ
41	112.5V	0.032uA	164.3mΩ	116.1V	0.064uA	161.6mΩ
42	118.9V	0.021uA	158.4mΩ	117.3V	0.053uA	157.8mΩ
43	114.1V	0.026uA	159.5mΩ	118.2V	0.026uA	159.2mΩ
44	114.4V	0.007uA	157.0mΩ	116.8V	0.063uA	161.2mΩ
45	115.3V	0.065uA	155.6mΩ	111.5V	0.053uA	165.5mΩ
46	116.4V	0.037uA	157.1mΩ	115.0V	0.042uA	156.9mΩ
47	117.2V	0.052uA	160.1mΩ	115.1V	0.041uA	161.5mΩ
48	119.0V	0.056uA	161.4mΩ	117.0V	0.038uA	155.9mΩ
49	115.0V	0.066uA	159.5mΩ	115.2V	0.067uA	158.4mΩ
50	113.3V	0.058uA	159.1mΩ	113.6V	0.048uA	163.7mΩ
51	119.2V	0.058uA	163.2mΩ	117.1V	0.045uA	164.2mΩ
52	117.3V	0.023uA	161.5mΩ	115.3V	0.024uA	157.1mΩ
53	117.3V	0.005uA	156.1mΩ	114.2V	0.044uA	162.5mΩ
54	114.9V	0.012uA	161.5mΩ	114.1V	0.037uA	155.8mΩ
55	117.0V	0.050uA	161.8mΩ	113.5V	0.036uA	161.4mΩ
56	113.8V	0.055uA	156.6mΩ	116.2V	0.052uA	163.2mΩ
57	113.0V	0.032uA	163.9mΩ	119.4V	0.047uA	156.0mΩ
58	117.2V	0.007uA	159.6mΩ	114.6V	0.003uA	157.7mΩ

SeCoS Corporation

High Temperature High Humidity Test Data

Report No : T151230-006
Part No : SMG2328
Test Equipment: JUNO Test System DTS-1000
Test Condition : 100V <V(BR)DSS @ID=-250μA ；IDSS < 1.0μA@VDS=80V
RDS(ON) < 250mΩ@VGS=10V, ID=1.5A
Test Condition: 85±2℃, 85±5%RH, 1000Hrs
Test Date: 2015.11.10 ~ 2015.12.22
Test Standard : JESD22 STANDARD Method-A101
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	114.1V	0.002uA	156.3mΩ	115.8V	0.010uA	165.5mΩ
60	111.2V	0.002uA	165.0mΩ	111.1V	0.060uA	161.7mΩ
61	117.6V	0.054uA	159.2mΩ	113.7V	0.009uA	160.5mΩ
62	114.4V	0.006uA	160.6mΩ	113.0V	0.001uA	159.6mΩ
63	113.4V	0.066uA	159.1mΩ	114.9V	0.003uA	156.3mΩ
64	114.5V	0.012uA	163.1mΩ	119.1V	0.012uA	158.7mΩ
65	113.8V	0.024uA	162.8mΩ	119.2V	0.006uA	164.0mΩ
66	113.4V	0.021uA	159.4mΩ	119.5V	0.023uA	156.5mΩ
67	111.1V	0.026uA	155.8mΩ	118.8V	0.036uA	160.0mΩ
68	113.7V	0.054uA	160.9mΩ	111.0V	0.043uA	159.9mΩ
69	118.2V	0.040uA	159.6mΩ	115.2V	0.069uA	158.6mΩ
70	117.2V	0.021uA	158.4mΩ	115.3V	0.036uA	157.9mΩ
71	112.6V	0.046uA	156.3mΩ	115.8V	0.023uA	160.7mΩ
72	117.1V	0.023uA	164.5mΩ	113.6V	0.001uA	164.6mΩ
73	114.8V	0.026uA	157.5mΩ	113.9V	0.032uA	164.3mΩ
74	117.4V	0.034uA	157.7mΩ	113.6V	0.010uA	161.4mΩ
75	113.2V	0.065uA	158.9mΩ	113.3V	0.062uA	164.3mΩ
76	112.2V	0.020uA	161.3mΩ	115.0V	0.018uA	164.3mΩ
77	116.4V	0.033uA	155.8mΩ	112.4V	0.003uA	163.7mΩ

Made By: King Huang

Approval: Peter Yang

SeCoS Corporation

High Temper High Humidity Reverse Bies Test Data

Report No : T151230-006
Part No : SMG2328
Test Equipment: JUNO Test System DTS-1000
Test Condition : 100V <V(BR)DSS @ID=-250μA ；IDSS < 1.0μA@VDS=80V
RDS(ON) < 250mΩ@VGS=10V, ID=1.5A
Test Condition: 85±2℃, 85±5%RH, 1000Hrs
Test Date: 2015.11.11 ~ 2015.12.23
Test Standard : JESD22 STANDARD Method-A101
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	119.0V	0.054uA	160.3mΩ	114.6V	0.016uA	163.2mΩ
2	113.7V	0.039uA	160.3mΩ	116.3V	0.023uA	164.0mΩ
3	116.7V	0.005uA	159.0mΩ	118.2V	0.034uA	158.4mΩ
4	117.6V	0.003uA	163.2mΩ	112.1V	0.023uA	161.3mΩ
5	112.0V	0.038uA	165.1mΩ	112.6V	0.037uA	157.8mΩ
6	113.6V	0.063uA	159.2mΩ	112.0V	0.047uA	157.9mΩ
7	113.8V	0.060uA	161.6mΩ	114.2V	0.067uA	165.7mΩ
8	115.0V	0.055uA	159.3mΩ	111.9V	0.058uA	156.4mΩ
9	114.4V	0.054uA	162.3mΩ	112.1V	0.046uA	165.5mΩ
10	113.5V	0.030uA	163.4mΩ	119.2V	0.022uA	156.6mΩ
11	115.4V	0.021uA	163.2mΩ	111.8V	0.044uA	157.7mΩ
12	118.7V	0.004uA	163.3mΩ	119.3V	0.049uA	158.6mΩ
13	115.4V	0.034uA	163.8mΩ	113.9V	0.021uA	157.0mΩ
13	115.2V	0.052uA	156.7mΩ	114.2V	0.021uA	155.9mΩ
15	116.0V	0.016uA	162.6mΩ	117.2V	0.019uA	159.7mΩ
16	116.6V	0.040uA	159.3mΩ	119.4V	0.016uA	162.6mΩ
17	117.3V	0.012uA	158.3mΩ	114.7V	0.021uA	164.8mΩ
18	115.4V	0.045uA	157.3mΩ	112.6V	0.045uA	161.1mΩ
19	114.1V	0.042uA	159.8mΩ	115.2V	0.059uA	165.3mΩ
20	115.8V	0.029uA	155.9mΩ	114.9V	0.036uA	155.8mΩ
21	119.7V	0.017uA	156.2mΩ	113.7V	0.057uA	161.2mΩ
22	111.8V	0.067uA	159.4mΩ	112.0V	0.017uA	157.7mΩ
23	119.3V	0.060uA	155.6mΩ	116.6V	0.061uA	156.1mΩ
24	116.8V	0.024uA	158.3mΩ	116.1V	0.028uA	158.4mΩ
25	113.2V	0.007uA	159.4mΩ	117.4V	0.045uA	163.5mΩ
26	115.3V	0.053uA	161.7mΩ	118.9V	0.048uA	165.3mΩ
27	114.4V	0.064uA	161.9mΩ	113.5V	0.050uA	155.7mΩ
28	117.1V	0.061uA	157.8mΩ	118.1V	0.033uA	161.6mΩ
29	117.8V	0.042uA	157.4mΩ	113.2V	0.002uA	165.2mΩ

SeCoS Corporation

High Temper High Humidity Reverse Bies Test Data

Report No : T151230-006
Part No : SMG2328
Test Equipment: JUNO Test System DTS-1000
Test Condition : 100V <V(BR)DSS @ID=-250μA ；IDSS < 1.0μA@VDS=80V
RDS(ON) < 250mΩ@VGS=10V, ID=1.5A
Test Condition: 85±2℃, 85±5%RH, 1000Hrs
Test Date: 2015.11.11 ~ 2015.12.23
Test Standard : JESD22 STANDARD Method-A101
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	116.7V	0.066uA	162.5mΩ	111.8V	0.006uA	165.5mΩ
31	119.3V	0.057uA	162.6mΩ	111.1V	0.068uA	165.4mΩ
32	113.3V	0.004uA	159.1mΩ	113.4V	0.060uA	164.3mΩ
33	114.4V	0.014uA	160.4mΩ	115.0V	0.068uA	163.9mΩ
34	111.5V	0.056uA	161.5mΩ	118.1V	0.048uA	157.7mΩ
35	114.4V	0.012uA	156.2mΩ	111.3V	0.029uA	164.8mΩ
36	119.7V	0.057uA	165.5mΩ	111.4V	0.060uA	157.9mΩ
37	112.5V	0.058uA	161.1mΩ	115.1V	0.018uA	159.4mΩ
38	116.0V	0.017uA	162.0mΩ	113.0V	0.063uA	158.9mΩ
39	112.0V	0.007uA	164.9mΩ	116.7V	0.026uA	162.6mΩ
40	111.4V	0.038uA	159.5mΩ	113.2V	0.025uA	164.4mΩ
41	119.0V	0.019uA	159.8mΩ	114.5V	0.057uA	162.0mΩ
42	115.6V	0.003uA	158.2mΩ	116.3V	0.052uA	162.9mΩ
43	116.5V	0.049uA	156.8mΩ	112.3V	0.041uA	155.9mΩ
44	118.3V	0.003uA	160.2mΩ	119.4V	0.038uA	155.9mΩ
45	118.6V	0.030uA	158.1mΩ	114.7V	0.043uA	165.7mΩ
46	111.5V	0.038uA	158.1mΩ	119.2V	0.001uA	160.2mΩ
47	116.3V	0.005uA	155.9mΩ	116.1V	0.037uA	155.8mΩ
48	112.8V	0.005uA	156.0mΩ	111.3V	0.053uA	162.0mΩ
49	113.1V	0.006uA	162.1mΩ	111.8V	0.024uA	165.1mΩ
50	114.1V	0.033uA	156.6mΩ	117.5V	0.054uA	162.1mΩ
51	116.3V	0.028uA	156.6mΩ	118.6V	0.003uA	164.6mΩ
52	112.8V	0.017uA	163.3mΩ	112.6V	0.028uA	162.4mΩ
53	113.6V	0.007uA	156.2mΩ	113.9V	0.045uA	160.0mΩ
54	113.5V	0.058uA	156.7mΩ	112.0V	0.001uA	160.8mΩ
55	113.7V	0.067uA	159.9mΩ	119.7V	0.030uA	158.0mΩ
56	116.2V	0.027uA	159.5mΩ	119.7V	0.037uA	158.2mΩ
57	116.0V	0.069uA	157.7mΩ	118.4V	0.065uA	160.9mΩ
58	111.4V	0.020uA	158.7mΩ	119.8V	0.040uA	157.9mΩ

SeCoS Corporation

High Temper High Humidity Reverse Bies Test Data

Report No : T151230-006
Part No : SMG2328
Test Equipment: JUNO Test System DTS-1000
Test Condition : 100V <V(BR)DSS @ID=-250μA ；IDSS < 1.0μA@VDS=80V
RDS(ON) < 250mΩ@VGS=10V, ID=1.5A
Test Condition: 85±2℃, 85±5%RH, 1000Hrs
Test Date: 2015.11.11 ~ 2015.12.23
Test Standard : JESD22 STANDARD Method-A101
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	112.9V	0.057uA	155.7mΩ	113.0V	0.039uA	159.8mΩ
60	118.2V	0.029uA	165.2mΩ	111.7V	0.006uA	156.4mΩ
61	118.0V	0.039uA	159.4mΩ	111.0V	0.048uA	160.2mΩ
62	111.2V	0.015uA	161.4mΩ	116.0V	0.014uA	160.7mΩ
63	116.2V	0.060uA	158.0mΩ	111.6V	0.002uA	159.0mΩ
64	118.5V	0.014uA	160.2mΩ	119.8V	0.001uA	160.5mΩ
65	119.2V	0.016uA	164.0mΩ	117.0V	0.056uA	164.7mΩ
66	119.1V	0.031uA	161.0mΩ	112.9V	0.010uA	159.7mΩ
67	113.5V	0.032uA	156.8mΩ	117.8V	0.006uA	164.3mΩ
68	116.8V	0.070uA	156.0mΩ	118.0V	0.040uA	160.2mΩ
69	114.9V	0.028uA	157.5mΩ	116.8V	0.070uA	163.4mΩ
70	119.8V	0.003uA	157.5mΩ	117.7V	0.027uA	160.0mΩ
71	117.7V	0.041uA	158.0mΩ	118.4V	0.007uA	160.2mΩ
72	118.2V	0.056uA	165.6mΩ	119.4V	0.038uA	160.7mΩ
73	115.9V	0.065uA	157.9mΩ	116.8V	0.023uA	162.4mΩ
74	113.8V	0.054uA	158.4mΩ	112.5V	0.034uA	162.9mΩ
75	113.1V	0.068uA	156.9mΩ	116.0V	0.010uA	161.5mΩ
76	111.1V	0.069uA	155.7mΩ	113.6V	0.047uA	163.8mΩ
77	114.9V	0.031uA	165.2mΩ	114.7V	0.059uA	161.1mΩ

Made By: King Huang

Approval: Peter Yang

SeCoS Corporation

Solderability Test Data

Report No : T151230-006
Part No : SMG2328
Test Equipment: JUNO Test System DTS-1000
Test Condition : 100V <V(BR)DSS @ID=-250μA ；IDSS < 1.0μA@VDS=80V
RDS(ON) < 250mΩ@VGS=10V, ID=1.5A
Test Condition: 245℃ ± 5℃, 5Sec
Test Date: 2015.12.30
Test Standard : JESD22 STANDER Method-B102
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	117.5V	0.064uA	160.8mΩ	116.1V	0.036uA	156.5mΩ
2	115.1V	0.003uA	156.5mΩ	116.5V	0.017uA	164.2mΩ
3	112.6V	0.015uA	162.5mΩ	117.2V	0.058uA	163.4mΩ
4	111.1V	0.070uA	157.5mΩ	118.1V	0.048uA	163.3mΩ
5	119.8V	0.065uA	158.5mΩ	115.0V	0.067uA	163.1mΩ
6	113.3V	0.031uA	164.1mΩ	111.8V	0.057uA	157.5mΩ
7	118.9V	0.029uA	155.9mΩ	111.3V	0.060uA	155.7mΩ
8	117.0V	0.062uA	158.2mΩ	113.5V	0.035uA	157.6mΩ
9	117.7V	0.034uA	157.8mΩ	111.7V	0.047uA	160.2mΩ
10	113.0V	0.054uA	159.9mΩ	119.7V	0.009uA	161.9mΩ

Made By: King Huang

Approval: Peter Yang