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
2015-10-21C-07	2016/1/21	2015/10/21

PCN Classification	Product Category
Major	Transistor

Subject
Change the assembly house.

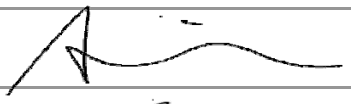
Affected Product(s)
BCP5551

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.

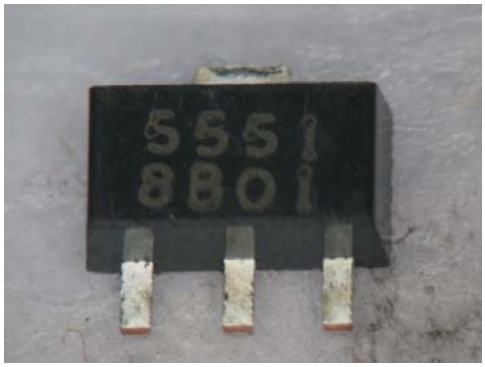
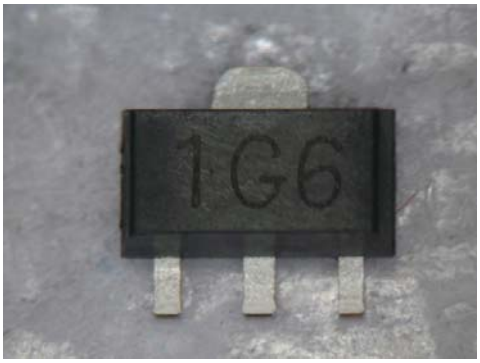
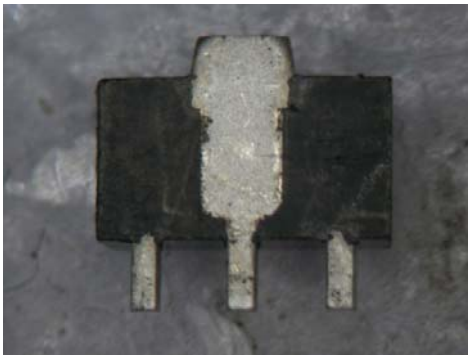
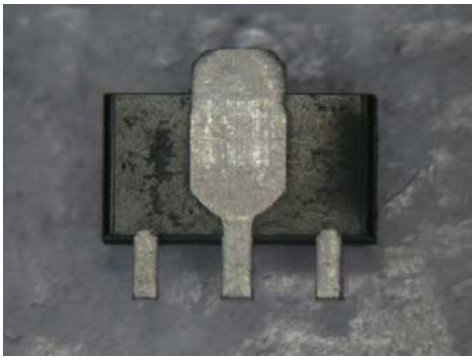
Impact(s)
None

Attachment(s)
Reliability Test Report.

Approval		
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		

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

Exterior comparison Chart	
Original	New
	
Top View	Top View
	
Back View	Back View

SeCoS Corporation

Reliability Testing Summary Report

Date: 2015/10/08 Document No.: SI15 -10-107

Test Item	P/N	Test Condition	(LTPD)	Sample Numbers	Allow Fall Numbers	Fall Numbers	Result
HTRB High Temp Reverse Bias	BCP5551	150 ± 5℃, 80%VR, T = 1000hrs		77	0	0	ACC
HTSL High Temperature Storage Life	BCP5551	150℃, T = 1000 hrs		77	0	0	ACC
PCT Pressure Cooker Test	BCP5551	121℃, 29.7PSIG, 168 hrs		77	0	0	ACC
TCT Temperature Cycle Test	BCP5551	-55℃/30min, 150℃/30min, For 1000 Cycle		77	0	0	ACC
THT High Temperature High Humidity Test	BCP5551	85 ± 2℃, RH=85±5%, 1000 hrs		77	0	0	ACC
H3TRB High Temper High Humidity Reverse Bies Test	BCP5551	85 ± 2℃, RH=85±5%, 1000 hrs		77	0	0	ACC
Solderability	BCP5551	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: 2015.08.17 Testing End Date: 2015.10.08

Tester: King Huang Approval: Peter Yang

SeCoS Corporation

Electrical Test Data

Report No : T151008-107
Part No : BCP5551
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)CEO > 160V@IC=1mA, IB=0 ； 80 < hFE < 250@VCE=5V, IC=10mA
VCE(sat) < 200mV@IC=50mA, IB=5mA
Test Condition: 25℃
Test Date: 2015.08.17
Test Standard : Specifications
Operator: Leo Hsia

Test Result: PASS

No	$V_{(BR)CEO}$ (V)	h_{FE}	$V_{CE(sat)}$ (mV)
1	224.0V	155.8	63.36mV
2	200.4V	145.7	63.23mV
3	210.6V	148.4	62.18mV
4	196.5V	153.7	63.09mV
5	198.0V	154.8	62.17mV
6	212.1V	150.8	65.93mV
7	214.4V	152.8	62.08mV
8	217.1V	157.6	62.58mV
9	190.7V	149.0	63.60mV
10	195.0V	152.4	64.39mV
11	199.0V	148.4	64.94mV
12	212.1V	147.6	66.55mV
13	205.6V	155.9	67.83mV
14	199.3V	151.0	66.43mV
15	215.6V	152.3	64.43mV
16	194.7V	157.2	65.59mV
17	224.5V	150.6	66.37mV
18	205.0V	156.3	63.40mV
19	219.1V	152.5	66.88mV
20	215.4V	155.8	66.85mV
21	211.8V	153.7	66.15mV
22	224.2V	150.8	62.14mV
23	225.6V	149.3	62.69mV
24	213.7V	153.8	65.18mV
25	205.2V	150.0	64.58mV
26	209.4V	149.0	66.61mV
27	195.3V	147.6	66.30mV
28	192.8V	152.0	67.15mV
29	193.0V	152.4	64.41mV
30	222.6V	157.5	65.07mV

SeCoS Corporation

Electrical Test Data

Report No : T151008-107
Part No : BCP5551
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)CEO > 160V@IC=1mA, IB=0 ； 80 < hFE < 250@VCE=5V, IC=10mA
VCE(sat) < 200mV@IC=50mA, IB=5mA
Test Condition: 25℃
Test Date: 2015.08.17
Test Standard : Specifications
Operator: Leo Hsia

Test Result: PASS

No	$V_{(BR)CEO}$ (V)	h_{FE}	$V_{CE(sat)}$ (mV)
31	222.3V	156.8	64.15mV
32	223.2V	146.5	62.86mV
33	206.6V	147.9	67.28mV
34	218.9V	145.8	66.39mV
35	193.9V	146.3	64.48mV
36	193.9V	149.0	66.11mV
37	207.5V	146.7	66.18mV
38	195.4V	148.6	63.92mV
39	212.5V	152.9	62.86mV
40	210.9V	152.5	65.13mV
41	214.6V	153.9	66.83mV
42	223.6V	154.9	63.93mV
43	201.3V	155.9	67.18mV
44	203.1V	149.9	66.61mV
45	200.3V	151.5	61.98mV
46	192.9V	149.1	62.81mV
47	205.8V	152.5	67.82mV
48	224.3V	149.9	64.91mV
49	228.5V	157.2	64.46mV
50	217.1V	148.0	66.97mV
51	193.7V	147.8	62.60mV
52	214.5V	147.4	66.02mV
53	224.8V	147.9	66.63mV
54	197.9V	151.9	67.27mV
55	204.8V	156.9	63.50mV
56	194.2V	152.3	65.09mV
57	220.4V	157.7	67.84mV
58	198.6V	146.0	66.95mV
59	204.4V	146.8	65.91mV
60	193.7V	147.3	66.86mV

SeCoS Corporation

Electrical Test Data

Report No : T151008-107
Part No : BCP5551
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)CEO > 160V@IC=1mA, IB=0 ； 80 < hFE < 250@VCE=5V, IC=10mA
VCE(sat) < 200mV@IC=50mA, IB=5mA
Test Condition: 25℃
Test Date: 2015.08.17
Test Standard : Specifications
Operator: Leo Hsia

Test Result: PASS

No	$V_{(BR)CEO}$ (V)	h_{FE}	$V_{CE(sat)}$ (mV)
61	224.4V	151.3	66.57mV
62	220.3V	154.7	67.83mV
63	216.1V	148.1	67.07mV
64	199.2V	154.1	66.75mV
65	201.1V	152.1	62.50mV
66	220.5V	157.5	67.89mV
67	194.6V	155.6	65.64mV
68	196.7V	153.3	62.48mV
69	224.6V	153.2	66.66mV
70	222.7V	155.7	66.63mV
71	212.8V	157.5	66.23mV
72	191.8V	149.7	64.08mV
73	196.5V	154.1	64.43mV
74	202.0V	156.2	64.19mV
75	193.6V	148.4	66.22mV
76	214.4V	145.8	67.67mV
77	207.5V	155.4	67.79mV

Made By: King Huang

Approval: Peter Yang

SeCoS Corporation

High Temperature Reverse Bias Test Data

Report No : T151008-107
Part No : BCP5551
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)CEO > 160V@IC=1mA, IB=0 ； 80 < hFE < 250@VCE=5V, IC=10mA
VCE(sat) < 200mV@IC=50mA, IB=5mA
Test Condition: 150 ± 5℃, 80%VR, T = 1000 hrs
Test Date: 2015.08.17 ~ 2015.09.29
Test Standard : JESD22 STANDARD Method-A108
Operator: Leo Hsia

Test Result: PASS

	Before			After		
No	$V_{(BR)CEO}$ (V)	h_{FE}	$V_{CE(sat)}$ (mV)	$V_{(BR)CEO}$ (V)	h_{FE}	$V_{CE(sat)}$ (mV)
1	207.7V	147.1	65.85mV	221.8V	149.8	67.44mV
2	227.8V	147.5	64.48mV	202.4V	150.7	63.77mV
3	218.5V	156.0	66.60mV	201.6V	152.5	67.40mV
4	210.4V	149.6	62.49mV	212.6V	149.9	63.74mV
5	226.2V	151.2	67.06mV	225.8V	148.3	64.97mV
6	220.3V	146.4	65.01mV	194.9V	156.0	64.85mV
7	222.4V	156.5	65.77mV	208.6V	154.1	67.37mV
8	207.1V	145.7	64.63mV	213.8V	151.4	66.01mV
9	208.5V	154.0	65.58mV	205.0V	153.0	67.79mV
10	223.9V	151.7	65.94mV	210.7V	149.1	63.73mV
11	193.8V	150.8	63.08mV	222.9V	148.8	64.02mV
12	199.5V	153.8	61.97mV	202.1V	150.6	65.79mV
13	227.1V	153.8	63.89mV	214.7V	153.3	65.80mV
14	192.4V	153.0	63.09mV	196.0V	157.7	63.68mV
15	199.4V	153.6	67.88mV	215.9V	147.9	62.26mV
16	220.6V	157.2	63.17mV	204.8V	151.6	65.81mV
17	192.0V	145.7	65.83mV	196.8V	156.9	65.28mV
18	203.4V	151.9	65.98mV	196.8V	145.4	64.82mV
19	225.2V	155.4	66.60mV	217.3V	149.8	67.53mV
20	208.1V	150.2	66.40mV	196.6V	153.3	66.88mV
21	193.4V	151.5	66.93mV	222.0V	150.5	63.35mV
22	218.3V	155.4	67.10mV	225.4V	153.1	62.28mV
23	203.4V	154.2	63.10mV	210.2V	152.1	66.14mV
24	204.0V	145.5	62.70mV	206.1V	152.8	66.90mV
25	213.5V	148.1	62.55mV	213.8V	152.1	67.48mV
26	222.9V	147.9	66.64mV	223.3V	155.3	66.26mV
27	191.7V	150.2	63.44mV	200.5V	147.9	64.06mV
28	218.8V	153.0	64.70mV	219.5V	155.7	67.00mV
29	192.8V	146.2	67.68mV	203.0V	152.7	66.51mV

SeCoS Corporation

High Temperature Reverse Bias Test Data

Report No : T151008-107
Part No : BCP5551
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)CEO > 160V@IC=1mA, IB=0 ； 80 < hFE < 250@VCE=5V, IC=10mA
VCE(sat) < 200mV@IC=50mA, IB=5mA
Test Condition: 150 ± 5℃, 80%VR, T = 1000 hrs
Test Date: 2015.08.17 ~ 2015.09.29
Test Standard : JESD22 STANDARD Method-A108
Operator: Leo Hsia

Test Result: PASS

	Before			After		
No	$V_{(BR)CEO}$ (V)	h_{FE}	$V_{CE(sat)}$ (mV)	$V_{(BR)CEO}$ (V)	h_{FE}	$V_{CE(sat)}$ (mV)
30	212.2V	155.6	63.31mV	223.5V	154.7	67.06mV
31	224.9V	156.0	65.28mV	223.4V	147.2	63.50mV
32	209.6V	148.5	67.56mV	197.5V	154.3	63.36mV
33	204.1V	154.2	62.16mV	228.4V	151.5	62.81mV
34	223.0V	155.7	67.50mV	198.3V	148.4	65.84mV
35	205.9V	149.7	63.60mV	223.7V	149.3	65.78mV
36	217.8V	153.6	61.90mV	220.9V	148.8	61.96mV
37	217.4V	148.9	63.54mV	202.4V	154.3	67.68mV
38	216.5V	154.6	67.24mV	197.5V	150.8	67.53mV
39	203.3V	149.1	63.58mV	192.6V	146.6	67.15mV
40	191.5V	146.2	65.31mV	213.8V	155.9	65.08mV
41	224.4V	147.8	63.64mV	225.2V	150.5	65.38mV
42	212.3V	149.1	66.46mV	225.5V	148.9	64.65mV
43	228.1V	155.2	64.73mV	207.2V	145.9	65.47mV
44	193.8V	149.5	66.14mV	216.3V	149.9	67.22mV
45	205.6V	153.2	65.42mV	220.0V	149.5	65.10mV
46	221.3V	151.6	66.41mV	219.3V	152.4	67.68mV
47	219.2V	156.9	64.35mV	203.6V	151.3	62.94mV
48	207.8V	150.2	63.43mV	211.0V	149.1	65.99mV
49	197.1V	150.9	63.54mV	206.7V	151.9	65.38mV
50	220.4V	146.6	66.24mV	194.8V	147.9	67.45mV
51	192.4V	152.6	65.42mV	204.3V	149.0	64.06mV
52	227.5V	156.5	63.31mV	202.9V	151.3	66.21mV
53	193.5V	147.9	63.54mV	200.8V	156.2	66.90mV
54	213.6V	152.8	61.93mV	221.3V	150.5	67.60mV
55	208.9V	156.7	63.28mV	209.5V	147.1	62.20mV
56	203.2V	152.0	64.94mV	212.6V	150.7	67.42mV
57	208.7V	150.3	66.43mV	197.4V	146.5	63.65mV
58	213.8V	155.8	62.59mV	218.4V	150.1	66.74mV

SeCoS Corporation

High Temperature Reverse Bias Test Data

Report No : T151008-107
Part No : BCP5551
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)CEO > 160V@IC=1mA, IB=0 ； 80 < hFE < 250@VCE=5V, IC=10mA
VCE(sat) < 200mV@IC=50mA, IB=5mA
Test Condition: 150 ± 5℃, 80%VR, T = 1000 hrs
Test Date: 2015.08.17 ~ 2015.09.29
Test Standard : JESD22 STANDARD Method-A108
Operator: Leo Hsia

Test Result: PASS

	Before			After		
No	$V_{(BR)CEO}$ (V)	h_{FE}	$V_{CE(sat)}$ (mV)	$V_{(BR)CEO}$ (V)	h_{FE}	$V_{CE(sat)}$ (mV)
59	226.4V	149.8	63.17mV	210.0V	147.2	63.42mV
60	224.6V	149.7	67.64mV	213.3V	147.2	64.67mV
61	200.9V	156.3	64.39mV	200.0V	146.4	66.88mV
62	196.7V	150.9	63.24mV	198.1V	146.6	64.70mV
63	209.2V	154.9	61.94mV	220.2V	154.9	65.36mV
64	224.0V	155.4	65.76mV	202.3V	156.1	63.14mV
65	205.0V	148.3	67.88mV	224.4V	157.7	66.89mV
66	206.1V	150.6	62.17mV	207.6V	157.3	62.81mV
67	203.7V	155.2	64.43mV	216.5V	157.0	66.09mV
68	197.8V	145.6	66.35mV	201.7V	154.2	65.20mV
69	214.8V	157.0	62.73mV	197.3V	156.2	65.56mV
70	215.7V	154.3	62.79mV	192.5V	153.4	64.64mV
71	193.1V	152.0	66.73mV	194.9V	154.9	62.46mV
72	220.2V	145.3	64.62mV	204.7V	155.2	62.77mV
73	211.9V	152.7	66.23mV	194.7V	148.6	66.57mV
74	195.8V	156.3	63.63mV	224.9V	153.0	62.88mV
75	199.6V	155.3	63.87mV	193.4V	152.2	62.14mV
76	201.5V	152.7	62.68mV	192.6V	147.5	64.45mV
77	206.0V	155.8	63.03mV	220.8V	145.7	66.65mV

Made By: King Huang

Approval: Peter Yang

SeCoS Corporation

High Temperature Storage Life Test Data

Report No : T151008-107
Part No : BCP5551
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)CEO > 160V@IC=1mA, IB=0 ； 80 < hFE < 250@VCE=5V, IC=10mA
VCE(sat) < 200mV@IC=50mA, IB=5mA
Test Condition: 150℃, 1000Hrs
Test Date: 2015.08.17 ~ 2015.09.29
Test Standard : JESD22 STANDARD Method-A103
Operator: Leo Hsia

Test Result: PASS

	Before			After		
No	$V_{(BR)CEO}$ (V)	h_{FE}	$V_{CE(sat)}$ (mV)	$V_{(BR)CEO}$ (V)	h_{FE}	$V_{CE(sat)}$ (mV)
1	194.3V	157.5	67.83mV	191.0V	155.3	66.65mV
2	214.2V	147.2	67.22mV	214.0V	155.4	62.22mV
3	212.8V	149.1	65.57mV	198.3V	152.4	62.94mV
4	193.9V	146.3	64.32mV	223.6V	150.3	66.70mV
5	207.3V	151.9	66.49mV	190.8V	154.4	66.01mV
6	210.6V	154.5	65.59mV	194.5V	148.2	62.29mV
7	203.2V	148.3	67.04mV	227.0V	151.6	67.34mV
8	224.3V	148.9	62.96mV	202.3V	151.2	63.65mV
9	221.0V	149.1	65.92mV	192.7V	152.1	62.21mV
10	227.7V	150.7	65.56mV	220.9V	147.9	64.59mV
11	192.0V	152.8	64.29mV	223.7V	155.2	63.89mV
12	199.2V	151.5	66.00mV	212.1V	149.0	61.98mV
13	193.6V	148.9	63.73mV	190.8V	155.1	66.66mV
14	206.9V	149.5	64.09mV	219.4V	157.1	67.42mV
15	191.1V	156.7	63.37mV	192.1V	148.6	62.53mV
16	224.8V	149.5	62.56mV	212.9V	157.7	67.84mV
17	193.6V	155.2	62.40mV	223.2V	149.6	64.86mV
18	220.7V	148.6	66.38mV	194.8V	157.0	62.94mV
19	207.3V	155.0	67.52mV	201.7V	152.2	64.01mV
20	193.8V	156.5	65.10mV	227.7V	147.4	63.04mV
21	222.2V	150.3	61.99mV	208.7V	155.3	64.24mV
22	207.5V	157.5	67.38mV	222.3V	155.7	66.29mV
23	209.8V	147.0	65.90mV	207.1V	151.4	66.00mV
24	217.7V	155.2	66.57mV	217.8V	156.2	65.50mV
25	218.1V	150.8	66.95mV	198.2V	155.9	62.10mV
26	220.0V	146.0	67.80mV	214.7V	151.4	63.21mV
27	225.5V	147.3	66.35mV	215.4V	153.3	64.07mV
28	208.5V	153.5	64.93mV	198.3V	151.7	63.93mV
29	220.5V	146.6	62.57mV	228.0V	154.1	65.53mV

SeCoS Corporation

High Temperature Storage Life Test Data

Report No : T151008-107
Part No : BCP5551
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)CEO > 160V@IC=1mA, IB=0 ； 80 < hFE < 250@VCE=5V, IC=10mA
VCE(sat) < 200mV@IC=50mA, IB=5mA
Test Condition: 150℃, 1000Hrs
Test Date: 2015.08.17 ~ 2015.09.29
Test Standard : JESD22 STANDARD Method-A103
Operator: Leo Hsia

Test Result: PASS

	Before			After		
No	$V_{(BR)CEO}$ (V)	h_{FE}	$V_{CE(sat)}$ (mV)	$V_{(BR)CEO}$ (V)	h_{FE}	$V_{CE(sat)}$ (mV)
30	213.8V	150.3	63.68mV	211.5V	157.3	64.01mV
31	208.2V	150.6	62.55mV	226.3V	155.0	63.05mV
32	224.8V	148.0	63.64mV	211.4V	154.3	66.31mV
33	206.5V	155.6	67.27mV	213.3V	152.9	64.59mV
34	201.8V	145.8	62.80mV	202.3V	148.4	63.99mV
35	214.3V	153.0	62.38mV	199.0V	149.3	64.13mV
36	222.4V	157.4	65.71mV	211.8V	151.7	66.46mV
37	209.6V	150.9	63.07mV	227.8V	152.4	67.28mV
38	217.4V	156.9	65.53mV	190.8V	146.9	67.15mV
39	216.3V	153.7	67.14mV	223.1V	153.9	65.38mV
40	191.0V	156.8	65.67mV	218.2V	155.8	62.00mV
41	223.1V	148.9	63.18mV	222.4V	150.2	67.68mV
42	212.7V	146.4	66.55mV	191.2V	147.4	66.48mV
43	220.3V	157.7	63.34mV	220.7V	148.6	67.30mV
44	197.6V	151.7	67.47mV	213.0V	149.2	65.84mV
45	204.1V	153.8	63.65mV	202.2V	152.2	67.22mV
46	219.1V	148.8	62.56mV	205.7V	154.9	64.04mV
47	203.5V	147.1	65.92mV	201.9V	147.7	64.58mV
48	228.5V	145.5	64.15mV	225.7V	149.1	67.61mV
49	205.5V	145.5	64.19mV	197.7V	147.2	62.04mV
50	206.7V	156.6	65.46mV	211.2V	149.6	65.17mV
51	191.3V	149.5	65.92mV	194.9V	155.7	65.32mV
52	193.6V	155.2	62.93mV	192.1V	151.0	67.55mV
53	221.5V	148.9	67.09mV	227.2V	145.4	66.25mV
54	214.0V	150.8	67.79mV	198.1V	148.5	65.49mV
55	194.0V	152.3	66.98mV	219.7V	149.4	61.99mV
56	197.7V	157.3	66.20mV	218.1V	155.9	65.72mV
57	206.7V	152.4	65.39mV	193.1V	150.5	67.84mV
58	200.1V	156.1	65.53mV	194.3V	147.6	64.58mV

SeCoS Corporation

High Temperature Storage Life Test Data

Report No : T151008-107
Part No : BCP5551
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)CEO > 160V@IC=1mA, IB=0 ； 80 < hFE < 250@VCE=5V, IC=10mA
VCE(sat) < 200mV@IC=50mA, IB=5mA
Test Condition: 150℃, 1000Hrs
Test Date: 2015.08.17 ~ 2015.09.29
Test Standard : JESD22 STANDARD Method-A103
Operator: Leo Hsia

Test Result: PASS

	Before			After		
No	$V_{(BR)CEO}$ (V)	h_{FE}	$V_{CE(sat)}$ (mV)	$V_{(BR)CEO}$ (V)	h_{FE}	$V_{CE(sat)}$ (mV)
59	218.9V	146.0	65.34mV	218.2V	155.1	62.83mV
60	201.7V	145.8	63.29mV	227.2V	153.7	65.70mV
61	223.0V	153.7	62.21mV	217.1V	147.9	64.32mV
62	216.6V	152.5	63.30mV	202.6V	150.8	63.67mV
63	219.8V	154.7	62.59mV	227.3V	147.2	63.09mV
64	211.6V	149.2	64.03mV	202.0V	146.5	63.04mV
65	209.8V	151.4	67.89mV	213.6V	152.9	66.72mV
66	197.6V	150.7	64.06mV	191.1V	154.1	63.57mV
67	227.6V	155.5	66.30mV	202.8V	153.2	61.96mV
68	203.1V	147.0	64.40mV	216.4V	149.9	67.80mV
69	200.6V	147.9	66.17mV	215.1V	155.5	65.05mV
70	203.3V	145.4	64.60mV	218.6V	155.5	64.26mV
71	191.1V	152.2	63.09mV	199.5V	149.0	63.36mV
72	193.6V	153.3	64.28mV	204.8V	157.7	66.93mV
73	192.3V	156.6	61.96mV	203.2V	146.4	63.66mV
74	217.1V	150.2	62.70mV	211.0V	146.5	64.94mV
75	224.2V	157.0	62.37mV	219.8V	150.9	64.07mV
76	218.2V	152.9	62.82mV	214.7V	151.6	62.71mV
77	199.4V	150.2	64.43mV	196.9V	150.1	64.44mV

Made By: King Huang

Approval: Peter Yang

SeCoS Corporation

Pressure Cooker Test Data

Report No : T151008-107
Part No : BCP5551
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)CEO > 160V@IC=1mA, IB=0 ； 80 < hFE < 250@VCE=5V, IC=10mA
VCE(sat) < 200mV@IC=50mA, IB=5mA
Test Condition: 121℃, 100%RH, 29.7PSIG, 168Hrs
Test Date: 2015.08.17 ~ 2015.08.25
Test Standard : JESD22 STANDARD Method-A102
Operator: Leo Hsia

Test Result: PASS

	Before			After		
No	$V_{(BR)CEO}$ (V)	h_{FE}	$V_{CE(sat)}$ (mV)	$V_{(BR)CEO}$ (V)	h_{FE}	$V_{CE(sat)}$ (mV)
1	192.0V	152.0	63.98mV	200.0V	149.9	63.80mV
2	199.0V	151.3	62.38mV	199.7V	147.4	62.41mV
3	224.8V	147.4	66.43mV	220.8V	153.4	62.85mV
4	226.5V	151.8	67.10mV	191.9V	149.9	64.72mV
5	213.3V	146.5	66.31mV	215.6V	150.1	63.05mV
6	210.1V	155.0	65.02mV	219.3V	155.5	65.48mV
7	225.0V	153.7	66.89mV	208.3V	147.6	66.85mV
8	193.9V	156.9	65.90mV	193.9V	154.0	63.23mV
9	203.5V	149.7	64.85mV	227.2V	154.6	66.90mV
10	226.7V	149.6	67.18mV	225.9V	157.6	66.13mV
11	194.0V	146.5	63.57mV	223.2V	150.5	67.26mV
12	223.1V	146.2	61.96mV	223.4V	146.5	62.61mV
13	192.8V	153.1	63.70mV	217.8V	153.5	67.51mV
14	223.3V	155.0	63.63mV	221.2V	153.7	66.10mV
15	224.3V	155.2	62.27mV	212.7V	149.9	62.11mV
16	221.6V	157.4	66.44mV	216.1V	146.6	63.87mV
17	195.0V	147.7	65.86mV	214.7V	150.4	65.43mV
18	195.7V	149.0	63.38mV	203.3V	151.2	65.72mV
19	206.9V	150.2	64.11mV	221.1V	153.2	64.77mV
20	215.6V	149.2	67.80mV	199.8V	153.0	65.22mV
21	217.7V	149.3	61.95mV	228.3V	149.1	67.06mV
22	208.1V	154.9	63.51mV	191.6V	154.4	62.29mV
23	198.9V	156.5	63.93mV	220.7V	155.5	63.88mV
24	218.0V	156.4	67.19mV	194.6V	146.5	67.11mV
25	208.0V	156.0	65.00mV	193.3V	156.7	62.18mV
26	209.0V	150.1	64.94mV	216.7V	146.4	63.56mV
27	209.2V	147.9	62.63mV	199.0V	156.5	64.31mV
28	198.9V	153.2	65.36mV	222.7V	157.5	63.14mV
29	207.5V	150.8	64.02mV	190.5V	148.0	62.82mV

SeCoS Corporation

Pressure Cooker Test Data

Report No : T151008-107
Part No : BCP5551
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)CEO > 160V@IC=1mA, IB=0 ； 80 < hFE < 250@VCE=5V, IC=10mA
VCE(sat) < 200mV@IC=50mA, IB=5mA
Test Condition: 121℃, 100%RH, 29.7PSIG, 168Hrs
Test Date: 2015.08.17 ~ 2015.08.25
Test Standard : JESD22 STANDARD Method-A102
Operator: Leo Hsia

Test Result: PASS

	Before			After		
No	$V_{(BR)CEO}$ (V)	h_{FE}	$V_{CE(sat)}$ (mV)	$V_{(BR)CEO}$ (V)	h_{FE}	$V_{CE(sat)}$ (mV)
30	192.4V	152.4	64.24mV	205.6V	154.0	66.26mV
31	204.9V	153.2	61.89mV	211.4V	146.8	67.34mV
32	217.4V	157.2	64.85mV	211.3V	149.8	62.80mV
33	206.7V	152.8	66.56mV	210.9V	157.0	63.96mV
34	202.4V	147.5	63.90mV	215.3V	149.0	63.01mV
35	207.3V	153.3	63.63mV	217.0V	156.9	66.76mV
36	201.7V	147.3	65.93mV	220.8V	148.6	64.73mV
37	226.8V	149.8	67.66mV	212.1V	146.4	65.59mV
38	211.1V	156.9	65.88mV	216.6V	156.4	67.25mV
39	225.0V	154.2	66.78mV	205.2V	155.3	64.28mV
40	206.9V	146.3	66.67mV	214.8V	156.7	66.54mV
41	222.1V	147.8	65.11mV	228.2V	150.4	63.52mV
42	191.1V	156.4	64.90mV	213.3V	154.9	66.40mV
43	217.7V	155.3	64.14mV	195.1V	156.1	66.11mV
44	218.0V	156.8	67.53mV	215.1V	152.1	62.63mV
45	215.4V	153.8	62.65mV	200.9V	148.1	65.21mV
46	202.2V	150.7	64.48mV	193.5V	149.0	62.36mV
47	226.9V	149.6	62.08mV	209.2V	149.7	66.05mV
48	217.0V	156.6	63.63mV	199.0V	145.9	67.24mV
49	199.6V	150.9	63.50mV	191.1V	150.7	67.67mV
50	213.7V	147.7	63.68mV	224.4V	147.3	66.93mV
51	203.1V	153.3	61.92mV	209.6V	156.2	62.01mV
52	192.0V	149.6	66.83mV	227.1V	151.8	63.24mV
53	216.4V	153.7	67.15mV	228.4V	156.8	64.54mV
54	207.2V	156.7	62.48mV	196.7V	146.3	64.19mV
55	223.0V	153.0	67.29mV	223.2V	149.9	67.64mV
56	219.6V	156.7	65.50mV	198.1V	150.5	64.22mV
57	219.4V	151.8	65.77mV	221.8V	153.8	67.84mV
58	201.0V	145.6	62.31mV	200.3V	148.3	66.13mV

SeCoS Corporation

Pressure Cooker Test Data

Report No : T151008-107
Part No : BCP5551
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)CEO > 160V@IC=1mA, IB=0 ； 80 < hFE < 250@VCE=5V, IC=10mA
VCE(sat) < 200mV@IC=50mA, IB=5mA
Test Condition: 121℃, 100%RH, 29.7PSIG, 168Hrs
Test Date: 2015.08.17 ~ 2015.08.25
Test Standard : JESD22 STANDARD Method-A102
Operator: Leo Hsia

Test Result: PASS

	Before			After		
No	$V_{(BR)CEO}$ (V)	h_{FE}	$V_{CE(sat)}$ (mV)	$V_{(BR)CEO}$ (V)	h_{FE}	$V_{CE(sat)}$ (mV)
59	213.2V	146.1	66.70mV	207.9V	151.1	65.93mV
60	200.3V	157.1	66.46mV	218.5V	153.3	63.98mV
61	214.9V	152.9	65.01mV	223.2V	146.5	62.41mV
62	221.3V	153.1	64.20mV	221.9V	147.6	64.76mV
63	199.4V	150.6	62.17mV	208.6V	150.0	64.98mV
64	206.5V	149.9	64.45mV	222.4V	151.0	66.78mV
65	200.8V	152.9	63.85mV	228.5V	154.2	65.91mV
66	202.8V	145.4	67.62mV	202.5V	148.2	62.51mV
67	195.8V	150.2	62.44mV	197.5V	152.0	62.63mV
68	211.8V	151.4	62.02mV	218.1V	146.8	65.31mV
69	191.7V	149.6	65.69mV	226.3V	148.8	67.21mV
70	199.1V	156.4	65.15mV	216.8V	156.0	65.08mV
71	193.0V	153.5	67.44mV	220.1V	156.7	63.30mV
72	202.5V	146.0	62.58mV	204.9V	150.7	65.34mV
73	222.6V	156.8	64.02mV	223.5V	157.0	66.05mV
74	204.6V	156.8	65.11mV	211.6V	147.6	65.82mV
75	218.2V	153.0	66.54mV	227.7V	149.5	66.50mV
76	190.9V	150.7	62.52mV	204.5V	152.8	65.39mV
77	197.7V	145.8	65.82mV	206.6V	150.1	64.86mV

Made By: King Huang

Approval: Peter Yang

SeCoS Corporation

Temperature Cycle Test Data

Report No : T151008-107
Part No : BCP5551
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)CEO > 160V@IC=1mA, IB=0 ； 80 < hFE < 250@VCE=5V, IC=10mA
VCE(sat) < 200mV@IC=50mA, IB=5mA
Test Condition: -55℃/30min, 150℃/30min, for1000 Cycle
Test Date: 2015.08.17 ~ 2015.10.08
Test Standard : JESD22 STANDARD Method-A104
Operator: Leo Hsia

Test Result: PASS

	Before			After		
No	$V_{(BR)CEO}$ (V)	h_{FE}	$V_{CE(sat)}$ (mV)	$V_{(BR)CEO}$ (V)	h_{FE}	$V_{CE(sat)}$ (mV)
1	206.3V	149.6	64.83mV	226.5V	150.7	64.07mV
2	226.4V	154.4	65.53mV	215.2V	153.0	67.21mV
3	211.1V	147.2	64.35mV	199.0V	147.2	64.47mV
4	228.4V	152.4	67.59mV	210.7V	148.0	66.50mV
5	218.0V	157.7	66.37mV	197.8V	149.9	61.91mV
6	227.8V	156.9	67.76mV	204.5V	150.9	64.32mV
7	224.1V	148.0	67.08mV	218.5V	150.3	65.63mV
8	191.9V	148.1	66.00mV	202.6V	153.0	67.27mV
9	222.7V	147.0	61.93mV	214.3V	155.4	64.66mV
10	211.8V	147.9	67.03mV	200.8V	147.5	66.99mV
11	218.7V	156.9	65.53mV	218.1V	149.7	65.66mV
12	216.9V	149.3	62.40mV	195.0V	154.0	66.92mV
13	223.1V	157.7	65.12mV	205.8V	157.2	64.81mV
14	228.5V	148.9	61.97mV	215.5V	153.1	65.44mV
15	213.9V	153.9	62.94mV	216.1V	154.5	61.95mV
16	202.1V	151.6	66.21mV	225.9V	149.5	64.43mV
17	224.8V	150.4	63.68mV	197.9V	153.8	64.43mV
18	213.6V	156.7	65.96mV	192.7V	155.6	65.19mV
19	218.7V	145.5	66.47mV	211.3V	147.8	64.55mV
20	207.4V	146.5	67.39mV	222.4V	157.7	65.04mV
21	226.0V	147.2	65.11mV	212.9V	147.9	65.72mV
22	222.7V	155.4	62.82mV	213.5V	149.5	63.39mV
23	192.3V	153.3	65.92mV	195.6V	149.6	63.40mV
24	210.5V	156.6	63.59mV	222.0V	147.4	63.59mV
25	214.2V	155.9	66.65mV	217.3V	156.1	66.79mV
26	220.0V	157.4	63.75mV	196.4V	150.4	63.16mV
27	210.0V	146.5	62.82mV	198.0V	147.8	67.25mV
28	222.2V	155.2	66.91mV	191.7V	150.5	64.50mV
29	227.8V	146.4	62.14mV	213.0V	146.9	64.25mV

SeCoS Corporation

Temperature Cycle Test Data

Report No : T151008-107
Part No : BCP5551
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)CEO > 160V@IC=1mA, IB=0 ； 80 < hFE < 250@VCE=5V, IC=10mA
VCE(sat) < 200mV@IC=50mA, IB=5mA
Test Condition: -55℃/30min, 150℃/30min, for1000 Cycle
Test Date: 2015.08.17 ~ 2015.10.08
Test Standard : JESD22 STANDARD Method-A104
Operator: Leo Hsia

Test Result: PASS

	Before			After		
No	$V_{(BR)CEO}$ (V)	h_{FE}	$V_{CE(sat)}$ (mV)	$V_{(BR)CEO}$ (V)	h_{FE}	$V_{CE(sat)}$ (mV)
30	201.4V	148.3	66.11mV	216.7V	148.1	64.61mV
31	193.1V	146.4	67.06mV	226.6V	154.0	63.24mV
32	196.4V	155.1	64.79mV	196.1V	153.0	66.56mV
33	200.2V	156.8	66.33mV	226.1V	145.9	62.73mV
34	222.5V	156.0	62.94mV	192.4V	154.7	66.96mV
35	198.0V	155.2	66.33mV	199.9V	147.5	66.08mV
36	208.9V	154.1	66.79mV	198.0V	147.1	65.37mV
37	202.0V	152.2	66.37mV	209.5V	149.5	62.63mV
38	227.5V	156.5	63.27mV	204.2V	156.0	64.31mV
39	212.3V	150.6	66.01mV	225.8V	154.0	63.81mV
40	207.7V	151.8	63.83mV	190.6V	148.1	67.66mV
41	216.4V	146.1	66.22mV	211.5V	156.4	62.77mV
42	221.3V	147.2	64.09mV	196.3V	145.9	62.47mV
43	206.3V	149.6	62.77mV	208.6V	149.8	65.59mV
44	215.2V	153.2	65.92mV	219.7V	149.5	67.59mV
45	198.1V	155.6	62.02mV	218.7V	157.4	63.63mV
46	197.5V	153.7	63.63mV	213.2V	156.2	62.71mV
47	222.2V	145.4	66.28mV	221.1V	145.7	65.82mV
48	209.1V	151.6	65.69mV	196.9V	154.3	65.54mV
49	221.8V	153.1	63.71mV	204.5V	148.4	64.92mV
50	193.1V	149.6	67.71mV	205.9V	148.6	63.56mV
51	205.8V	157.5	67.71mV	199.0V	146.2	64.70mV
52	205.4V	154.7	67.15mV	208.9V	151.7	65.21mV
53	224.6V	146.5	64.50mV	221.2V	154.4	63.95mV
54	204.8V	153.1	62.98mV	210.3V	148.8	62.46mV
55	211.7V	149.1	65.76mV	203.7V	148.0	66.21mV
56	226.1V	146.9	63.54mV	223.3V	150.7	66.38mV
57	219.9V	156.3	65.72mV	210.0V	154.8	65.82mV
58	204.6V	146.8	66.79mV	193.6V	147.2	64.95mV

SeCoS Corporation

Temperature Cycle Test Data

Report No : T151008-107
Part No : BCP5551
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)CEO > 160V@IC=1mA, IB=0 ； 80 < hFE < 250@VCE=5V, IC=10mA
VCE(sat) < 200mV@IC=50mA, IB=5mA
Test Condition: -55℃/30min, 150℃/30min, for1000 Cycle
Test Date: 2015.08.17 ~ 2015.10.08
Test Standard : JESD22 STANDARD Method-A104
Operator: Leo Hsia

Test Result: PASS

	Before			After		
No	$V_{(BR)CEO}$ (V)	h_{FE}	$V_{CE(sat)}$ (mV)	$V_{(BR)CEO}$ (V)	h_{FE}	$V_{CE(sat)}$ (mV)
59	195.2V	155.0	67.60mV	197.5V	156.7	63.86mV
60	226.9V	155.0	67.84mV	205.0V	156.3	62.74mV
61	200.4V	155.6	66.78mV	212.8V	152.9	64.32mV
62	202.4V	152.6	62.18mV	228.6V	157.6	63.34mV
63	220.7V	146.9	65.86mV	221.8V	151.0	62.03mV
64	217.3V	150.7	66.73mV	210.6V	150.9	62.55mV
65	207.4V	157.7	64.88mV	222.2V	155.4	62.59mV
66	200.3V	155.6	64.95mV	213.7V	152.2	65.70mV
67	205.2V	147.3	64.03mV	222.8V	145.4	67.51mV
68	200.2V	156.8	62.78mV	216.2V	157.7	63.99mV
69	213.1V	149.6	67.38mV	197.0V	156.3	63.09mV
70	197.1V	150.7	63.52mV	219.8V	148.5	63.20mV
71	218.2V	151.5	64.78mV	199.0V	148.9	65.58mV
72	217.9V	147.8	67.45mV	208.5V	152.3	66.22mV
73	221.7V	150.9	65.30mV	222.4V	155.5	64.21mV
74	222.5V	149.5	66.56mV	211.7V	157.1	64.64mV
75	200.4V	150.6	64.05mV	224.4V	154.9	66.98mV
76	228.2V	154.7	67.88mV	198.2V	155.0	65.17mV
77	218.1V	148.8	62.26mV	190.6V	157.6	65.80mV

Made By: King Huang

Approval: Peter Yang

SeCoS Corporation

High Temperature High Humidity Test Data

Report No : T151008-107
Part No : BCP5551
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)CEO > 160V@IC=1mA, IB=0 ； 80 < hFE < 250@VCE=5V, IC=10mA
VCE(sat) < 200mV@IC=50mA, IB=5mA
Test Condition: 85±2℃, 85±5%RH, 1000Hrs
Test Date: 2015.08.25 ~ 2015.10.06
Test Standard : JESD22 STANDARD Method-A101
Operator: Leo Hsia

Test Result: PASS

	Before			After		
No	$V_{(BR)CEO}$ (V)	h_{FE}	$V_{CE(sat)}$ (mV)	$V_{(BR)CEO}$ (V)	h_{FE}	$V_{CE(sat)}$ (mV)
1	209.1V	152.2	64.75mV	214.9V	157.3	67.27mV
2	225.1V	150.1	67.19mV	193.4V	155.9	66.24mV
3	209.7V	146.6	63.72mV	201.5V	147.9	63.49mV
4	223.2V	149.4	62.67mV	224.2V	153.2	63.37mV
5	200.2V	153.4	66.83mV	201.8V	153.5	62.12mV
6	201.9V	153.6	62.27mV	200.8V	148.7	67.27mV
7	216.9V	146.4	67.03mV	221.0V	156.3	67.52mV
8	209.7V	154.0	64.87mV	197.5V	156.0	63.27mV
9	201.6V	156.8	62.39mV	207.2V	154.7	62.51mV
10	207.7V	154.6	62.16mV	220.4V	153.8	63.80mV
11	198.4V	148.1	64.97mV	221.5V	151.3	64.73mV
12	223.5V	157.5	63.93mV	207.6V	145.7	67.17mV
13	203.0V	145.8	65.90mV	211.9V	154.9	63.78mV
14	220.3V	156.2	65.91mV	205.6V	148.5	65.40mV
15	196.0V	148.6	67.86mV	195.1V	157.0	66.71mV
16	206.3V	145.5	63.38mV	222.2V	149.5	63.41mV
17	227.6V	157.2	65.08mV	198.7V	153.4	66.77mV
18	207.6V	154.9	63.66mV	199.2V	157.2	66.06mV
19	204.4V	145.6	66.89mV	225.8V	150.9	66.26mV
20	201.0V	153.5	64.27mV	203.3V	151.2	67.24mV
21	219.0V	147.3	63.24mV	206.3V	151.7	67.55mV
22	205.9V	153.0	65.29mV	215.1V	156.0	61.97mV
23	198.5V	156.4	66.33mV	219.1V	152.9	67.82mV
24	212.1V	146.4	64.64mV	216.9V	148.6	64.33mV
25	225.7V	148.2	62.45mV	195.4V	147.3	67.27mV
26	224.4V	149.7	67.46mV	192.0V	156.4	67.21mV
27	224.6V	151.3	63.62mV	191.7V	146.9	65.02mV
28	198.0V	154.4	65.60mV	192.0V	157.1	66.06mV
29	215.1V	155.0	65.30mV	208.1V	155.4	67.81mV

SeCoS Corporation

High Temperature High Humidity Test Data

Report No : T151008-107
Part No : BCP5551
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)CEO > 160V@IC=1mA, IB=0 ； 80 < hFE < 250@VCE=5V, IC=10mA
VCE(sat) < 200mV@IC=50mA, IB=5mA
Test Condition: 85±2℃, 85±5%RH, 1000Hrs
Test Date: 2015.08.25 ~ 2015.10.06
Test Standard : JESD22 STANDARD Method-A101
Operator: Leo Hsia

Test Result: PASS

	Before			After		
No	$V_{(BR)CEO}$ (V)	h_{FE}	$V_{CE(sat)}$ (mV)	$V_{(BR)CEO}$ (V)	h_{FE}	$V_{CE(sat)}$ (mV)
30	224.4V	146.4	64.48mV	219.7V	150.2	66.72mV
31	205.8V	150.9	66.45mV	199.5V	151.3	62.24mV
32	205.0V	157.1	62.36mV	213.3V	152.6	64.82mV
33	202.2V	152.9	62.28mV	205.0V	154.3	63.83mV
34	201.3V	148.3	62.44mV	209.8V	153.1	62.04mV
35	226.5V	153.2	64.22mV	221.7V	148.8	67.30mV
36	212.2V	155.6	65.84mV	220.0V	145.8	65.74mV
37	228.3V	146.9	67.01mV	206.6V	153.7	65.75mV
38	208.7V	146.1	63.63mV	210.9V	148.9	66.91mV
39	207.0V	154.2	64.89mV	223.7V	156.5	61.93mV
40	225.5V	152.5	64.23mV	197.9V	153.3	63.49mV
41	223.9V	153.5	62.16mV	212.7V	149.0	64.74mV
42	209.2V	153.5	65.42mV	211.3V	153.4	63.35mV
43	193.6V	145.5	64.71mV	206.0V	148.0	63.44mV
44	210.3V	154.0	66.72mV	216.3V	153.1	66.70mV
45	213.9V	149.9	62.31mV	221.1V	150.9	62.39mV
46	225.0V	151.0	63.65mV	221.9V	149.7	64.29mV
47	194.1V	151.5	65.38mV	191.7V	153.2	63.25mV
48	207.9V	148.9	66.94mV	218.2V	154.7	62.39mV
49	219.3V	155.5	67.38mV	224.2V	152.8	64.14mV
50	224.9V	149.8	67.12mV	196.7V	147.6	62.57mV
51	193.7V	151.6	64.57mV	209.8V	149.5	66.90mV
52	202.2V	151.6	62.29mV	190.5V	155.5	63.29mV
53	196.8V	150.9	66.93mV	196.5V	156.9	63.07mV
54	202.6V	156.9	64.89mV	228.6V	153.4	64.85mV
55	224.9V	153.4	66.97mV	199.5V	154.5	65.78mV
56	220.5V	153.3	62.63mV	214.5V	152.8	66.77mV
57	216.0V	149.8	62.10mV	192.9V	156.1	67.32mV
58	192.4V	154.3	63.05mV	206.0V	145.8	62.50mV

SeCoS Corporation

High Temperature High Humidity Test Data

Report No : T151008-107
Part No : BCP5551
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)CEO > 160V@IC=1mA, IB=0 ； 80 < hFE < 250@VCE=5V, IC=10mA
VCE(sat) < 200mV@IC=50mA, IB=5mA
Test Condition: 85±2℃, 85±5%RH, 1000Hrs
Test Date: 2015.08.25 ~ 2015.10.06
Test Standard : JESD22 STANDARD Method-A101
Operator: Leo Hsia

Test Result: PASS

	Before			After		
No	$V_{(BR)CEO}$ (V)	h_{FE}	$V_{CE(sat)}$ (mV)	$V_{(BR)CEO}$ (V)	h_{FE}	$V_{CE(sat)}$ (mV)
59	199.4V	147.9	65.02mV	193.6V	156.1	65.97mV
60	193.5V	149.8	64.58mV	198.4V	148.0	67.41mV
61	195.9V	155.7	67.07mV	204.1V	157.0	66.25mV
62	204.7V	157.3	63.86mV	195.7V	146.2	67.28mV
63	223.1V	150.8	66.14mV	209.5V	154.6	65.72mV
64	215.9V	156.2	65.77mV	208.6V	151.0	64.54mV
65	228.2V	155.5	67.42mV	192.3V	147.8	67.78mV
66	221.9V	146.3	66.19mV	214.1V	155.8	63.16mV
67	199.6V	148.6	67.61mV	191.3V	149.3	63.24mV
68	216.7V	147.5	63.35mV	216.0V	155.0	63.44mV
69	204.9V	155.6	63.38mV	222.8V	155.9	65.03mV
70	210.2V	148.4	65.47mV	220.7V	149.5	64.30mV
71	195.4V	154.1	63.84mV	214.8V	157.1	66.91mV
72	225.5V	157.3	66.12mV	192.2V	149.0	62.54mV
73	191.6V	152.3	62.96mV	210.2V	148.8	62.47mV
74	196.4V	150.0	67.81mV	218.3V	156.1	62.71mV
75	210.0V	150.1	63.11mV	219.1V	146.7	67.85mV
76	217.2V	149.4	66.80mV	195.8V	154.2	67.43mV
77	218.7V	151.9	65.91mV	222.3V	145.5	63.76mV

Made By: King Huang

Approval: Peter Yang

SeCoS Corporation

High Temper High Humidity Reverse Bies Test Data

Report No : T151008-107
Part No : BCP5551
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)CEO > 160V@IC=1mA, IB=0 ； 80 < hFE < 250@VCE=5V, IC=10mA
VCE(sat) < 200mV@IC=50mA, IB=5mA
Test Condition: 85±2℃, 85±5%RH, 1000Hrs
Test Date: 2015.08.25 ~ 2015.10.06
Test Standard : JESD22 STANDARD Method-A101
Operator: Leo Hsia

Test Result: PASS

	Before			After		
No	$V_{(BR)CEO}$ (V)	h_{FE}	$V_{CE(sat)}$ (mV)	$V_{(BR)CEO}$ (V)	h_{FE}	$V_{CE(sat)}$ (mV)
1	206.0V	150.4	63.19mV	192.3V	153.4	65.89mV
2	196.4V	146.4	65.54mV	224.0V	147.5	67.19mV
3	190.7V	152.0	64.10mV	190.5V	157.3	64.73mV
4	220.3V	151.5	65.42mV	216.3V	150.6	63.27mV
5	206.6V	150.8	64.72mV	205.4V	153.0	62.39mV
6	213.0V	154.4	64.43mV	223.6V	156.0	62.06mV
7	206.8V	149.9	67.01mV	225.7V	146.7	67.06mV
8	228.1V	150.5	67.25mV	198.1V	146.9	62.49mV
9	214.0V	156.7	67.66mV	213.0V	153.7	61.93mV
10	190.6V	155.9	63.42mV	192.2V	153.8	65.33mV
11	203.0V	152.5	64.90mV	204.9V	146.6	63.63mV
12	205.3V	155.7	63.20mV	213.0V	155.4	66.68mV
13	199.6V	149.8	65.68mV	217.2V	151.8	66.75mV
14	223.2V	152.4	66.45mV	217.1V	149.4	63.45mV
15	193.8V	147.2	65.77mV	207.7V	146.2	62.12mV
16	196.1V	148.5	66.75mV	228.5V	151.1	67.81mV
17	215.0V	155.8	65.28mV	198.1V	150.8	64.18mV
18	199.3V	151.5	62.24mV	194.5V	151.2	63.48mV
19	212.1V	154.0	63.64mV	218.1V	149.1	64.39mV
20	196.6V	151.7	67.30mV	221.7V	145.5	63.60mV
21	221.9V	155.2	62.43mV	210.8V	152.2	64.54mV
22	204.0V	156.0	66.48mV	226.4V	155.5	62.95mV
23	196.0V	156.3	62.44mV	222.5V	152.9	66.25mV
24	218.2V	150.9	65.10mV	199.6V	146.5	64.11mV
25	192.9V	154.5	62.07mV	228.4V	145.7	66.39mV
26	211.8V	157.0	66.56mV	215.5V	154.2	65.15mV
27	209.8V	146.0	63.36mV	207.7V	155.2	63.23mV
28	208.6V	146.6	61.92mV	190.9V	149.3	62.29mV
29	206.1V	157.0	65.54mV	221.5V	154.7	63.86mV

SeCoS Corporation

High Temper High Humidity Reverse Bies Test Data

Report No : T151008-107
Part No : BCP5551
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)CEO > 160V@IC=1mA, IB=0 ； 80 < hFE < 250@VCE=5V, IC=10mA
VCE(sat) < 200mV@IC=50mA, IB=5mA
Test Condition: 85±2℃, 85±5%RH, 1000Hrs
Test Date: 2015.08.25 ~ 2015.10.06
Test Standard : JESD22 STANDARD Method-A101
Operator: Leo Hsia

Test Result: PASS

	Before			After		
No	$V_{(BR)CEO}$ (V)	h_{FE}	$V_{CE(sat)}$ (mV)	$V_{(BR)CEO}$ (V)	h_{FE}	$V_{CE(sat)}$ (mV)
30	219.8V	150.3	64.82mV	197.9V	146.9	67.21mV
31	199.2V	146.7	66.01mV	216.3V	146.0	62.74mV
32	205.4V	148.9	62.18mV	203.6V	151.6	66.62mV
33	199.7V	147.3	62.67mV	194.3V	149.8	65.28mV
34	223.0V	147.8	65.54mV	222.1V	151.2	64.03mV
35	191.9V	156.9	65.61mV	203.8V	148.3	67.69mV
36	219.4V	146.0	66.21mV	200.5V	154.5	65.74mV
37	226.0V	151.0	66.90mV	213.2V	153.5	67.61mV
38	192.2V	157.5	64.18mV	220.7V	153.2	66.79mV
39	199.6V	155.2	65.56mV	210.7V	148.6	63.57mV
40	200.1V	151.3	64.84mV	204.8V	154.3	67.75mV
41	199.8V	151.6	65.95mV	213.3V	156.5	64.70mV
42	213.9V	157.8	62.68mV	194.5V	150.5	65.44mV
43	201.4V	151.6	65.92mV	211.6V	156.0	63.83mV
44	204.9V	148.5	63.62mV	197.2V	148.5	62.15mV
45	211.2V	153.1	63.80mV	225.6V	149.6	64.46mV
46	211.8V	145.5	65.21mV	201.1V	150.4	62.94mV
47	212.2V	151.8	64.42mV	211.1V	157.7	64.67mV
48	204.3V	154.3	67.09mV	198.4V	149.5	62.14mV
49	214.8V	151.8	66.26mV	194.3V	153.6	63.36mV
50	226.9V	154.5	64.46mV	194.5V	153.0	65.91mV
51	214.2V	153.6	63.34mV	227.7V	147.0	63.92mV
52	203.7V	153.0	67.64mV	210.0V	148.1	66.67mV
53	196.6V	153.8	62.61mV	219.0V	155.6	64.81mV
54	208.3V	148.4	66.23mV	194.1V	148.8	61.91mV
55	199.0V	154.1	62.72mV	195.5V	149.6	62.16mV
56	197.9V	149.5	66.02mV	204.2V	156.2	64.66mV
57	215.3V	154.1	64.50mV	203.2V	154.2	61.96mV
58	194.7V	155.8	65.78mV	200.3V	145.4	63.45mV

SeCoS Corporation

High Temper High Humidity Reverse Bies Test Data

Report No : T151008-107
Part No : BCP5551
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)CEO > 160V@IC=1mA, IB=0 ； 80 < hFE < 250@VCE=5V, IC=10mA
VCE(sat) < 200mV@IC=50mA, IB=5mA
Test Condition: 85±2℃, 85±5%RH, 1000Hrs
Test Date: 2015.08.25 ~ 2015.10.06
Test Standard : JESD22 STANDARD Method-A101
Operator: Leo Hsia

Test Result: PASS

	Before			After		
No	$V_{(BR)CEO}$ (V)	h_{FE}	$V_{CE(sat)}$ (mV)	$V_{(BR)CEO}$ (V)	h_{FE}	$V_{CE(sat)}$ (mV)
59	203.7V	152.1	66.99mV	227.9V	157.6	65.64mV
60	193.2V	148.7	67.02mV	201.2V	150.8	62.89mV
61	193.5V	156.5	62.45mV	193.8V	155.6	62.48mV
62	199.0V	145.7	67.32mV	200.6V	156.8	63.42mV
63	193.3V	157.2	66.36mV	223.0V	147.1	67.47mV
64	217.0V	155.7	65.56mV	193.6V	154.9	62.37mV
65	210.0V	149.1	64.12mV	227.2V	148.3	63.03mV
66	211.7V	152.1	66.61mV	208.5V	149.1	65.05mV
67	228.4V	156.4	65.94mV	190.8V	146.1	62.07mV
68	212.3V	146.9	66.88mV	222.4V	157.5	66.19mV
69	206.4V	147.1	64.38mV	223.3V	149.8	62.72mV
70	203.8V	151.9	64.41mV	199.9V	154.2	63.11mV
71	208.8V	147.4	67.44mV	191.1V	150.6	67.64mV
72	199.6V	154.3	64.93mV	203.4V	150.4	65.47mV
73	195.6V	157.5	62.99mV	206.7V	156.4	63.13mV
74	194.7V	145.9	64.10mV	223.4V	155.5	65.84mV
75	202.7V	152.4	64.28mV	226.9V	157.7	67.47mV
76	227.7V	149.2	65.12mV	214.8V	152.9	65.56mV
77	197.2V	145.3	64.75mV	193.9V	152.8	65.99mV

Made By: King Huang

Approval: Peter Yang

SeCoS Corporation

Solderability Test Data

Report No : T151008-107
Part No : BCP5551
Test Equipment: JUNO Test System DTS-1000
Test Condition : V(BR)CEO > 160V@IC=1mA, IB=0 ； 80 < hFE < 250@VCE=5V, IC=10mA
VCE(sat) < 200mV@IC=50mA, IB=5mA
Test Condition: 245℃ ± 5℃, 5Sec
Test Date: 2015.10.08
Test Standard : JESD22 STANDER Method-B102
Operator: Leo Hsia

Test Result: PASS

	Before			After		
No	$V_{(BR)CEO}$ (V)	h_{FE}	$V_{CE(sat)}$ (mV)	$V_{(BR)CEO}$ (V)	h_{FE}	$V_{CE(sat)}$ (mV)
1	205.7V	156.3	65.62mV	199.1V	156.7	64.75mV
2	208.2V	155.0	64.97mV	192.4V	155.1	62.94mV
3	213.8V	157.5	67.67mV	209.9V	155.6	65.78mV
4	220.6V	157.7	62.05mV	210.3V	149.4	67.05mV
5	221.7V	146.2	66.93mV	198.1V	155.8	64.74mV
6	213.2V	155.6	65.65mV	215.8V	146.6	66.48mV
7	206.7V	156.5	62.08mV	216.3V	151.4	63.26mV
8	206.3V	150.4	64.59mV	225.4V	157.5	62.80mV
9	196.8V	152.4	66.77mV	218.2V	149.5	64.46mV
10	221.3V	154.2	66.80mV	222.9V	153.0	67.30mV

Made By: King Huang

Approval: Peter Yang