www.SeCosGmbH.com

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

PCN#	Effective Date	Issue Date
2015-07-01C-01	D/C:5F02	2015/7/01

PCN Classification	Product Category
Major	MOSFET

Subject
Process Optimization

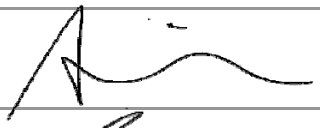
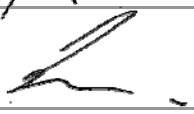
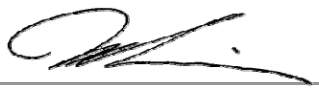
Affected Product(s)
SPR40N06

Description of Change(s)
In order to enhance the effectiveness of the product, wafer size change from 6-inch to 8-inch.

Content of Change(s)
wafer size

Impact(s)
N/A

Attachment(s)
Reliability Teat Report.

Approval		
Issue by	Alice Lai	e-mail: alice@secosgmbh.com
Development Engineer		Alice Lai
QA Manager		Peter Yang
General Manger		Mathew Liu

For more information, please contact us directly or visit our website http://www.secosgmbh.com

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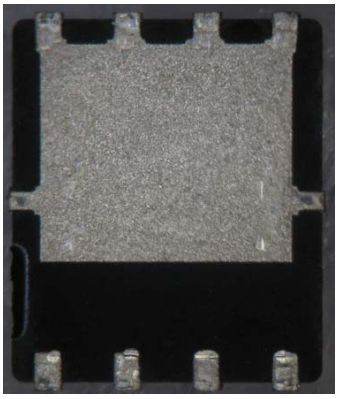
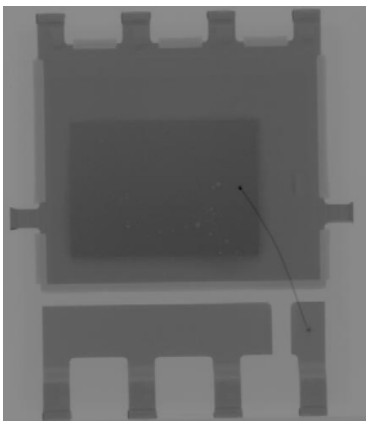
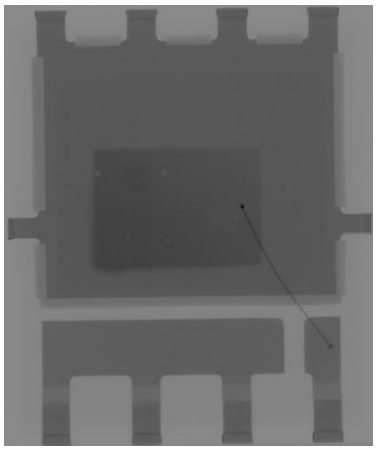
Exterior comparison Chart	
Original	New
 Top View	 Top View
 Lateral View	 Lateral View
 X-Ray	 X-Ray

SeCoS Corporation

Reliability Testing Summary Report

Date: 2015/06/30 Document No.: SI15 -06- 23

Test Item	P/N	Test Condition	(LTPD)	Sample Numbers	Allow Fall Numbers	Fall Numbers	Result
HTRB High Temp Reverse Bias	SPR40N06	150 ± 5℃, 80%VR, T = 1000hrs		77	0	0	ACC
HTSL High Temperature Storage Life	SPR40N06	150℃, T = 1000 hrs		77	0	0	ACC
PCT Pressure Cooker Test	SPR40N06	121℃, 29.7PSIG, 168 hrs		77	0	0	ACC
TCT Temperature Cycle Test	SPR40N06	-55℃/30min, 150℃/30min, For 1000 Cycle		77	0	0	ACC
THT High Temperature High Humidity Test	SPR40N06	85 ± 2℃, RH=85±5%, 1000 hrs		77	0	0	ACC
H3TRB High Temper High Humidity Reverse Bies Test	SPR40N06	85 ± 2℃, RH=85±5%, 80%VR, 1000 hrs		77	0	0	ACC
Solderability	SPR40N06	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: 2015.05.04 Testing End Date: 2015.06.30

Tester: King Huang Approval: Peter Yang

SeCoS Corporation

Electrical Test Data

Report No : T150630-023
Part No : SPR40N06
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)DSS > 60V@ID=250μA ；IDSS < 1μA@VDS=60V
RDS(ON) < 12mΩ@VGS=10V, ID=20A
Test Condition: 25℃
Test Date: 2015.05.04
Test Standard : Specifications
Operator: Leo Hsia

Test Result: PASS

No	$V_{(BR)DSS}$	I_{DSS}	$R_{DS(ON)}$
1	70.71V	0.008uA	8.94mΩ
2	71.66V	0.006uA	8.51mΩ
3	70.12V	0.007uA	9.04mΩ
4	69.98V	0.011uA	9.50mΩ
5	72.14V	0.009uA	8.39mΩ
6	70.37V	0.006uA	8.84mΩ
7	71.77V	0.007uA	8.19mΩ
8	72.62V	0.010uA	9.32mΩ
9	69.99V	0.008uA	9.16mΩ
10	71.68V	0.010uA	8.52mΩ
11	72.62V	0.007uA	9.40mΩ
12	71.14V	0.008uA	9.54mΩ
13	72.69V	0.008uA	8.89mΩ
13	70.43V	0.006uA	8.91mΩ
15	71.67V	0.010uA	8.85mΩ
16	70.34V	0.011uA	9.45mΩ
17	72.21V	0.010uA	8.50mΩ
18	70.65V	0.006uA	8.41mΩ
19	71.41V	0.008uA	8.21mΩ
20	69.92V	0.006uA	8.06mΩ
21	71.11V	0.006uA	9.19mΩ
22	70.46V	0.007uA	9.35mΩ
23	70.24V	0.008uA	8.59mΩ
24	71.33V	0.011uA	8.53mΩ
25	70.68V	0.008uA	9.61mΩ
26	69.90V	0.011uA	8.74mΩ
27	70.70V	0.006uA	8.33mΩ
28	69.76V	0.008uA	8.84mΩ
29	70.84V	0.007uA	9.11mΩ
30	70.62V	0.010uA	8.42mΩ

SeCoS Corporation

Electrical Test Data

Report No : T150630-023
Part No : SPR40N06
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)DSS > 60V@ID=250μA ；IDSS < 1μA@VDS=60V
RDS(ON) < 12mΩ@VGS=10V, ID=20A
Test Condition: 25℃
Test Date: 2015.05.04
Test Standard : Specifications
Operator: Leo Hsia

Test Result: PASS

No	$V_{(BR)DSS}$	I_{DSS}	$R_{DS(ON)}$
31	71.13V	0.009uA	8.26mΩ
32	72.57V	0.007uA	9.14mΩ
33	71.04V	0.007uA	9.34mΩ
34	70.91V	0.011uA	9.08mΩ
35	71.25V	0.011uA	8.04mΩ
36	71.67V	0.008uA	8.74mΩ
37	72.26V	0.009uA	9.21mΩ
38	71.01V	0.008uA	9.10mΩ
39	71.35V	0.006uA	9.27mΩ
40	70.61V	0.008uA	9.13mΩ
41	70.29V	0.008uA	9.35mΩ
42	71.79V	0.008uA	9.06mΩ
43	72.41V	0.011uA	8.82mΩ
44	70.29V	0.009uA	8.20mΩ
45	71.93V	0.006uA	8.11mΩ
46	71.44V	0.008uA	8.95mΩ
47	71.63V	0.008uA	8.62mΩ
48	70.94V	0.008uA	8.27mΩ
49	71.78V	0.011uA	9.31mΩ
50	70.73V	0.007uA	8.86mΩ
51	71.02V	0.010uA	8.85mΩ
52	70.49V	0.008uA	9.62mΩ
53	71.10V	0.011uA	8.10mΩ
54	70.05V	0.006uA	9.37mΩ
55	71.86V	0.008uA	8.66mΩ
56	72.33V	0.006uA	8.56mΩ
57	71.64V	0.008uA	8.32mΩ
58	72.37V	0.008uA	9.41mΩ
59	71.47V	0.008uA	8.80mΩ
60	72.35V	0.011uA	8.19mΩ

SeCoS Corporation

Electrical Test Data

Report No : T150630-023
Part No : SPR40N06
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)DSS > 60V@ID=250μA ；IDSS < 1μA@VDS=60V
RDS(ON) < 12mΩ@VGS=10V, ID=20A
Test Condition: 25℃
Test Date: 2015.05.04
Test Standard : Specifications
Operator: Leo Hsia

Test Result: PASS

No	$V_{(BR)DSS}$	I_{DSS}	$R_{DS(ON)}$
61	70.75V	0.010uA	8.30mΩ
62	71.17V	0.011uA	9.22mΩ
63	70.05V	0.007uA	9.31mΩ
64	71.74V	0.009uA	8.32mΩ
65	72.66V	0.011uA	8.24mΩ
66	71.36V	0.009uA	9.26mΩ
67	70.26V	0.006uA	8.51mΩ
68	72.43V	0.007uA	9.04mΩ
69	71.96V	0.009uA	9.36mΩ
70	71.59V	0.010uA	9.60mΩ
71	72.43V	0.008uA	9.45mΩ
72	72.18V	0.010uA	9.21mΩ
73	69.90V	0.011uA	9.37mΩ
74	70.95V	0.011uA	8.40mΩ
75	70.24V	0.008uA	9.37mΩ
76	71.74V	0.008uA	8.32mΩ
77	72.07V	0.006uA	9.51mΩ

Made By: King Huang

Approval: Peter Yang

SeCoS Corporation

High Temperature Reverse Bias Test Data

Report No : T150630-023
Part No : SPR40N06
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)DSS > 60V@ID=250μA ；IDSS < 1μA@VDS=60V
RDS(ON) < 12mΩ@VGS=10V, ID=20A
Test Condition: 150 ± 5℃, 80%VR, T = 1000 hrs
Test Date: 2015.05.04 ~ 2015.06.16
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	71.85V	0.009uA	8.51mΩ	71.46V	0.009uA	9.38mΩ
2	70.02V	0.010uA	9.28mΩ	72.12V	0.007uA	8.57mΩ
3	71.30V	0.011uA	9.39mΩ	70.84V	0.010uA	8.44mΩ
4	69.86V	0.007uA	9.02mΩ	69.90V	0.011uA	8.87mΩ
5	72.34V	0.010uA	8.78mΩ	71.92V	0.006uA	9.58mΩ
6	72.37V	0.009uA	9.25mΩ	70.19V	0.006uA	9.07mΩ
7	72.32V	0.010uA	8.47mΩ	72.36V	0.010uA	8.26mΩ
8	70.18V	0.011uA	8.29mΩ	71.75V	0.010uA	9.55mΩ
9	70.40V	0.008uA	9.38mΩ	71.47V	0.010uA	8.38mΩ
10	70.44V	0.011uA	9.48mΩ	70.49V	0.011uA	8.82mΩ
11	72.03V	0.008uA	8.13mΩ	72.58V	0.009uA	8.99mΩ
12	70.33V	0.007uA	9.03mΩ	71.14V	0.007uA	8.84mΩ
13	69.79V	0.011uA	8.27mΩ	70.38V	0.010uA	8.70mΩ
13	71.74V	0.007uA	9.20mΩ	70.32V	0.009uA	8.32mΩ
15	70.72V	0.010uA	8.91mΩ	71.79V	0.006uA	8.97mΩ
16	71.70V	0.010uA	8.63mΩ	70.72V	0.009uA	9.21mΩ
17	72.57V	0.009uA	9.47mΩ	70.41V	0.007uA	8.39mΩ
18	72.10V	0.011uA	9.53mΩ	70.01V	0.010uA	8.75mΩ
19	70.63V	0.010uA	8.97mΩ	72.50V	0.008uA	8.65mΩ
20	70.67V	0.007uA	8.89mΩ	70.11V	0.008uA	8.20mΩ
21	70.55V	0.010uA	8.85mΩ	72.47V	0.008uA	8.35mΩ
22	71.20V	0.009uA	9.20mΩ	71.75V	0.007uA	8.89mΩ
23	69.83V	0.006uA	8.82mΩ	71.44V	0.009uA	9.00mΩ
24	70.24V	0.007uA	8.46mΩ	71.95V	0.008uA	8.18mΩ
25	72.69V	0.009uA	9.47mΩ	70.93V	0.008uA	9.29mΩ
26	70.33V	0.010uA	8.44mΩ	71.75V	0.011uA	8.81mΩ
27	71.21V	0.008uA	9.23mΩ	71.79V	0.010uA	9.58mΩ
28	72.50V	0.008uA	8.19mΩ	72.46V	0.010uA	8.10mΩ
29	70.23V	0.009uA	8.99mΩ	72.11V	0.010uA	8.30mΩ

SeCoS Corporation

High Temperature Reverse Bias Test Data

Report No : T150630-023
Part No : SPR40N06
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)DSS > 60V@ID=250μA ；IDSS < 1μA@VDS=60V
RDS(ON) < 12mΩ@VGS=10V, ID=20A
Test Condition: 150 ± 5℃, 80%VR, T = 1000 hrs
Test Date: 2015.05.04 ~ 2015.06.16
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	72.69V	0.009uA	8.36mΩ	70.89V	0.011uA	8.79mΩ
31	69.75V	0.007uA	8.20mΩ	70.75V	0.011uA	9.16mΩ
32	72.41V	0.008uA	9.14mΩ	71.71V	0.006uA	8.27mΩ
33	69.75V	0.009uA	8.72mΩ	71.86V	0.011uA	8.76mΩ
34	72.07V	0.010uA	9.58mΩ	71.48V	0.006uA	9.11mΩ
35	70.41V	0.011uA	8.93mΩ	70.50V	0.008uA	8.65mΩ
36	70.82V	0.011uA	8.34mΩ	69.96V	0.009uA	8.88mΩ
37	70.80V	0.007uA	8.58mΩ	69.77V	0.007uA	8.30mΩ
38	70.90V	0.011uA	9.08mΩ	71.58V	0.011uA	8.45mΩ
39	70.77V	0.010uA	8.42mΩ	70.84V	0.006uA	8.95mΩ
40	71.51V	0.010uA	8.89mΩ	71.72V	0.010uA	9.29mΩ
41	69.80V	0.010uA	8.95mΩ	71.44V	0.010uA	8.13mΩ
42	70.17V	0.009uA	9.16mΩ	71.41V	0.006uA	8.39mΩ
43	71.25V	0.010uA	8.42mΩ	70.72V	0.011uA	8.63mΩ
44	70.55V	0.006uA	8.90mΩ	71.57V	0.009uA	9.58mΩ
45	72.37V	0.011uA	8.68mΩ	70.38V	0.006uA	8.89mΩ
46	71.86V	0.010uA	9.48mΩ	72.53V	0.011uA	9.17mΩ
47	72.31V	0.006uA	9.40mΩ	71.71V	0.009uA	8.52mΩ
48	70.35V	0.008uA	9.20mΩ	70.78V	0.008uA	9.02mΩ
49	72.32V	0.007uA	9.59mΩ	72.46V	0.006uA	9.04mΩ
50	71.81V	0.007uA	9.04mΩ	70.18V	0.006uA	8.78mΩ
51	71.68V	0.010uA	8.68mΩ	71.08V	0.011uA	8.35mΩ
52	71.21V	0.010uA	8.95mΩ	72.69V	0.006uA	8.51mΩ
53	71.26V	0.008uA	8.55mΩ	71.00V	0.008uA	9.25mΩ
54	70.08V	0.011uA	9.57mΩ	71.39V	0.007uA	8.79mΩ
55	70.52V	0.006uA	8.67mΩ	71.09V	0.008uA	8.22mΩ
56	69.85V	0.009uA	9.02mΩ	70.49V	0.010uA	8.50mΩ
57	72.50V	0.007uA	9.16mΩ	72.19V	0.007uA	8.75mΩ
58	72.24V	0.010uA	8.20mΩ	72.02V	0.007uA	8.30mΩ

SeCoS Corporation

High Temperature Reverse Bias Test Data

Report No : T150630-023
Part No : SPR40N06
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)DSS > 60V@ID=250μA ；IDSS < 1μA@VDS=60V
RDS(ON) < 12mΩ@VGS=10V, ID=20A
Test Condition: 150 ± 5℃, 80%VR, T = 1000 hrs
Test Date: 2015.05.04 ~ 2015.06.16
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	71.16V	0.010uA	9.07mΩ	69.99V	0.009uA	8.17mΩ
60	71.13V	0.009uA	9.00mΩ	69.91V	0.007uA	8.79mΩ
61	69.99V	0.007uA	8.27mΩ	71.84V	0.009uA	8.28mΩ
62	71.62V	0.011uA	8.41mΩ	70.76V	0.006uA	8.29mΩ
63	70.14V	0.009uA	8.06mΩ	70.58V	0.007uA	8.10mΩ
64	71.44V	0.011uA	8.25mΩ	71.50V	0.006uA	8.88mΩ
65	71.22V	0.011uA	9.28mΩ	69.88V	0.008uA	8.10mΩ
66	72.40V	0.011uA	9.60mΩ	72.61V	0.007uA	9.21mΩ
67	71.75V	0.009uA	9.50mΩ	71.09V	0.007uA	9.48mΩ
68	71.32V	0.008uA	9.13mΩ	70.02V	0.008uA	9.16mΩ
69	72.41V	0.009uA	8.65mΩ	70.30V	0.006uA	8.07mΩ
70	70.46V	0.009uA	8.50mΩ	70.23V	0.011uA	8.19mΩ
71	72.51V	0.007uA	9.52mΩ	71.03V	0.008uA	9.61mΩ
72	71.83V	0.006uA	8.17mΩ	71.92V	0.006uA	9.57mΩ
73	72.65V	0.011uA	9.18mΩ	72.63V	0.010uA	8.59mΩ
74	71.79V	0.008uA	8.44mΩ	72.08V	0.008uA	9.01mΩ
75	71.84V	0.011uA	8.69mΩ	71.40V	0.010uA	8.46mΩ
76	70.30V	0.007uA	9.47mΩ	70.70V	0.007uA	8.60mΩ
77	70.72V	0.008uA	8.49mΩ	69.80V	0.006uA	9.57mΩ

Made By: King Huang

Approval: Peter Yang

SeCoS Corporation

High Temperature Storage Life Test Data

Report No : T150630-023
Part No : SPR40N06
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)DSS > 60V@ID=250μA ；IDSS < 1μA@VDS=60V
RDS(ON) < 12mΩ@VGS=10V, ID=20A
Test Condition: 150℃, 1000Hrs
Test Date: 2015.05.04 ~ 2015.06.16
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	72.30V	0.008uA	9.49mΩ	70.47V	0.011uA	9.39mΩ
2	71.61V	0.010uA	9.44mΩ	70.57V	0.006uA	8.84mΩ
3	72.13V	0.006uA	9.20mΩ	70.38V	0.010uA	8.99mΩ
4	70.54V	0.010uA	8.90mΩ	72.00V	0.007uA	8.77mΩ
5	72.10V	0.006uA	8.60mΩ	71.47V	0.011uA	9.52mΩ
6	72.33V	0.008uA	9.58mΩ	72.48V	0.007uA	9.41mΩ
7	70.32V	0.010uA	8.17mΩ	72.13V	0.010uA	8.51mΩ
8	71.52V	0.007uA	8.47mΩ	70.11V	0.007uA	8.93mΩ
9	71.31V	0.010uA	9.44mΩ	72.24V	0.007uA	8.06mΩ
10	71.27V	0.011uA	9.31mΩ	69.80V	0.009uA	9.27mΩ
11	69.94V	0.011uA	8.93mΩ	69.96V	0.008uA	9.15mΩ
12	72.48V	0.006uA	9.26mΩ	69.94V	0.010uA	9.05mΩ
13	71.32V	0.009uA	9.07mΩ	71.97V	0.006uA	9.08mΩ
13	72.15V	0.011uA	8.95mΩ	71.52V	0.010uA	9.33mΩ
15	70.75V	0.008uA	9.56mΩ	71.01V	0.008uA	8.18mΩ
16	70.51V	0.008uA	9.20mΩ	71.01V	0.006uA	8.15mΩ
17	70.92V	0.007uA	9.55mΩ	71.22V	0.007uA	9.36mΩ
18	70.44V	0.009uA	8.14mΩ	70.28V	0.011uA	9.49mΩ
19	72.08V	0.008uA	8.98mΩ	70.42V	0.009uA	9.59mΩ
20	72.44V	0.008uA	9.53mΩ	70.39V	0.010uA	9.36mΩ
21	70.56V	0.011uA	9.05mΩ	71.22V	0.007uA	8.36mΩ
22	70.28V	0.007uA	9.21mΩ	70.84V	0.009uA	9.04mΩ
23	71.20V	0.008uA	9.01mΩ	71.79V	0.009uA	8.08mΩ
24	69.93V	0.006uA	9.54mΩ	71.47V	0.011uA	8.18mΩ
25	72.59V	0.006uA	8.96mΩ	70.25V	0.011uA	8.30mΩ
26	71.84V	0.008uA	8.57mΩ	70.95V	0.009uA	8.26mΩ
27	71.14V	0.005uA	9.28mΩ	71.44V	0.010uA	9.02mΩ
28	70.20V	0.007uA	8.14mΩ	70.21V	0.010uA	8.88mΩ
29	71.47V	0.010uA	8.52mΩ	72.00V	0.008uA	9.02mΩ

SeCoS Corporation

High Temperature Storage Life Test Data

Report No : T150630-023
Part No : SPR40N06
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)DSS > 60V@ID=250μA ；IDSS < 1μA@VDS=60V
RDS(ON) < 12mΩ@VGS=10V, ID=20A
Test Condition: 150℃, 1000Hrs
Test Date: 2015.05.04 ~ 2015.06.16
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	72.34V	0.009uA	9.51mΩ	72.47V	0.006uA	9.11mΩ
31	71.70V	0.009uA	8.82mΩ	72.48V	0.008uA	9.12mΩ
32	70.30V	0.007uA	8.87mΩ	70.46V	0.006uA	8.50mΩ
33	70.66V	0.007uA	8.63mΩ	72.29V	0.010uA	8.35mΩ
34	72.29V	0.011uA	8.40mΩ	71.11V	0.011uA	8.32mΩ
35	70.73V	0.011uA	9.36mΩ	72.70V	0.006uA	8.60mΩ
36	72.68V	0.007uA	8.37mΩ	71.12V	0.006uA	8.73mΩ
37	72.15V	0.011uA	8.89mΩ	70.17V	0.009uA	8.57mΩ
38	70.86V	0.011uA	8.91mΩ	70.92V	0.009uA	9.00mΩ
39	71.94V	0.006uA	8.28mΩ	71.20V	0.009uA	8.84mΩ
40	70.86V	0.007uA	9.13mΩ	70.26V	0.009uA	9.56mΩ
41	72.53V	0.008uA	8.60mΩ	71.15V	0.006uA	9.02mΩ
42	70.70V	0.010uA	8.63mΩ	71.90V	0.009uA	9.60mΩ
43	69.87V	0.007uA	9.33mΩ	72.20V	0.009uA	9.13mΩ
44	70.53V	0.009uA	9.28mΩ	70.28V	0.007uA	8.49mΩ
45	72.23V	0.008uA	9.59mΩ	70.69V	0.011uA	8.25mΩ
46	70.17V	0.011uA	9.13mΩ	72.50V	0.009uA	9.11mΩ
47	71.72V	0.009uA	9.40mΩ	70.43V	0.009uA	8.82mΩ
48	71.09V	0.008uA	9.22mΩ	71.91V	0.006uA	9.46mΩ
49	72.10V	0.008uA	8.30mΩ	69.99V	0.010uA	9.52mΩ
50	72.03V	0.011uA	8.87mΩ	72.34V	0.009uA	9.10mΩ
51	72.18V	0.008uA	8.31mΩ	69.85V	0.010uA	8.59mΩ
52	70.38V	0.011uA	8.45mΩ	72.07V	0.008uA	8.14mΩ
53	70.13V	0.010uA	8.36mΩ	69.90V	0.006uA	9.48mΩ
54	70.12V	0.008uA	8.09mΩ	69.81V	0.010uA	8.54mΩ
55	70.93V	0.011uA	8.91mΩ	70.04V	0.009uA	9.13mΩ
56	70.65V	0.010uA	9.07mΩ	71.22V	0.007uA	9.40mΩ
57	72.67V	0.011uA	9.28mΩ	71.62V	0.008uA	8.50mΩ
58	71.44V	0.005uA	8.64mΩ	71.36V	0.009uA	9.44mΩ

SeCoS Corporation

High Temperature Storage Life Test Data

Report No : T150630-023
Part No : SPR40N06
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)DSS > 60V@ID=250μA ；IDSS < 1μA@VDS=60V
RDS(ON) < 12mΩ@VGS=10V, ID=20A
Test Condition: 150℃, 1000Hrs
Test Date: 2015.05.04 ~ 2015.06.16
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	72.58V	0.006uA	8.88mΩ	71.06V	0.008uA	8.17mΩ
60	70.04V	0.009uA	8.71mΩ	70.12V	0.007uA	8.85mΩ
61	71.12V	0.010uA	9.58mΩ	70.59V	0.007uA	8.26mΩ
62	72.46V	0.010uA	9.55mΩ	71.82V	0.010uA	8.38mΩ
63	72.05V	0.009uA	9.06mΩ	71.81V	0.010uA	9.59mΩ
64	71.02V	0.008uA	8.33mΩ	70.18V	0.008uA	8.50mΩ
65	71.17V	0.007uA	9.53mΩ	72.37V	0.009uA	8.90mΩ
66	69.79V	0.010uA	8.40mΩ	70.02V	0.010uA	8.45mΩ
67	69.84V	0.006uA	8.65mΩ	70.52V	0.008uA	8.29mΩ
68	72.11V	0.006uA	8.17mΩ	70.82V	0.006uA	9.62mΩ
69	70.92V	0.006uA	8.16mΩ	70.64V	0.011uA	8.97mΩ
70	71.21V	0.010uA	9.37mΩ	70.89V	0.007uA	8.09mΩ
71	72.45V	0.011uA	8.18mΩ	72.03V	0.008uA	9.30mΩ
72	71.29V	0.009uA	8.52mΩ	70.45V	0.011uA	9.44mΩ
73	69.80V	0.011uA	8.04mΩ	70.70V	0.010uA	8.74mΩ
74	70.31V	0.008uA	9.32mΩ	70.94V	0.010uA	8.16mΩ
75	70.69V	0.007uA	8.32mΩ	72.55V	0.009uA	9.43mΩ
76	71.55V	0.007uA	8.04mΩ	69.94V	0.010uA	9.45mΩ
77	70.81V	0.009uA	8.62mΩ	71.25V	0.009uA	9.36mΩ

Made By: King Huang

Approval: Peter Yang

SeCoS Corporation

Pressure Cooker Test Data

Report No : T150630-023
Part No : SPR40N06
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)DSS > 60V@ID=250μA ；IDSS < 1μA@VDS=60V
RDS(ON) < 12mΩ@VGS=10V, ID=20A
Test Condition: 121℃, 100%RH, 29.7PSIG, 168Hrs
Test Date: 2015.05.11 ~ 2015.05.19
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	69.83V	0.006uA	8.52mΩ	72.48V	0.006uA	8.96mΩ
2	72.12V	0.008uA	8.17mΩ	71.98V	0.008uA	8.63mΩ
3	71.63V	0.009uA	9.07mΩ	72.63V	0.011uA	8.42mΩ
4	70.70V	0.008uA	8.68mΩ	72.08V	0.008uA	8.57mΩ
5	72.02V	0.007uA	8.74mΩ	72.51V	0.007uA	9.49mΩ
6	72.35V	0.008uA	8.48mΩ	69.78V	0.011uA	9.13mΩ
7	71.89V	0.010uA	8.39mΩ	71.76V	0.011uA	8.63mΩ
8	71.76V	0.011uA	9.17mΩ	71.15V	0.011uA	8.11mΩ
9	70.31V	0.009uA	9.20mΩ	72.07V	0.010uA	8.69mΩ
10	70.07V	0.007uA	8.44mΩ	71.73V	0.010uA	9.11mΩ
11	72.64V	0.007uA	9.38mΩ	70.75V	0.010uA	8.70mΩ
12	70.30V	0.008uA	8.83mΩ	72.24V	0.006uA	9.42mΩ
13	72.63V	0.011uA	8.25mΩ	72.06V	0.011uA	8.63mΩ
13	71.08V	0.007uA	8.79mΩ	72.57V	0.007uA	8.50mΩ
15	72.44V	0.009uA	9.04mΩ	70.16V	0.006uA	9.44mΩ
16	70.60V	0.007uA	8.13mΩ	70.08V	0.007uA	9.18mΩ
17	71.06V	0.006uA	8.95mΩ	71.90V	0.006uA	9.50mΩ
18	72.48V	0.007uA	9.05mΩ	72.65V	0.011uA	9.40mΩ
19	71.56V	0.006uA	8.80mΩ	69.75V	0.010uA	8.91mΩ
20	69.83V	0.007uA	9.44mΩ	70.17V	0.007uA	8.71mΩ
21	72.36V	0.010uA	8.71mΩ	69.96V	0.009uA	8.16mΩ
22	71.50V	0.007uA	8.32mΩ	70.49V	0.009uA	8.81mΩ
23	71.10V	0.008uA	9.13mΩ	70.92V	0.009uA	8.50mΩ
24	71.45V	0.011uA	8.12mΩ	70.24V	0.011uA	9.37mΩ
25	72.39V	0.007uA	8.26mΩ	70.12V	0.009uA	8.67mΩ
26	72.38V	0.008uA	9.03mΩ	70.56V	0.009uA	9.23mΩ
27	70.09V	0.008uA	9.16mΩ	72.42V	0.010uA	9.23mΩ
28	72.70V	0.009uA	9.22mΩ	71.57V	0.006uA	8.47mΩ
29	70.47V	0.006uA	8.22mΩ	70.46V	0.006uA	9.45mΩ

SeCoS Corporation

Pressure Cooker Test Data

Report No : T150630-023
Part No : SPR40N06
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)DSS > 60V@ID=250μA ；IDSS < 1μA@VDS=60V
RDS(ON) < 12mΩ@VGS=10V, ID=20A
Test Condition: 121℃, 100%RH, 29.7PSIG, 168Hrs
Test Date: 2015.05.11 ~ 2015.05.19
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	70.42V	0.009uA	8.84mΩ	72.42V	0.009uA	8.83mΩ
31	71.34V	0.007uA	9.44mΩ	72.41V	0.009uA	8.05mΩ
32	70.67V	0.009uA	9.49mΩ	69.82V	0.005uA	9.35mΩ
33	71.87V	0.009uA	8.59mΩ	70.05V	0.009uA	8.41mΩ
34	72.04V	0.011uA	9.14mΩ	71.77V	0.007uA	8.04mΩ
35	70.80V	0.006uA	9.18mΩ	69.97V	0.009uA	8.43mΩ
36	71.19V	0.006uA	8.52mΩ	71.62V	0.007uA	9.60mΩ
37	70.75V	0.008uA	8.04mΩ	71.73V	0.009uA	9.40mΩ
38	71.18V	0.009uA	9.09mΩ	70.71V	0.007uA	8.15mΩ
39	71.30V	0.007uA	9.02mΩ	72.41V	0.008uA	9.13mΩ
40	70.52V	0.011uA	8.23mΩ	71.70V	0.009uA	8.34mΩ
41	72.05V	0.008uA	9.55mΩ	71.48V	0.006uA	8.76mΩ
42	71.46V	0.010uA	9.32mΩ	70.58V	0.011uA	8.29mΩ
43	71.76V	0.007uA	8.41mΩ	71.53V	0.009uA	8.60mΩ
44	72.63V	0.006uA	9.16mΩ	71.58V	0.008uA	8.20mΩ
45	71.79V	0.007uA	8.53mΩ	72.35V	0.007uA	9.34mΩ
46	70.89V	0.011uA	9.14mΩ	71.20V	0.006uA	8.39mΩ
47	71.87V	0.006uA	8.95mΩ	70.69V	0.010uA	8.19mΩ
48	72.57V	0.007uA	8.09mΩ	72.37V	0.010uA	9.30mΩ
49	70.45V	0.007uA	9.21mΩ	70.12V	0.005uA	9.09mΩ
50	71.94V	0.010uA	8.22mΩ	70.66V	0.009uA	9.24mΩ
51	72.28V	0.008uA	8.33mΩ	70.94V	0.006uA	8.66mΩ
52	72.24V	0.008uA	9.07mΩ	70.05V	0.006uA	8.15mΩ
53	70.41V	0.010uA	8.29mΩ	69.80V	0.009uA	8.99mΩ
54	70.50V	0.009uA	9.27mΩ	71.57V	0.006uA	8.66mΩ
55	72.67V	0.008uA	9.32mΩ	70.15V	0.009uA	9.49mΩ
56	69.76V	0.008uA	9.08mΩ	70.85V	0.008uA	8.38mΩ
57	70.54V	0.010uA	8.95mΩ	69.89V	0.006uA	9.37mΩ
58	70.74V	0.007uA	8.90mΩ	70.01V	0.010uA	8.35mΩ

SeCoS Corporation

Pressure Cooker Test Data

Report No : T150630-023
Part No : SPR40N06
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)DSS > 60V@ID=250μA ；IDSS < 1μA@VDS=60V
RDS(ON) < 12mΩ@VGS=10V, ID=20A
Test Condition: 121℃, 100%RH, 29.7PSIG, 168Hrs
Test Date: 2015.05.11 ~ 2015.05.19
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	70.14V	0.008uA	8.25mΩ	72.05V	0.010uA	8.03mΩ
60	70.97V	0.008uA	8.43mΩ	71.05V	0.007uA	8.23mΩ
61	70.43V	0.006uA	8.94mΩ	69.88V	0.010uA	9.46mΩ
62	72.11V	0.010uA	8.85mΩ	70.26V	0.009uA	8.24mΩ
63	71.94V	0.009uA	9.47mΩ	71.14V	0.009uA	8.04mΩ
64	69.95V	0.011uA	8.80mΩ	71.64V	0.007uA	9.49mΩ
65	70.44V	0.007uA	9.44mΩ	70.95V	0.008uA	9.09mΩ
66	71.68V	0.007uA	9.12mΩ	71.33V	0.010uA	8.22mΩ
67	71.71V	0.007uA	9.37mΩ	72.09V	0.011uA	9.22mΩ
68	70.86V	0.010uA	9.35mΩ	70.74V	0.008uA	8.37mΩ
69	70.04V	0.011uA	8.18mΩ	70.25V	0.008uA	9.16mΩ
70	72.04V	0.010uA	8.17mΩ	71.32V	0.006uA	9.61mΩ
71	72.61V	0.008uA	8.75mΩ	70.03V	0.005uA	8.53mΩ
72	70.34V	0.006uA	9.17mΩ	72.10V	0.009uA	8.35mΩ
73	70.58V	0.008uA	8.06mΩ	72.32V	0.009uA	9.26mΩ
74	71.29V	0.010uA	9.17mΩ	71.61V	0.008uA	8.96mΩ
75	70.85V	0.007uA	8.39mΩ	71.65V	0.008uA	9.33mΩ
76	71.62V	0.008uA	8.38mΩ	70.63V	0.010uA	9.12mΩ
77	72.60V	0.011uA	8.99mΩ	72.26V	0.009uA	9.03mΩ

Made By: King Huang

Approval: Peter Yang

SeCoS Corporation

Temperature Cycle Test Data

Report No : T150630-023
Part No : SPR40N06
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)DSS > 60V@ID=250μA ；IDSS < 1μA@VDS=60V
RDS(ON) < 12mΩ@VGS=10V, ID=20A
Test Condition: -55℃/30min, 150℃/30min, for1000 Cycle
Test Date: 2015.05.08 ~ 2015.06.29
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	70.87V	0.009uA	9.31mΩ	70.46V	0.009uA	8.47mΩ
2	72.40V	0.009uA	8.36mΩ	70.81V	0.010uA	8.96mΩ
3	69.92V	0.007uA	9.26mΩ	70.63V	0.007uA	8.74mΩ
4	72.63V	0.011uA	8.87mΩ	71.36V	0.008uA	9.31mΩ
5	71.28V	0.007uA	9.04mΩ	71.30V	0.010uA	9.59mΩ
6	71.73V	0.010uA	8.14mΩ	69.83V	0.006uA	8.28mΩ
7	70.43V	0.009uA	8.46mΩ	70.02V	0.006uA	9.39mΩ
8	72.36V	0.007uA	9.22mΩ	70.93V	0.006uA	8.89mΩ
9	71.29V	0.008uA	9.01mΩ	70.94V	0.009uA	8.08mΩ
10	71.46V	0.011uA	9.40mΩ	72.45V	0.007uA	8.95mΩ
11	71.34V	0.009uA	8.05mΩ	70.78V	0.009uA	9.41mΩ
12	71.84V	0.007uA	9.24mΩ	71.89V	0.011uA	9.43mΩ
13	70.68V	0.008uA	8.29mΩ	72.60V	0.006uA	8.13mΩ
13	70.31V	0.010uA	8.54mΩ	71.78V	0.010uA	8.91mΩ
15	70.78V	0.007uA	8.64mΩ	71.13V	0.008uA	8.49mΩ
16	72.17V	0.008uA	9.19mΩ	69.92V	0.006uA	9.29mΩ
17	71.55V	0.011uA	8.64mΩ	71.92V	0.009uA	9.31mΩ
18	72.01V	0.011uA	8.57mΩ	72.36V	0.011uA	9.17mΩ
19	69.79V	0.008uA	9.47mΩ	70.06V	0.008uA	9.41mΩ
20	70.46V	0.006uA	9.13mΩ	70.08V	0.007uA	9.28mΩ
21	69.93V	0.010uA	8.28mΩ	71.08V	0.010uA	9.51mΩ
22	71.40V	0.009uA	8.66mΩ	72.62V	0.010uA	9.17mΩ
23	71.23V	0.010uA	8.97mΩ	71.99V	0.006uA	8.07mΩ
24	72.54V	0.008uA	8.26mΩ	71.42V	0.007uA	8.81mΩ
25	71.29V	0.006uA	9.17mΩ	72.15V	0.010uA	8.63mΩ
26	69.93V	0.010uA	9.31mΩ	70.96V	0.008uA	9.36mΩ
27	72.69V	0.006uA	8.93mΩ	69.98V	0.006uA	8.13mΩ
28	72.62V	0.010uA	9.45mΩ	71.30V	0.008uA	8.22mΩ
29	70.70V	0.006uA	9.39mΩ	72.54V	0.006uA	9.61mΩ

SeCoS Corporation

Temperature Cycle Test Data

Report No : T150630-023
Part No : SPR40N06
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)DSS > 60V@ID=250μA ；IDSS < 1μA@VDS=60V
RDS(ON) < 12mΩ@VGS=10V, ID=20A
Test Condition: -55℃/30min, 150℃/30min, for1000 Cycle
Test Date: 2015.05.08 ~ 2015.06.29
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	70.76V	0.009uA	9.04mΩ	72.43V	0.010uA	8.66mΩ
31	71.21V	0.011uA	8.68mΩ	71.99V	0.010uA	8.75mΩ
32	69.96V	0.011uA	8.61mΩ	70.64V	0.009uA	8.32mΩ
33	72.25V	0.010uA	8.98mΩ	72.43V	0.006uA	9.47mΩ
34	70.66V	0.010uA	8.68mΩ	70.76V	0.008uA	8.09mΩ
35	70.65V	0.008uA	8.62mΩ	72.68V	0.007uA	8.29mΩ
36	71.02V	0.007uA	9.10mΩ	70.05V	0.009uA	8.75mΩ
37	71.89V	0.010uA	8.27mΩ	71.86V	0.007uA	9.49mΩ
38	70.22V	0.010uA	9.10mΩ	71.43V	0.007uA	9.50mΩ
39	69.92V	0.009uA	9.36mΩ	71.06V	0.010uA	9.21mΩ
40	71.64V	0.006uA	8.42mΩ	71.86V	0.010uA	8.41mΩ
41	72.28V	0.006uA	9.50mΩ	70.45V	0.010uA	8.74mΩ
42	70.76V	0.006uA	9.10mΩ	70.80V	0.008uA	8.36mΩ
43	70.92V	0.009uA	8.53mΩ	71.08V	0.011uA	8.29mΩ
44	71.75V	0.007uA	9.56mΩ	70.16V	0.008uA	8.35mΩ
45	70.83V	0.007uA	8.29mΩ	72.38V	0.006uA	9.37mΩ
46	71.83V	0.007uA	9.57mΩ	71.80V	0.007uA	8.42mΩ
47	71.46V	0.006uA	8.92mΩ	71.81V	0.006uA	8.38mΩ
48	71.41V	0.009uA	9.10mΩ	71.33V	0.007uA	9.22mΩ
49	71.60V	0.008uA	8.19mΩ	72.30V	0.008uA	8.63mΩ
50	69.82V	0.010uA	8.54mΩ	72.00V	0.007uA	9.26mΩ
51	69.94V	0.011uA	9.34mΩ	71.22V	0.011uA	8.72mΩ
52	71.49V	0.009uA	8.79mΩ	71.23V	0.011uA	8.80mΩ
53	72.55V	0.011uA	8.55mΩ	70.90V	0.008uA	8.61mΩ
54	70.64V	0.009uA	8.46mΩ	70.61V	0.011uA	8.93mΩ
55	71.55V	0.008uA	9.25mΩ	71.10V	0.010uA	9.61mΩ
56	71.35V	0.006uA	9.05mΩ	71.28V	0.007uA	8.51mΩ
57	70.47V	0.006uA	8.82mΩ	70.94V	0.011uA	9.34mΩ
58	70.82V	0.011uA	8.97mΩ	71.90V	0.008uA	8.13mΩ

SeCoS Corporation

Temperature Cycle Test Data

Report No : T150630-023
Part No : SPR40N06
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)DSS > 60V@ID=250μA ；IDSS < 1μA@VDS=60V
RDS(ON) < 12mΩ@VGS=10V, ID=20A
Test Condition: -55℃/30min, 150℃/30min, for1000 Cycle
Test Date: 2015.05.08 ~ 2015.06.29
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	72.02V	0.010uA	8.15mΩ	70.83V	0.009uA	9.30mΩ
60	71.96V	0.007uA	8.13mΩ	69.86V	0.011uA	8.11mΩ
61	70.26V	0.010uA	8.51mΩ	71.09V	0.009uA	8.52mΩ
62	69.84V	0.010uA	8.89mΩ	72.02V	0.011uA	8.89mΩ
63	71.30V	0.009uA	8.89mΩ	71.44V	0.009uA	8.12mΩ
64	71.93V	0.010uA	9.48mΩ	70.22V	0.009uA	8.59mΩ
65	70.51V	0.009uA	9.20mΩ	70.89V	0.011uA	9.17mΩ
66	72.43V	0.009uA	8.19mΩ	70.58V	0.008uA	8.82mΩ
67	72.16V	0.010uA	8.78mΩ	70.48V	0.008uA	8.11mΩ
68	70.25V	0.009uA	9.14mΩ	72.09V	0.006uA	9.57mΩ
69	72.16V	0.010uA	9.02mΩ	71.03V	0.009uA	9.07mΩ
70	70.95V	0.011uA	8.81mΩ	72.17V	0.007uA	8.20mΩ
71	72.17V	0.006uA	8.12mΩ	71.77V	0.010uA	9.25mΩ
72	71.30V	0.006uA	9.51mΩ	70.27V	0.010uA	8.04mΩ
73	69.99V	0.007uA	9.52mΩ	69.98V	0.010uA	8.75mΩ
74	69.77V	0.008uA	9.41mΩ	70.33V	0.011uA	8.95mΩ
75	71.66V	0.009uA	9.01mΩ	71.29V	0.007uA	8.22mΩ
76	70.41V	0.006uA	9.45mΩ	71.09V	0.007uA	8.03mΩ
77	71.30V	0.007uA	9.39mΩ	72.40V	0.008uA	8.99mΩ

Made By: King Huang

Approval: Peter Yang

SeCoS Corporation

High Temperature High Humidity Test Data

Report No : T150630-023
Part No : SPR40N06
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)DSS > 60V@ID=250μA ；IDSS < 1μA@VDS=60V
RDS(ON) < 12mΩ@VGS=10V, ID=20A
Test Condition: 85±2℃, 85±5%RH, 1000Hrs
Test Date: 2015.05.11 ~ 2015.06.23
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	72.65V	0.008uA	9.41mΩ	70.61V	0.006uA	9.01mΩ
2	72.57V	0.010uA	8.11mΩ	71.38V	0.009uA	8.43mΩ
3	72.67V	0.011uA	8.46mΩ	70.91V	0.008uA	8.18mΩ
4	72.23V	0.007uA	8.98mΩ	71.74V	0.011uA	8.81mΩ
5	72.22V	0.007uA	8.24mΩ	71.14V	0.011uA	8.91mΩ
6	72.19V	0.008uA	9.34mΩ	72.34V	0.006uA	8.04mΩ
7	70.43V	0.009uA	8.85mΩ	70.78V	0.010uA	8.32mΩ
8	71.36V	0.011uA	9.12mΩ	71.85V	0.007uA	8.57mΩ
9	72.17V	0.007uA	8.38mΩ	70.49V	0.007uA	8.92mΩ
10	71.59V	0.010uA	9.17mΩ	72.39V	0.007uA	8.22mΩ
11	71.64V	0.011uA	9.06mΩ	71.77V	0.010uA	9.36mΩ
12	70.09V	0.007uA	8.82mΩ	71.63V	0.008uA	8.87mΩ
13	70.58V	0.008uA	9.55mΩ	72.57V	0.009uA	8.65mΩ
13	72.70V	0.010uA	8.97mΩ	71.92V	0.006uA	8.56mΩ
15	71.33V	0.008uA	9.42mΩ	71.10V	0.009uA	8.97mΩ
16	72.35V	0.008uA	8.97mΩ	70.68V	0.011uA	9.19mΩ
17	72.62V	0.010uA	8.30mΩ	71.63V	0.009uA	9.03mΩ
18	72.31V	0.009uA	8.65mΩ	71.30V	0.006uA	8.89mΩ
19	71.05V	0.010uA	9.02mΩ	71.31V	0.006uA	9.47mΩ
20	70.64V	0.011uA	8.18mΩ	70.05V	0.006uA	8.70mΩ
21	72.07V	0.005uA	8.85mΩ	71.99V	0.009uA	9.31mΩ
22	72.61V	0.011uA	9.60mΩ	70.42V	0.009uA	8.26mΩ
23	70.65V	0.007uA	9.35mΩ	71.73V	0.008uA	8.92mΩ
24	70.94V	0.011uA	8.09mΩ	71.99V	0.011uA	9.50mΩ
25	71.30V	0.009uA	8.69mΩ	70.42V	0.007uA	9.59mΩ
26	70.37V	0.007uA	8.81mΩ	69.96V	0.007uA	8.94mΩ
27	69.90V	0.009uA	8.51mΩ	72.45V	0.008uA	9.06mΩ
28	71.09V	0.011uA	8.05mΩ	71.89V	0.010uA	8.23mΩ
29	72.18V	0.005uA	9.53mΩ	72.68V	0.005uA	9.58mΩ

SeCoS Corporation

High Temperature High Humidity Test Data

Report No : T150630-023
Part No : SPR40N06
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)DSS > 60V@ID=250μA ；IDSS < 1μA@VDS=60V
RDS(ON) < 12mΩ@VGS=10V, ID=20A
Test Condition: 85±2℃, 85±5%RH, 1000Hrs
Test Date: 2015.05.11 ~ 2015.06.23
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	72.48V	0.006uA	8.38mΩ	70.39V	0.011uA	9.48mΩ
31	72.08V	0.010uA	8.27mΩ	69.86V	0.009uA	8.77mΩ
32	71.63V	0.009uA	9.11mΩ	70.92V	0.010uA	9.00mΩ
33	71.92V	0.009uA	8.18mΩ	71.04V	0.008uA	8.87mΩ
34	72.55V	0.008uA	8.04mΩ	72.18V	0.010uA	8.56mΩ
35	71.44V	0.008uA	9.31mΩ	71.44V	0.010uA	9.26mΩ
36	71.75V	0.007uA	8.28mΩ	71.23V	0.011uA	9.55mΩ
37	72.35V	0.006uA	9.52mΩ	69.86V	0.011uA	9.28mΩ
38	70.74V	0.008uA	8.09mΩ	70.88V	0.007uA	9.26mΩ
39	71.61V	0.006uA	8.46mΩ	70.30V	0.010uA	8.58mΩ
40	70.92V	0.011uA	8.25mΩ	71.54V	0.010uA	8.24mΩ
41	72.66V	0.006uA	8.44mΩ	70.07V	0.007uA	9.49mΩ
42	70.53V	0.007uA	8.49mΩ	72.24V	0.010uA	8.99mΩ
43	71.67V	0.009uA	8.85mΩ	69.96V	0.006uA	8.84mΩ
44	70.61V	0.006uA	8.13mΩ	72.23V	0.010uA	9.39mΩ
45	72.41V	0.008uA	8.12mΩ	71.13V	0.011uA	8.88mΩ
46	72.33V	0.011uA	9.06mΩ	71.48V	0.007uA	9.28mΩ
47	71.33V	0.011uA	9.60mΩ	70.86V	0.010uA	9.60mΩ
48	71.30V	0.011uA	9.46mΩ	72.13V	0.008uA	9.22mΩ
49	71.75V	0.009uA	8.84mΩ	71.01V	0.008uA	8.67mΩ
50	72.55V	0.011uA	8.18mΩ	70.09V	0.007uA	8.37mΩ
51	72.23V	0.008uA	8.35mΩ	70.01V	0.007uA	8.16mΩ
52	69.82V	0.010uA	9.30mΩ	71.34V	0.009uA	9.31mΩ
53	71.38V	0.006uA	9.46mΩ	70.58V	0.010uA	8.25mΩ
54	72.03V	0.011uA	8.73mΩ	70.74V	0.006uA	8.09mΩ
55	72.50V	0.007uA	9.57mΩ	72.45V	0.007uA	8.20mΩ
56	72.35V	0.007uA	8.85mΩ	71.95V	0.008uA	9.04mΩ
57	71.90V	0.006uA	8.03mΩ	72.11V	0.009uA	8.33mΩ
58	71.24V	0.008uA	8.83mΩ	70.38V	0.008uA	9.50mΩ

SeCoS Corporation

High Temperature High Humidity Test Data

Report No : T150630-023
Part No : SPR40N06
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)DSS > 60V@ID=250μA ；IDSS < 1μA@VDS=60V
RDS(ON) < 12mΩ@VGS=10V, ID=20A
Test Condition: 85±2℃, 85±5%RH, 1000Hrs
Test Date: 2015.05.11 ~ 2015.06.23
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	69.75V	0.010uA	9.17mΩ	71.93V	0.006uA	8.84mΩ
60	71.13V	0.010uA	8.25mΩ	70.03V	0.010uA	8.32mΩ
61	71.23V	0.007uA	8.29mΩ	70.43V	0.008uA	8.95mΩ
62	71.70V	0.009uA	8.75mΩ	70.87V	0.007uA	8.68mΩ
63	71.80V	0.008uA	9.22mΩ	71.75V	0.008uA	9.13mΩ
64	70.97V	0.006uA	9.15mΩ	71.27V	0.011uA	9.04mΩ
65	71.59V	0.008uA	9.15mΩ	70.85V	0.010uA	9.06mΩ
66	71.00V	0.008uA	8.55mΩ	70.82V	0.006uA	8.73mΩ
67	71.98V	0.008uA	8.49mΩ	72.49V	0.011uA	9.13mΩ
68	70.62V	0.009uA	8.95mΩ	70.68V	0.009uA	9.25mΩ
69	70.17V	0.010uA	8.49mΩ	70.76V	0.007uA	8.34mΩ
70	72.52V	0.008uA	9.18mΩ	71.72V	0.007uA	8.24mΩ
71	70.93V	0.008uA	8.78mΩ	71.77V	0.010uA	8.55mΩ
72	71.32V	0.008uA	8.76mΩ	72.41V	0.008uA	8.33mΩ
73	72.45V	0.007uA	9.11mΩ	71.07V	0.011uA	8.89mΩ
74	71.48V	0.009uA	8.22mΩ	70.25V	0.006uA	8.16mΩ
75	72.01V	0.007uA	9.15mΩ	70.34V	0.010uA	8.38mΩ
76	71.43V	0.010uA	9.00mΩ	70.76V	0.006uA	8.16mΩ
77	70.18V	0.007uA	8.11mΩ	70.83V	0.010uA	8.73mΩ

Made By: King Huang

Approval: Peter Yang

SeCoS Corporation

High Temperature High Humidity Reverse Bias Test Data

Report No : T150630-023
Part No : SPR40N06
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)DSS > 60V@ID=250μA ；IDSS < 1μA@VDS=60V
RDS(ON) < 12mΩ@VGS=10V, ID=20A
Test Condition: 85±2℃, 85±5%RH, 80%VR, 1000Hrs
Test Date: 2015.05.12 ~ 2015.06.24
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	72.40V	0.009uA	9.59mΩ	71.99V	0.007uA	8.86mΩ
2	70.97V	0.009uA	8.58mΩ	70.07V	0.005uA	8.26mΩ
3	70.02V	0.009uA	8.46mΩ	71.47V	0.006uA	8.10mΩ
4	70.28V	0.011uA	8.55mΩ	70.26V	0.006uA	8.83mΩ
5	72.44V	0.011uA	9.44mΩ	71.24V	0.010uA	9.43mΩ
6	71.15V	0.010uA	8.19mΩ	70.91V	0.008uA	9.39mΩ
7	72.12V	0.007uA	8.49mΩ	71.21V	0.009uA	9.43mΩ
8	70.80V	0.009uA	9.32mΩ	71.48V	0.007uA	8.78mΩ
9	70.46V	0.008uA	9.42mΩ	71.59V	0.008uA	9.54mΩ
10	71.24V	0.010uA	8.44mΩ	70.00V	0.009uA	9.07mΩ
11	71.68V	0.008uA	9.36mΩ	72.32V	0.006uA	8.68mΩ
12	71.87V	0.007uA	9.32mΩ	71.36V	0.006uA	8.95mΩ
13	72.64V	0.008uA	8.39mΩ	72.12V	0.011uA	8.91mΩ
13	71.85V	0.007uA	9.15mΩ	72.56V	0.008uA	8.33mΩ
15	72.39V	0.010uA	8.93mΩ	72.23V	0.007uA	8.84mΩ
16	70.68V	0.010uA	9.52mΩ	69.84V	0.006uA	8.80mΩ
17	70.74V	0.011uA	8.31mΩ	70.88V	0.008uA	8.83mΩ
18	72.17V	0.008uA	8.29mΩ	71.14V	0.006uA	9.29mΩ
19	71.46V	0.010uA	8.13mΩ	70.81V	0.009uA	8.75mΩ
20	71.04V	0.010uA	9.30mΩ	69.84V	0.008uA	8.16mΩ
21	70.76V	0.007uA	8.22mΩ	71.01V	0.010uA	8.72mΩ
22	71.76V	0.010uA	8.58mΩ	72.49V	0.009uA	9.48mΩ
23	71.27V	0.006uA	8.43mΩ	71.47V	0.011uA	9.35mΩ
24	70.72V	0.006uA	8.04mΩ	69.83V	0.009uA	8.73mΩ
25	70.08V	0.006uA	8.35mΩ	70.94V	0.006uA	8.30mΩ
26	72.00V	0.008uA	8.42mΩ	71.23V	0.006uA	8.19mΩ
27	70.88V	0.006uA	8.15mΩ	71.27V	0.006uA	8.20mΩ
28	71.48V	0.009uA	8.37mΩ	70.16V	0.010uA	8.51mΩ
29	70.63V	0.008uA	9.12mΩ	71.48V	0.009uA	9.38mΩ

SeCoS Corporation

High Temperature High Humidity Reverse Bias Test Data

Report No : T150630-023
Part No : SPR40N06
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)DSS > 60V@ID=250μA ；IDSS < 1μA@VDS=60V
RDS(ON) < 12mΩ@VGS=10V, ID=20A
Test Condition: 85±2℃, 85±5%RH, 80%VR, 1000Hrs
Test Date: 2015.05.12 ~ 2015.06.24
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	71.83V	0.006uA	9.52mΩ	72.15V	0.010uA	8.24mΩ
31	69.86V	0.006uA	8.87mΩ	72.65V	0.010uA	9.53mΩ
32	70.10V	0.008uA	9.01mΩ	72.60V	0.009uA	9.56mΩ
33	69.76V	0.007uA	8.80mΩ	69.83V	0.010uA	8.98mΩ
34	72.21V	0.009uA	8.58mΩ	70.28V	0.011uA	8.89mΩ
35	70.31V	0.007uA	8.64mΩ	72.05V	0.011uA	9.00mΩ
36	70.02V	0.008uA	8.33mΩ	71.12V	0.011uA	9.27mΩ
37	71.92V	0.006uA	9.33mΩ	72.45V	0.009uA	9.11mΩ
38	70.98V	0.009uA	8.87mΩ	72.60V	0.007uA	8.84mΩ
39	71.74V	0.011uA	8.18mΩ	71.39V	0.011uA	9.00mΩ
40	69.91V	0.008uA	8.92mΩ	70.29V	0.009uA	9.54mΩ
41	70.94V	0.006uA	8.03mΩ	70.24V	0.009uA	8.29mΩ
42	70.64V	0.010uA	9.24mΩ	71.76V	0.009uA	9.32mΩ
43	70.38V	0.010uA	8.11mΩ	70.73V	0.009uA	8.73mΩ
44	71.85V	0.006uA	8.46mΩ	69.75V	0.007uA	8.40mΩ
45	71.90V	0.009uA	9.18mΩ	70.54V	0.008uA	9.41mΩ
46	72.05V	0.009uA	9.23mΩ	70.50V	0.007uA	9.40mΩ
47	70.33V	0.007uA	8.76mΩ	71.32V	0.008uA	8.43mΩ
48	69.83V	0.010uA	9.15mΩ	71.18V	0.007uA	9.12mΩ
49	71.92V	0.007uA	8.73mΩ	71.69V	0.009uA	8.28mΩ
50	71.06V	0.011uA	8.82mΩ	71.02V	0.010uA	8.32mΩ
51	71.26V	0.011uA	8.32mΩ	70.81V	0.008uA	9.47mΩ
52	71.36V	0.007uA	9.57mΩ	70.44V	0.006uA	9.34mΩ
53	70.17V	0.009uA	8.66mΩ	72.14V	0.007uA	8.28mΩ
54	72.54V	0.011uA	8.03mΩ	72.56V	0.006uA	8.67mΩ
55	71.63V	0.007uA	8.10mΩ	72.62V	0.006uA	8.62mΩ
56	70.73V	0.011uA	9.28mΩ	72.19V	0.008uA	9.29mΩ
57	71.47V	0.011uA	8.43mΩ	70.39V	0.009uA	9.25mΩ
58	70.35V	0.007uA	9.50mΩ	70.70V	0.006uA	8.72mΩ

SeCoS Corporation

High Temperature High Humidity Reverse Bias Test Data

Report No : T150630-023
Part No : SPR40N06
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)DSS > 60V@ID=250μA ；IDSS < 1μA@VDS=60V
RDS(ON) < 12mΩ@VGS=10V, ID=20A
Test Condition: 85±2℃, 85±5%RH, 80%VR, 1000Hrs
Test Date: 2015.05.12 ~ 2015.06.24
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	71.23V	0.005uA	9.43mΩ	72.33V	0.007uA	9.26mΩ
60	71.40V	0.010uA	8.90mΩ	71.00V	0.008uA	9.31mΩ
61	72.11V	0.010uA	8.80mΩ	70.61V	0.008uA	8.98mΩ
62	71.28V	0.010uA	8.72mΩ	70.64V	0.006uA	9.16mΩ
63	71.05V	0.008uA	8.28mΩ	72.45V	0.011uA	9.36mΩ
64	71.12V	0.006uA	9.23mΩ	70.55V	0.007uA	8.61mΩ
65	72.07V	0.010uA	8.31mΩ	71.63V	0.008uA	8.25mΩ
66	70.22V	0.009uA	9.42mΩ	72.11V	0.010uA	8.76mΩ
67	70.61V	0.008uA	9.35mΩ	71.56V	0.008uA	8.46mΩ
68	70.53V	0.011uA	9.07mΩ	71.58V	0.008uA	8.45mΩ
69	70.35V	0.010uA	8.06mΩ	70.39V	0.008uA	8.78mΩ
70	72.19V	0.006uA	9.02mΩ	70.49V	0.009uA	8.50mΩ
71	71.27V	0.008uA	8.30mΩ	71.10V	0.005uA	8.83mΩ
72	69.87V	0.008uA	8.86mΩ	71.40V	0.006uA	9.38mΩ
73	72.54V	0.008uA	9.35mΩ	70.08V	0.008uA	8.42mΩ
74	69.88V	0.009uA	8.87mΩ	70.36V	0.007uA	8.40mΩ
75	72.19V	0.008uA	8.82mΩ	70.46V	0.006uA	8.98mΩ
76	71.06V	0.007uA	9.28mΩ	72.65V	0.007uA	9.62mΩ
77	72.49V	0.011uA	8.17mΩ	71.04V	0.008uA	8.94mΩ

Made By: King Huang

Approval: Peter Yang

SeCoS Corporation

Solderability Test Data

Report No : T150630-023
Part No : SPR40N06
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)DSS > 60V@ID=250μA ；IDSS < 1μA@VDS=60V
RDS(ON) < 12mΩ@VGS=10V, ID=20A
Test Condition: 245℃ ± 5℃, 5Sec
Test Date: 2015.06.30
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	71.85V	0.011uA	8.74mΩ	72.14V	0.008uA	9.59mΩ
2	71.68V	0.011uA	8.12mΩ	71.02V	0.007uA	8.26mΩ
3	71.06V	0.008uA	9.48mΩ	72.54V	0.007uA	9.45mΩ
4	71.53V	0.009uA	8.75mΩ	70.17V	0.006uA	8.67mΩ
5	69.94V	0.008uA	9.35mΩ	72.16V	0.007uA	8.16mΩ
6	72.49V	0.007uA	8.67mΩ	70.01V	0.007uA	8.42mΩ
7	69.95V	0.009uA	8.83mΩ	69.97V	0.006uA	8.40mΩ
8	71.81V	0.009uA	8.27mΩ	72.45V	0.010uA	8.81mΩ
9	71.29V	0.009uA	9.46mΩ	71.28V	0.007uA	8.73mΩ
10	72.45V	0.007uA	9.42mΩ	71.44V	0.008uA	8.26mΩ

Made By: King Huang

Approval: Peter Yang