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
2014-06-01C-02	2014/9/1	2014/6/1

PCN Classification	Product Category
Major	FR107G

Subject

Add assembly vendor

Affected Product(s)

FR107G

Description of Change(s)

In order to avoid shortage of the material, and enhance the speed of delivery, thus, we add a new assembly house.

Content of Change(s)

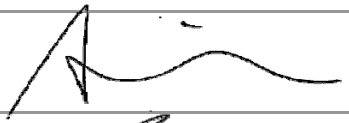
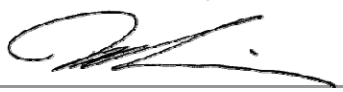
Packing change, the original packaging quantity is 5Kpce, now change the packaging quantity is 3Kpcs

Impact(s)

None

Attachment(s)

Reliability Test Report. SGS 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

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

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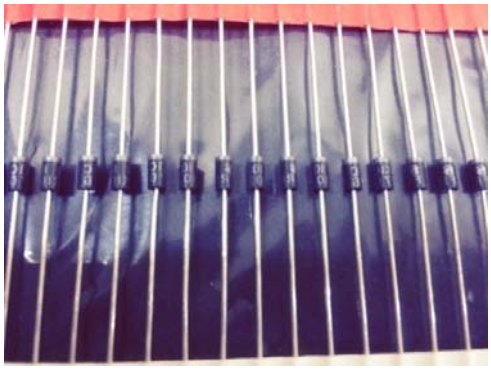
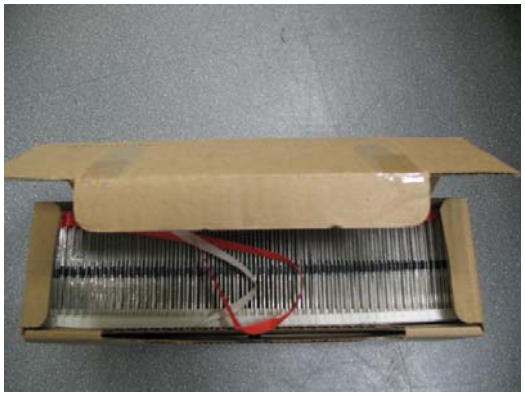
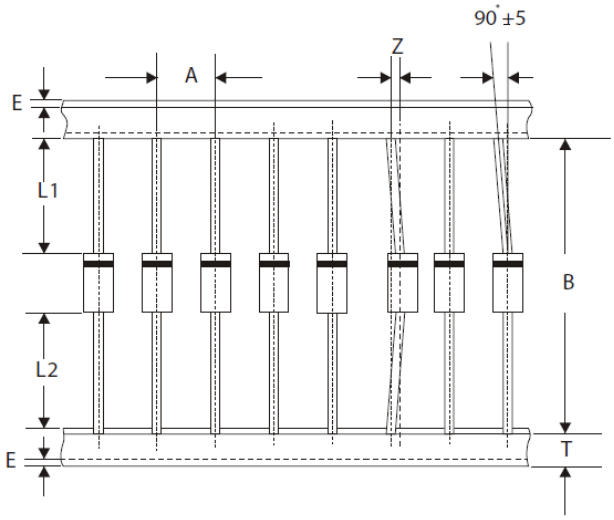
Exterior comparison Chart	
Original	New
	
Top View	Top View
	
Lateral View	Lateral View
	
Reel	Reel

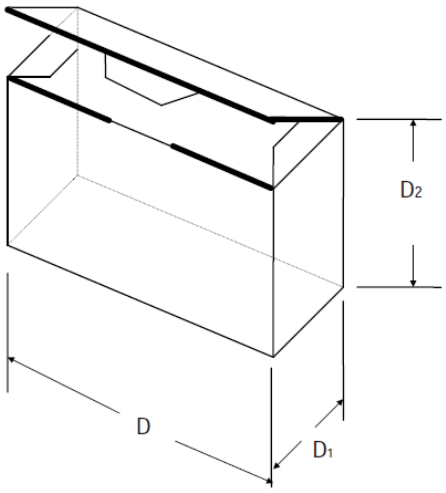
Elektronische Bauelemente

Packaging Information
Axial Lead Devices
Ammunition Taping Specification

DO-15 / DO-27 / DO-41 / R-1

Component Outline	Component Pitch A	Inner Tape Pitch B	
		52mm	26mm
DO-15	5.0mm±0.5mm	52.4±1.5mm	-
DO-27	10mm±0.5mm	52.4±1.5mm	-
DO-41	5.0mm±0.5mm	52.4±1.5mm	26.5±0.4mm
R-1	5.0 mm±0.3mm	-	26.5±0.4mm





Component Outline	Item	Symbol	Specification(mm)	
			52mm	26mm
DO-15	Component Alignment	Z	1.0 MAX	-
DO-27			1.2 MAX	-
DO-41			1.0 MAX	1.0 MAX
R-1			-	0.5 MAX
DO-15 / DO-27/ DO-41/ R-1	Tape Width	T	6.0±0.5	6.0±0.5
DO-15	Exposed Adhesive	E	0.8 MAX	-
DO-27			0.5 MAX	-
DO-41			0.8 MAX	0.8 MAX
R-1			-	0.5 MAX
DO-15	Body Eccentricity	lL1-L2l	0±1.0	-
DO-27			0±1.0	-
DO-41			0±1.0	0±0.5
R-1			-	0±0.5
DO-15 / DO-27/ DO-41/ R-1	Reel Outside diameter	D	255mm	255mm
DO-15 / DO-27/ DO-41/ R-1	Reel inner diameter	D1	80mm	80mm
DO-15 / DO-27/ DO-41/ R-1	Reel hole diameter	D2	92mm	92mm

Note:

When using the tape to stick the component, both ends of the tape should be stick at the lower side of the component. Cut it flat and compress the tape to prevent it curled. For each reel, the tape cannot be stick more than two place and each taped area should not less than 10cm.

SeCoS Corporation

Reliability Testing Summary Report

Date: 2014/04/30 Document No.: SH14 -04- 23

Test Item	P/N	Test Condition	(LTPD)	Sample Numbers	Allow Fall Numbers	Fall Numbers	Result
HTRB High Temp Reverse Bias	FR107G	100 ± 5℃, 80%VR, T = 1000hrs		77	0	0	ACC
HTSL High Temperature Storage Life	FR107G	150℃, T = 1000 hrs		77	0	0	ACC
PCT Pressure Cooker Test	FR107G	121℃, 29.7PSIG, 168 hrs		77	0	0	ACC
TCT Temperature Cycle Test	FR107G	-55℃/30min, 150℃/30min, For 1000 Cycle		77	0	0	ACC
THT High Temperature High Humidity Test	FR107G	85 ± 2℃, RH=85±5%, 1000 hrs		77	0	0	ACC
H3TRB High Temper High Humidity Reverse Bies Test	FR107G	85 ± 2℃, RH=85±5%, 1000 hrs		77	0	0	ACC
Solder Resistance DITY	FR107G	270±5℃, 7Sec ＋2/－0 Sec		10	0	0	ACC

Judgment:

■ **qualified** □ **unqualified**

Testing Start Date: 2014.03.03 Testing End Date: 2014.04.30

Tester: Leo Hsia Approval: Peter Yang

SeCoS Corporation

Electrical Test Data

Report No : T140430-021
Part No : FR107G
Test Equipment: JUNO Test System DTS-1000
Test Condition : VF<1300mV@IF=1A, IR<5uA@VR=1000V
Test Condition: 25℃
Test Date: 2014.03.03 ~ 2014.03.03
Test Standard : Specifications
Operator: Leo Hsia

Test Result: PASS

No	VF (mV)	IR (uA)
1	968.3mV	0.087uA
2	989.4mV	0.045uA
3	963.5mV	0.093uA
4	996.4mV	0.053uA
5	977.4mV	0.089uA
6	963.4mV	0.075uA
7	983.1mV	0.065uA
8	953.4mV	0.045uA
9	952.6mV	0.083uA
10	971.0mV	0.066uA
11	982.6mV	0.082uA
12	965.4mV	0.061uA
13	956.6mV	0.074uA
14	974.4mV	0.068uA
15	972.8mV	0.066uA
16	997.9mV	0.048uA
17	976.3mV	0.064uA
18	964.5mV	0.068uA
19	985.0mV	0.070uA
20	954.7mV	0.067uA
21	993.0mV	0.081uA
22	986.3mV	0.082uA
23	982.9mV	0.058uA
24	972.8mV	0.048uA
25	980.0mV	0.059uA
26	990.2mV	0.064uA
27	971.1mV	0.063uA
28	995.5mV	0.079uA
29	992.6mV	0.071uA
30	958.7mV	0.086uA
31	997.9mV	0.061uA

SeCoS Corporation

Electrical Test Data

Report No : T140430-021
Part No : FR107G
Test Equipment: JUNO Test System DTS-1000
Test Condition : VF<1300mV@IF=1A, IR<5uA@VR=1000V
Test Condition: 25℃
Test Date: 2014.03.03 ~ 2014.03.03
Test Standard : Specifications
Operator: Leo Hsia

Test Result: PASS

No	VF (mV)	IR (uA)
32	963.0mV	0.051uA
33	982.0mV	0.059uA
34	956.2mV	0.057uA
35	960.3mV	0.060uA
36	984.2mV	0.060uA
37	983.0mV	0.078uA
38	972.2mV	0.055uA
39	991.8mV	0.089uA
40	954.7mV	0.091uA
41	955.4mV	0.081uA
42	977.3mV	0.045uA
43	965.8mV	0.073uA
44	953.4mV	0.081uA
45	976.0mV	0.068uA
46	988.5mV	0.059uA
47	995.4mV	0.060uA
48	957.7mV	0.068uA
49	992.0mV	0.084uA
50	978.6mV	0.061uA
51	957.8mV	0.081uA
52	966.5mV	0.055uA
53	980.7mV	0.059uA
54	955.6mV	0.092uA
55	973.0mV	0.067uA
56	979.7mV	0.057uA
57	965.2mV	0.047uA
58	988.1mV	0.071uA
59	960.7mV	0.056uA
60	972.6mV	0.077uA
61	982.6mV	0.072uA
62	982.7mV	0.059uA

SeCoS Corporation

Electrical Test Data

Report No : T140430-021
Part No : FR107G
Test Equipment: JUNO Test System DTS-1000
Test Condition : VF<1300mV@IF=1A, IR<5uA@VR=1000V
Test Condition: 25℃
Test Date: 2014.03.03 ~ 2014.03.03
Test Standard : Specifications
Operator: Leo Hsia

Test Result: PASS

No	VF (mV)	IR (uA)
63	973.8mV	0.045uA
64	990.5mV	0.064uA
65	962.9mV	0.053uA
66	956.2mV	0.047uA
67	995.0mV	0.092uA
68	973.2mV	0.061uA
69	958.9mV	0.061uA
70	987.4mV	0.073uA
71	972.8mV	0.075uA
72	991.3mV	0.087uA
73	952.2mV	0.054uA
74	989.7mV	0.066uA
75	952.0mV	0.047uA
76	970.8mV	0.047uA
77	988.6mV	0.054uA

Made By: Leo Hsia Approval: Peter Yang

SeCoS Corporation

High Temperature Reverse Bias Test Data

Report No : T140430-021
Part No : FR107G
Test Equipment: JUNO Test System DTS-1000
Test Condition : VF<1300mV@IF=1A, IR<5uA@VR=1000V
Test Condition: 100 ± 5℃, 80%VR, T = 1000 hrs
Test Date: 2014.03.03 ~ 2014.04.15
Test Standard : JESD22 STANDARD Method-A108
Operator: Leo Hsia

Test Result: PASS

	Before		After	
No	VF (mV)	IR (uA)	VF (mV)	IR (uA)
1	955.0mV	0.084uA	955.9mV	0.045uA
2	969.5mV	0.091uA	972.6mV	0.055uA
3	987.8mV	0.072uA	979.1mV	0.049uA
4	970.5mV	0.046uA	992.2mV	0.057uA
5	974.6mV	0.079uA	986.8mV	0.078uA
6	962.2mV	0.071uA	984.5mV	0.054uA
7	987.6mV	0.083uA	996.9mV	0.057uA
8	982.4mV	0.063uA	967.4mV	0.070uA
9	974.6mV	0.079uA	958.7mV	0.074uA
10	971.4mV	0.047uA	955.0mV	0.085uA
11	961.2mV	0.049uA	983.9mV	0.046uA
12	957.3mV	0.050uA	967.1mV	0.080uA
13	996.9mV	0.084uA	984.4mV	0.077uA
14	995.3mV	0.066uA	955.5mV	0.077uA
15	956.7mV	0.050uA	974.5mV	0.054uA
16	982.7mV	0.057uA	962.0mV	0.057uA
17	971.1mV	0.067uA	966.4mV	0.082uA
18	979.6mV	0.090uA	992.5mV	0.046uA
19	962.8mV	0.046uA	968.6mV	0.077uA
20	975.4mV	0.067uA	981.7mV	0.084uA
21	965.8mV	0.081uA	972.2mV	0.082uA
22	991.8mV	0.049uA	979.4mV	0.068uA
23	974.2mV	0.050uA	957.4mV	0.051uA
24	961.0mV	0.057uA	990.9mV	0.080uA
25	974.3mV	0.056uA	958.2mV	0.057uA
26	957.9mV	0.064uA	974.7mV	0.046uA
27	964.0mV	0.088uA	992.2mV	0.065uA
28	962.1mV	0.089uA	970.6mV	0.090uA
29	965.5mV	0.059uA	964.4mV	0.074uA
30	974.9mV	0.047uA	955.9mV	0.087uA

SeCoS Corporation

High Temperature Reverse Bias Test Data

Report No : T140430-021
Part No : FR107G
Test Equipment: JUNO Test System DTS-1000
Test Condition : VF<1300mV@IF=1A, IR<5uA@VR=1000V
Test Condition: 100 ± 5℃, 80%VR, T = 1000 hrs
Test Date: 2014.03.03 ~ 2014.04.15
Test Standard : JESD22 STANDARD Method-A108
Operator: Leo Hsia

Test Result: PASS

	Before		After	
No	VF (mV)	IR (uA)	VF (mV)	IR (uA)
31	955.2mV	0.077uA	965.1mV	0.085uA
32	979.2mV	0.062uA	960.8mV	0.068uA
33	991.7mV	0.090uA	960.7mV	0.050uA
34	975.6mV	0.060uA	993.9mV	0.052uA
35	972.5mV	0.057uA	960.0mV	0.061uA
36	979.3mV	0.086uA	954.2mV	0.085uA
37	970.3mV	0.061uA	965.3mV	0.061uA
38	959.4mV	0.060uA	971.1mV	0.080uA
39	992.7mV	0.084uA	983.7mV	0.045uA
40	955.6mV	0.049uA	980.7mV	0.086uA
41	992.3mV	0.092uA	967.1mV	0.050uA
42	971.0mV	0.068uA	963.4mV	0.072uA
43	980.5mV	0.074uA	964.1mV	0.060uA
44	965.5mV	0.091uA	953.0mV	0.047uA
45	971.4mV	0.073uA	982.3mV	0.072uA
46	974.1mV	0.081uA	956.0mV	0.070uA
47	954.6mV	0.073uA	995.6mV	0.093uA
48	967.6mV	0.072uA	979.3mV	0.088uA
49	965.3mV	0.081uA	956.0mV	0.063uA
50	955.9mV	0.063uA	965.5mV	0.068uA
51	964.4mV	0.082uA	971.6mV	0.060uA
52	966.1mV	0.078uA	974.9mV	0.087uA
53	971.8mV	0.060uA	952.2mV	0.048uA
54	986.6mV	0.059uA	966.2mV	0.053uA
55	965.0mV	0.085uA	965.2mV	0.080uA
56	984.5mV	0.068uA	958.7mV	0.064uA
57	986.6mV	0.049uA	970.5mV	0.087uA
58	953.9mV	0.087uA	997.4mV	0.075uA
59	960.0mV	0.060uA	984.7mV	0.051uA
60	952.8mV	0.081uA	957.4mV	0.065uA

SeCoS Corporation

High Temperature Reverse Bias Test Data

Report No : T140430-021
Part No : FR107G
Test Equipment: JUNO Test System DTS-1000
Test Condition : VF<1300mV@IF=1A, IR<5uA@VR=1000V
Test Condition: 100 ± 5℃, 80%VR, T = 1000 hrs
Test Date: 2014.03.03 ~ 2014.04.15
Test Standard : JESD22 STANDARD Method-A108
Operator: Leo Hsia

Test Result: PASS

	Before		After	
No	VF (mV)	IR (uA)	VF (mV)	IR (uA)
61	983.0mV	0.078uA	977.7mV	0.063uA
62	959.9mV	0.076uA	968.6mV	0.091uA
63	963.1mV	0.074uA	953.8mV	0.054uA
64	983.6mV	0.079uA	977.1mV	0.081uA
65	983.6mV	0.076uA	960.9mV	0.045uA
66	987.8mV	0.084uA	969.4mV	0.055uA
67	975.1mV	0.072uA	989.8mV	0.081uA
68	978.3mV	0.066uA	978.9mV	0.069uA
69	966.5mV	0.060uA	955.2mV	0.066uA
70	986.1mV	0.092uA	973.8mV	0.064uA
71	995.5mV	0.084uA	987.0mV	0.081uA
72	972.1mV	0.077uA	976.0mV	0.053uA
73	977.7mV	0.074uA	954.0mV	0.076uA
74	952.4mV	0.046uA	969.8mV	0.079uA
75	957.1mV	0.058uA	960.1mV	0.088uA
76	975.4mV	0.050uA	976.1mV	0.060uA
77	988.6mV	0.069uA	970.0mV	0.058uA

Made By: Leo Hsia

Approval: Peter Yang

SeCoS Corporation

High Temperature Storage Life Test Data

Report No : T140430-021
Part No : FR107G
Test Equipment: JUNO Test System DTS-1000
Test Condition : VF<1300mV@IF=1A, IR<5uA@VR=1000V
Test Condition: 150℃, 1000Hrs
Test Date: 2014.03.03 ~ 2014.04.15
Test Standard : JESD22 STANDARD Method-A103
Operator: Leo Hsia

Test Result: PASS

	Before		After	
No	VF (mV)	IR (uA)	VF (mV)	IR (uA)
1	972.1mV	0.074uA	962.8mV	0.080uA
2	991.0mV	0.050uA	958.7mV	0.066uA
3	969.2mV	0.077uA	969.0mV	0.072uA
4	971.6mV	0.072uA	990.2mV	0.046uA
5	964.2mV	0.065uA	971.5mV	0.065uA
6	980.2mV	0.071uA	971.1mV	0.056uA
7	965.3mV	0.079uA	996.8mV	0.071uA
8	973.8mV	0.076uA	953.1mV	0.076uA
9	953.8mV	0.067uA	983.2mV	0.063uA
10	975.4mV	0.078uA	964.2mV	0.052uA
11	997.9mV	0.054uA	960.3mV	0.072uA
12	968.3mV	0.089uA	975.8mV	0.067uA
13	969.0mV	0.092uA	978.1mV	0.045uA
14	970.9mV	0.070uA	969.6mV	0.070uA
15	981.5mV	0.079uA	965.5mV	0.048uA
16	961.8mV	0.092uA	969.5mV	0.090uA
17	954.3mV	0.068uA	953.3mV	0.054uA
18	973.2mV	0.046uA	962.4mV	0.046uA
19	971.2mV	0.079uA	964.6mV	0.082uA
20	992.7mV	0.058uA	976.3mV	0.069uA
21	993.8mV	0.079uA	987.1mV	0.078uA
22	954.0mV	0.046uA	980.3mV	0.045uA
23	980.0mV	0.074uA	957.6mV	0.068uA
24	994.3mV	0.078uA	995.0mV	0.050uA
25	966.8mV	0.061uA	987.0mV	0.092uA
26	969.1mV	0.052uA	984.3mV	0.092uA
27	994.7mV	0.048uA	997.8mV	0.076uA
28	963.8mV	0.090uA	970.9mV	0.067uA
29	989.3mV	0.084uA	990.4mV	0.077uA
30	989.7mV	0.072uA	983.3mV	0.089uA

SeCoS Corporation

High Temperature Storage Life Test Data

Report No : T140430-021
Part No : FR107G
Test Equipment: JUNO Test System DTS-1000
Test Condition : VF<1300mV@IF=1A, IR<5uA@VR=1000V
Test Condition: 150℃, 1000Hrs
Test Date: 2014.03.03 ~ 2014.04.15
Test Standard : JESD22 STANDARD Method-A103
Operator: Leo Hsia

Test Result: PASS

	Before		After	
No	VF (mV)	IR (uA)	VF (mV)	IR (uA)
31	954.4mV	0.046uA	980.3mV	0.070uA
32	963.4mV	0.086uA	970.7mV	0.054uA
33	985.0mV	0.045uA	981.3mV	0.051uA
34	966.3mV	0.088uA	957.9mV	0.080uA
35	973.5mV	0.085uA	953.6mV	0.049uA
36	975.1mV	0.085uA	973.5mV	0.058uA
37	964.2mV	0.087uA	972.5mV	0.089uA
38	961.2mV	0.045uA	977.4mV	0.081uA
39	995.8mV	0.063uA	964.0mV	0.050uA
40	987.5mV	0.053uA	957.2mV	0.060uA
41	957.4mV	0.058uA	975.3mV	0.065uA
42	995.5mV	0.072uA	992.1mV	0.053uA
43	956.3mV	0.050uA	996.2mV	0.062uA
44	952.1mV	0.069uA	976.7mV	0.060uA
45	983.2mV	0.080uA	961.2mV	0.061uA
46	973.6mV	0.079uA	976.2mV	0.090uA
47	988.7mV	0.068uA	955.4mV	0.072uA
48	986.1mV	0.066uA	996.9mV	0.063uA
49	976.5mV	0.051uA	965.0mV	0.049uA
50	983.3mV	0.045uA	976.4mV	0.056uA
51	969.7mV	0.053uA	968.6mV	0.080uA
52	990.3mV	0.061uA	966.6mV	0.049uA
53	993.0mV	0.064uA	990.9mV	0.067uA
54	969.6mV	0.060uA	993.6mV	0.081uA
55	974.5mV	0.090uA	963.4mV	0.047uA
56	960.1mV	0.054uA	967.9mV	0.070uA
57	986.0mV	0.070uA	972.4mV	0.050uA
58	979.6mV	0.075uA	985.5mV	0.081uA
59	958.7mV	0.050uA	990.6mV	0.088uA
60	952.9mV	0.092uA	992.4mV	0.055uA

SeCoS Corporation

High Temperature Storage Life Test Data

Report No : T140430-021
Part No : FR107G
Test Equipment: JUNO Test System DTS-1000
Test Condition : VF<1300mV@IF=1A, IR<5uA@VR=1000V
Test Condition: 150℃, 1000Hrs
Test Date: 2014.03.03 ~ 2014.04.15
Test Standard : JESD22 STANDARD Method-A103
Operator: Leo Hsia

Test Result: PASS

	Before		After	
No	VF (mV)	IR (uA)	VF (mV)	IR (uA)
61	977.8mV	0.078uA	991.3mV	0.071uA
62	989.1mV	0.069uA	993.2mV	0.087uA
63	956.6mV	0.081uA	960.2mV	0.066uA
64	982.6mV	0.079uA	961.2mV	0.089uA
65	990.1mV	0.079uA	996.4mV	0.087uA
66	981.4mV	0.061uA	962.7mV	0.071uA
67	955.2mV	0.088uA	955.5mV	0.048uA
68	975.5mV	0.072uA	995.6mV	0.051uA
69	993.3mV	0.047uA	957.8mV	0.074uA
70	972.3mV	0.053uA	980.7mV	0.078uA
71	972.0mV	0.074uA	984.6mV	0.076uA
72	963.1mV	0.059uA	966.9mV	0.067uA
73	953.0mV	0.087uA	987.9mV	0.050uA
74	986.8mV	0.045uA	957.5mV	0.083uA
75	957.9mV	0.045uA	964.8mV	0.048uA
76	958.4mV	0.072uA	973.4mV	0.092uA
77	981.7mV	0.050uA	990.5mV	0.050uA

Made By: Leo Hsia

Approval: Peter Yang

SeCoS Corporation

Pressure Cooker Test Data

Report No : T140430-021
Part No : FR107G
Test Equipment: JUNO Test System DTS-1000
Test Condition : VF<1300mV@IF=1A, IR<5uA@VR=1000V
Test Condition: 121℃, 100%RH, 29.7PSIG, 168Hrs
Test Date: 2014.03.03 ~ 2014.03.11
Test Standard : JESD22 STANDARD Method-A102
Operator: Leo Hsia

Test Result: PASS

	Before		After	
No	VF (mV)	IR (uA)	VF (mV)	IR (uA)
1	970.1mV	0.083uA	992.9mV	0.073uA
2	967.8mV	0.073uA	981.5mV	0.082uA
3	981.1mV	0.054uA	990.1mV	0.048uA
4	964.4mV	0.079uA	972.7mV	0.085uA
5	954.8mV	0.081uA	997.3mV	0.057uA
6	990.3mV	0.079uA	971.1mV	0.046uA
7	955.7mV	0.080uA	962.5mV	0.049uA
8	977.0mV	0.066uA	957.1mV	0.059uA
9	990.2mV	0.067uA	972.0mV	0.054uA
10	987.6mV	0.080uA	961.4mV	0.071uA
11	970.8mV	0.046uA	957.2mV	0.046uA
12	956.3mV	0.075uA	991.6mV	0.071uA
13	993.3mV	0.047uA	970.1mV	0.070uA
14	996.3mV	0.050uA	985.7mV	0.064uA
15	973.3mV	0.091uA	969.8mV	0.073uA
16	990.4mV	0.062uA	967.4mV	0.055uA
17	972.5mV	0.081uA	971.8mV	0.077uA
18	985.0mV	0.047uA	989.0mV	0.078uA
19	958.2mV	0.057uA	977.6mV	0.045uA
20	978.8mV	0.089uA	987.8mV	0.078uA
21	992.3mV	0.079uA	970.1mV	0.059uA
22	960.3mV	0.050uA	964.6mV	0.054uA
23	960.7mV	0.078uA	968.0mV	0.076uA
24	964.8mV	0.054uA	959.1mV	0.084uA
25	976.8mV	0.068uA	985.7mV	0.067uA
26	988.9mV	0.069uA	989.7mV	0.081uA
27	981.7mV	0.068uA	973.1mV	0.068uA
28	975.8mV	0.082uA	989.5mV	0.064uA
29	992.6mV	0.077uA	962.4mV	0.062uA
30	959.7mV	0.066uA	960.2mV	0.081uA

SeCoS Corporation

Pressure Cooker Test Data

Report No : T140430-021
Part No : FR107G
Test Equipment: JUNO Test System DTS-1000
Test Condition : VF<1300mV@IF=1A, IR<5uA@VR=1000V
Test Condition: 121℃, 100%RH, 29.7PSIG, 168Hrs
Test Date: 2014.03.03 ~ 2014.03.11
Test Standard : JESD22 STANDARD Method-A102
Operator: Leo Hsia

Test Result: PASS

	Before		After	
No	VF (mV)	IR (uA)	VF (mV)	IR (uA)
31	955.3mV	0.057uA	976.5mV	0.089uA
32	966.0mV	0.092uA	976.6mV	0.092uA
33	992.8mV	0.063uA	955.7mV	0.075uA
34	989.5mV	0.069uA	981.9mV	0.076uA
35	993.9mV	0.083uA	956.7mV	0.072uA
36	976.5mV	0.051uA	979.0mV	0.056uA
37	976.8mV	0.080uA	957.0mV	0.058uA
38	973.7mV	0.083uA	970.3mV	0.056uA
39	978.0mV	0.086uA	982.1mV	0.063uA
40	987.3mV	0.068uA	962.7mV	0.087uA
41	960.9mV	0.067uA	986.4mV	0.081uA
42	970.0mV	0.055uA	956.3mV	0.046uA
43	957.8mV	0.052uA	974.5mV	0.085uA
44	977.4mV	0.064uA	994.1mV	0.091uA
45	983.4mV	0.083uA	996.1mV	0.083uA
46	987.1mV	0.056uA	983.3mV	0.045uA
47	956.2mV	0.049uA	986.8mV	0.048uA
48	970.6mV	0.047uA	995.8mV	0.090uA
49	958.7mV	0.047uA	976.3mV	0.081uA
50	995.9mV	0.059uA	976.4mV	0.061uA
51	993.4mV	0.076uA	991.0mV	0.059uA
52	975.8mV	0.075uA	995.6mV	0.075uA
53	971.7mV	0.056uA	993.6mV	0.079uA
54	961.5mV	0.076uA	982.9mV	0.057uA
55	997.5mV	0.086uA	967.6mV	0.052uA
56	959.9mV	0.087uA	964.7mV	0.046uA
57	981.4mV	0.059uA	965.5mV	0.052uA
58	953.4mV	0.091uA	973.4mV	0.086uA
59	963.3mV	0.069uA	985.2mV	0.054uA
60	968.4mV	0.084uA	988.4mV	0.056uA

SeCoS Corporation

Pressure Cooker Test Data

Report No : T140430-021
Part No : FR107G
Test Equipment: JUNO Test System DTS-1000
Test Condition : VF<1300mV@IF=1A, IR<5uA@VR=1000V
Test Condition: 121℃, 100%RH, 29.7PSIG, 168Hrs
Test Date: 2014.03.03 ~ 2014.03.11
Test Standard : JESD22 STANDARD Method-A102
Operator: Leo Hsia

Test Result: PASS

	Before		After	
No	VF (mV)	IR (uA)	VF (mV)	IR (uA)
61	989.2mV	0.088uA	995.1mV	0.051uA
62	988.1mV	0.066uA	975.8mV	0.059uA
63	992.7mV	0.078uA	997.3mV	0.075uA
64	980.6mV	0.067uA	998.0mV	0.084uA
65	993.6mV	0.053uA	958.0mV	0.052uA
66	956.1mV	0.071uA	957.7mV	0.082uA
67	964.4mV	0.049uA	989.1mV	0.045uA
68	981.1mV	0.086uA	968.4mV	0.087uA
69	967.6mV	0.081uA	956.7mV	0.062uA
70	997.8mV	0.087uA	975.5mV	0.086uA
71	992.6mV	0.056uA	960.6mV	0.051uA
72	997.1mV	0.048uA	980.1mV	0.090uA
73	968.2mV	0.055uA	965.0mV	0.062uA
74	953.2mV	0.075uA	979.0mV	0.046uA
75	984.2mV	0.093uA	970.7mV	0.090uA
76	992.3mV	0.049uA	953.9mV	0.066uA
77	958.2mV	0.074uA	972.5mV	0.062uA

Made By: Leo Hsia

Approval: Peter Yang

SeCoS Corporation

Temperature Cycle Test Data

Report No : T140430-021
Part No : FR107G
Test Equipment: JUNO Test System DTS-1000
Test Condition : VF<1300mV@IF=1A, IR<5uA@VR=1000V
Test Condition: -55℃/30min, 150℃/30min, for1000 Cycle
Test Date: 2014.03.03 ~ 2014.04.25
Test Standard : JESD22 STANDARD Method-A104
Operator: Leo Hsia

Test Result: PASS

	Before		After	
No	VF (mV)	IR (uA)	VF (mV)	IR (uA)
1	984.2mV	0.092uA	970.1mV	0.077uA
2	978.4mV	0.059uA	982.8mV	0.062uA
3	990.3mV	0.078uA	971.4mV	0.053uA
4	972.1mV	0.046uA	954.1mV	0.090uA
5	960.1mV	0.089uA	958.6mV	0.087uA
6	985.6mV	0.053uA	988.1mV	0.081uA
7	959.1mV	0.092uA	972.0mV	0.067uA
8	979.8mV	0.092uA	986.5mV	0.066uA
9	967.0mV	0.084uA	991.7mV	0.059uA
10	961.4mV	0.054uA	977.2mV	0.069uA
11	974.6mV	0.087uA	968.3mV	0.049uA
12	954.2mV	0.091uA	983.3mV	0.082uA
13	968.7mV	0.048uA	995.0mV	0.045uA
14	987.3mV	0.074uA	978.9mV	0.046uA
15	967.8mV	0.078uA	956.5mV	0.066uA
16	997.0mV	0.088uA	964.6mV	0.082uA
17	990.4mV	0.089uA	964.3mV	0.092uA
18	981.4mV	0.069uA	981.1mV	0.049uA
19	995.2mV	0.059uA	986.9mV	0.067uA
20	958.2mV	0.084uA	962.5mV	0.068uA
21	966.7mV	0.073uA	952.3mV	0.081uA
22	963.6mV	0.073uA	965.9mV	0.081uA
23	956.0mV	0.061uA	972.2mV	0.059uA
24	961.0mV	0.090uA	961.6mV	0.075uA
25	973.1mV	0.074uA	954.6mV	0.063uA
26	974.4mV	0.045uA	993.9mV	0.054uA
27	957.7mV	0.080uA	993.8mV	0.084uA
28	994.6mV	0.081uA	964.7mV	0.072uA
29	977.5mV	0.077uA	963.4mV	0.071uA
30	984.5mV	0.078uA	996.1mV	0.069uA

SeCoS Corporation

Temperature Cycle Test Data

Report No : T140430-021
Part No : FR107G
Test Equipment: JUNO Test System DTS-1000
Test Condition : VF<1300mV@IF=1A, IR<5uA@VR=1000V
Test Condition: -55℃/30min, 150℃/30min, for1000 Cycle
Test Date: 2014.03.03 ~ 2014.04.25
Test Standard : JESD22 STANDARD Method-A104
Operator: Leo Hsia

Test Result: PASS

	Before		After	
No	VF (mV)	IR (uA)	VF (mV)	IR (uA)
31	972.8mV	0.091uA	960.2mV	0.067uA
32	972.4mV	0.091uA	997.2mV	0.055uA
33	975.7mV	0.089uA	957.9mV	0.055uA
34	974.4mV	0.052uA	973.9mV	0.082uA
35	959.8mV	0.063uA	984.8mV	0.093uA
36	968.2mV	0.074uA	958.1mV	0.085uA
37	993.9mV	0.058uA	955.2mV	0.053uA
38	956.9mV	0.071uA	977.1mV	0.089uA
39	980.3mV	0.081uA	975.4mV	0.045uA
40	988.0mV	0.071uA	971.2mV	0.069uA
41	988.4mV	0.074uA	975.8mV	0.069uA
42	981.8mV	0.089uA	992.1mV	0.074uA
43	955.6mV	0.082uA	994.5mV	0.061uA
44	985.6mV	0.052uA	982.2mV	0.045uA
45	970.6mV	0.058uA	970.3mV	0.052uA
46	970.5mV	0.053uA	995.9mV	0.081uA
47	960.9mV	0.077uA	985.7mV	0.050uA
48	977.9mV	0.072uA	991.3mV	0.050uA
49	968.7mV	0.071uA	986.6mV	0.092uA
50	966.1mV	0.075uA	963.5mV	0.082uA
51	995.0mV	0.092uA	971.1mV	0.076uA
52	961.8mV	0.053uA	976.2mV	0.054uA
53	956.5mV	0.086uA	982.3mV	0.077uA
54	981.6mV	0.063uA	953.5mV	0.077uA
55	972.9mV	0.068uA	982.6mV	0.086uA
56	988.1mV	0.062uA	959.2mV	0.047uA
57	975.3mV	0.077uA	963.4mV	0.050uA
58	952.1mV	0.091uA	960.2mV	0.049uA
59	984.7mV	0.067uA	975.1mV	0.075uA
60	957.0mV	0.066uA	961.0mV	0.075uA

SeCoS Corporation

Temperature Cycle Test Data

Report No : T140430-021
Part No : FR107G
Test Equipment: JUNO Test System DTS-1000
Test Condition : VF<1300mV@IF=1A, IR<5uA@VR=1000V
Test Condition: -55℃/30min, 150℃/30min, for1000 Cycle
Test Date: 2014.03.03 ~ 2014.04.25
Test Standard : JESD22 STANDARD Method-A104
Operator: Leo Hsia

Test Result: PASS

	Before		After	
No	VF (mV)	IR (uA)	VF (mV)	IR (uA)
61	955.8mV	0.091uA	969.9mV	0.083uA
62	963.5mV	0.066uA	976.8mV	0.078uA
63	968.1mV	0.071uA	968.4mV	0.059uA
64	965.5mV	0.053uA	965.0mV	0.069uA
65	958.6mV	0.067uA	969.1mV	0.047uA
66	956.0mV	0.088uA	964.2mV	0.073uA
67	961.4mV	0.049uA	958.5mV	0.057uA
68	986.7mV	0.081uA	980.8mV	0.048uA
69	970.2mV	0.076uA	997.3mV	0.068uA
70	989.6mV	0.068uA	979.8mV	0.068uA
71	984.5mV	0.084uA	977.4mV	0.060uA
72	961.6mV	0.073uA	976.6mV	0.067uA
73	972.1mV	0.081uA	982.0mV	0.074uA
74	956.9mV	0.087uA	984.6mV	0.084uA
75	968.2mV	0.077uA	988.8mV	0.045uA
76	977.2mV	0.053uA	977.8mV	0.085uA
77	969.0mV	0.050uA	954.1mV	0.087uA

Made By: Leo Hsia

Approval: Peter Yang

SeCoS Corporation

High Temperature High Humidity Test Data

Report No : T140430-021
Part No : FR107G
Test Equipment: JUNO Test System DTS-1000
Test Condition : VF<1300mV@IF=1A, IR<5uA@VR=1000V
Test Condition: 85±2℃, 85±5%RH, 1000Hrs
Test Date: 2014.03.11 ~ 2014.04.23
Test Standard : JESD22 STANDARD Method-A101
Operator: Leo Hsia

Test Result: PASS

	Before		After	
No	VF (mV)	IR (uA)	VF (mV)	IR (uA)
1	987.6mV	0.088uA	968.1mV	0.062uA
2	962.7mV	0.059uA	987.5mV	0.082uA
3	979.9mV	0.064uA	982.8mV	0.086uA
4	960.5mV	0.072uA	970.1mV	0.085uA
5	975.7mV	0.085uA	980.6mV	0.063uA
6	970.7mV	0.090uA	961.0mV	0.047uA
7	975.0mV	0.060uA	975.4mV	0.091uA
8	993.0mV	0.068uA	996.0mV	0.055uA
9	962.5mV	0.074uA	952.7mV	0.063uA
10	976.7mV	0.046uA	995.5mV	0.066uA
11	996.6mV	0.088uA	966.4mV	0.077uA
12	972.0mV	0.063uA	973.0mV	0.074uA
13	967.9mV	0.054uA	957.4mV	0.091uA
14	962.4mV	0.074uA	966.7mV	0.089uA
15	954.6mV	0.089uA	980.4mV	0.065uA
16	997.2mV	0.085uA	956.6mV	0.050uA
17	981.7mV	0.080uA	971.3mV	0.049uA
18	962.7mV	0.078uA	983.4mV	0.085uA
19	982.5mV	0.067uA	971.2mV	0.084uA
20	993.1mV	0.056uA	988.6mV	0.048uA
21	980.4mV	0.065uA	967.8mV	0.060uA
22	978.3mV	0.091uA	975.7mV	0.052uA
23	996.3mV	0.077uA	986.8mV	0.087uA
24	972.8mV	0.066uA	980.2mV	0.086uA
25	958.1mV	0.090uA	992.9mV	0.059uA
26	972.4mV	0.065uA	981.3mV	0.080uA
27	984.6mV	0.080uA	971.7mV	0.045uA
28	959.4mV	0.082uA	963.5mV	0.060uA
29	956.3mV	0.048uA	976.9mV	0.065uA
30	988.0mV	0.068uA	963.2mV	0.061uA

SeCoS Corporation

High Temperature High Humidity Test Data

Report No : T140430-021
Part No : FR107G
Test Equipment: JUNO Test System DTS-1000
Test Condition : VF<1300mV@IF=1A, IR<5uA@VR=1000V
Test Condition: 85±2℃, 85±5%RH, 1000Hrs
Test Date: 2014.03.11 ~ 2014.04.23
Test Standard : JESD22 STANDARD Method-A101
Operator: Leo Hsia

Test Result: PASS

	Before		After	
No	VF (mV)	IR (uA)	VF (mV)	IR (uA)
31	982.5mV	0.088uA	982.0mV	0.084uA
32	977.2mV	0.071uA	962.7mV	0.089uA
33	970.8mV	0.064uA	966.5mV	0.077uA
34	960.7mV	0.055uA	978.4mV	0.069uA
35	990.8mV	0.085uA	964.1mV	0.092uA
36	961.0mV	0.082uA	992.6mV	0.053uA
37	957.8mV	0.051uA	965.8mV	0.084uA
38	965.5mV	0.050uA	960.2mV	0.081uA
39	956.8mV	0.078uA	981.9mV	0.053uA
40	965.2mV	0.073uA	952.1mV	0.056uA
41	963.9mV	0.062uA	988.3mV	0.087uA
42	994.7mV	0.076uA	987.7mV	0.071uA
43	958.5mV	0.085uA	968.9mV	0.054uA
44	992.6mV	0.082uA	983.2mV	0.092uA
45	953.8mV	0.090uA	955.1mV	0.078uA
46	974.4mV	0.049uA	984.0mV	0.059uA
47	976.3mV	0.061uA	962.9mV	0.056uA
48	983.5mV	0.069uA	983.9mV	0.057uA
49	995.9mV	0.067uA	953.0mV	0.069uA
50	974.9mV	0.053uA	971.7mV	0.048uA
51	957.1mV	0.086uA	988.0mV	0.067uA
52	976.4mV	0.091uA	968.9mV	0.067uA
53	997.6mV	0.058uA	974.5mV	0.087uA
54	993.6mV	0.073uA	974.8mV	0.074uA
55	986.6mV	0.062uA	994.4mV	0.088uA
56	984.1mV	0.085uA	976.5mV	0.077uA
57	987.8mV	0.077uA	989.8mV	0.080uA
58	970.7mV	0.059uA	961.2mV	0.060uA
59	974.1mV	0.086uA	973.9mV	0.061uA
60	959.4mV	0.091uA	973.2mV	0.054uA

SeCoS Corporation

High Temperature High Humidity Test Data

Report No : T140430-021
Part No : FR107G
Test Equipment: JUNO Test System DTS-1000
Test Condition : VF<1300mV@IF=1A, IR<5uA@VR=1000V
Test Condition: 85±2℃, 85±5%RH, 1000Hrs
Test Date: 2014.03.11 ~ 2014.04.23
Test Standard : JESD22 STANDARD Method-A101
Operator: Leo Hsia

Test Result: PASS

	Before		After	
No	VF (mV)	IR (uA)	VF (mV)	IR (uA)
61	981.6mV	0.078uA	958.7mV	0.086uA
62	966.9mV	0.079uA	997.5mV	0.071uA
63	953.8mV	0.076uA	977.3mV	0.071uA
64	966.4mV	0.082uA	963.1mV	0.071uA
65	967.7mV	0.086uA	978.7mV	0.065uA
66	989.9mV	0.084uA	987.4mV	0.057uA
67	985.3mV	0.059uA	955.2mV	0.085uA
68	952.6mV	0.061uA	958.7mV	0.067uA
69	953.5mV	0.056uA	958.2mV	0.046uA
70	979.1mV	0.052uA	994.5mV	0.062uA
71	973.6mV	0.081uA	993.4mV	0.063uA
72	994.0mV	0.049uA	977.4mV	0.058uA
73	954.0mV	0.069uA	980.8mV	0.045uA
74	987.6mV	0.092uA	957.3mV	0.087uA
75	971.2mV	0.083uA	996.6mV	0.058uA
76	976.5mV	0.090uA	972.1mV	0.087uA
77	974.2mV	0.089uA	982.2mV	0.086uA

Made By: Leo Hsia

Approval: Peter Yang

SeCoS Corporation

High Temper High Humidity Reverse Bies Test Data

Report No : T140430-021
Part No : FR107G
Test Equipment: JUNO Test System DTS-1000
Test Condition : VF<1300mV@IF=1A, IR<5uA@VR=1000V
Test Condition: 85±2℃, 85±5%RH, 1000Hrs
Test Date: 2014.03.11 ~ 2014.04.23
Test Standard : JESD22 STANDARD Method-A101
Operator: Leo Hsia

Test Result: PASS

	Before		After	
No	VF (mV)	IR (uA)	VF (mV)	IR (uA)
1	978.2mV	0.071uA	953.6mV	0.059uA
2	954.1mV	0.080uA	974.4mV	0.061uA
3	953.3mV	0.082uA	962.9mV	0.055uA
4	992.9mV	0.073uA	956.2mV	0.060uA
5	964.7mV	0.081uA	960.9mV	0.054uA
6	997.4mV	0.065uA	955.0mV	0.053uA
7	961.7mV	0.085uA	997.3mV	0.064uA
8	954.5mV	0.082uA	988.4mV	0.066uA
9	994.6mV	0.058uA	956.0mV	0.074uA
10	975.4mV	0.065uA	956.4mV	0.091uA
11	971.8mV	0.046uA	983.1mV	0.066uA
12	992.0mV	0.058uA	974.8mV	0.061uA
13	994.7mV	0.080uA	983.4mV	0.071uA
14	987.3mV	0.045uA	958.0mV	0.056uA
15	957.1mV	0.080uA	991.6mV	0.052uA
16	957.7mV	0.065uA	962.8mV	0.081uA
17	967.3mV	0.078uA	990.9mV	0.064uA
18	981.7mV	0.078uA	971.6mV	0.093uA
19	997.2mV	0.084uA	973.1mV	0.065uA
20	981.8mV	0.070uA	967.7mV	0.073uA
21	955.1mV	0.084uA	986.7mV	0.051uA
22	962.0mV	0.057uA	980.6mV	0.063uA
23	952.1mV	0.069uA	987.6mV	0.053uA
24	953.8mV	0.075uA	982.5mV	0.075uA
25	977.5mV	0.088uA	968.2mV	0.046uA
26	963.8mV	0.079uA	989.4mV	0.078uA
27	990.9mV	0.057uA	970.2mV	0.071uA
28	986.8mV	0.056uA	983.2mV	0.088uA
29	957.3mV	0.071uA	965.0mV	0.048uA
30	987.8mV	0.085uA	979.8mV	0.084uA

SeCoS Corporation

High Temper High Humidity Reverse Bies Test Data

Report No : T140430-021
Part No : FR107G
Test Equipment: JUNO Test System DTS-1000
Test Condition : VF<1300mV@IF=1A, IR<5uA@VR=1000V
Test Condition: 85±2℃, 85±5%RH, 1000Hrs
Test Date: 2014.03.11 ~ 2014.04.23
Test Standard : JESD22 STANDARD Method-A101
Operator: Leo Hsia

Test Result: PASS

	Before		After	
No	VF (mV)	IR (uA)	VF (mV)	IR (uA)
31	994.3mV	0.089uA	956.2mV	0.047uA
32	953.2mV	0.053uA	976.9mV	0.054uA
33	991.9mV	0.091uA	962.5mV	0.063uA
34	994.1mV	0.083uA	995.4mV	0.081uA
35	972.4mV	0.066uA	974.4mV	0.089uA
36	971.8mV	0.076uA	965.6mV	0.053uA
37	989.4mV	0.049uA	983.1mV	0.062uA
38	960.1mV	0.082uA	955.6mV	0.062uA
39	983.7mV	0.085uA	978.4mV	0.068uA
40	989.4mV	0.088uA	994.1mV	0.080uA
41	990.4mV	0.080uA	969.4mV	0.062uA
42	980.7mV	0.046uA	965.0mV	0.091uA
43	992.1mV	0.073uA	956.5mV	0.050uA
44	997.3mV	0.088uA	973.5mV	0.062uA
45	995.0mV	0.068uA	994.5mV	0.070uA
46	973.2mV	0.090uA	957.0mV	0.064uA
47	952.4mV	0.058uA	967.1mV	0.057uA
48	975.0mV	0.065uA	956.3mV	0.076uA
49	960.7mV	0.063uA	975.3mV	0.049uA
50	966.7mV	0.081uA	970.5mV	0.056uA
51	992.3mV	0.083uA	979.5mV	0.049uA
52	967.1mV	0.070uA	978.4mV	0.087uA
53	985.0mV	0.083uA	955.0mV	0.077uA
54	970.0mV	0.058uA	988.0mV	0.088uA
55	995.6mV	0.090uA	962.8mV	0.078uA
56	976.6mV	0.084uA	988.8mV	0.062uA
57	973.4mV	0.050uA	970.1mV	0.073uA
58	989.2mV	0.062uA	977.7mV	0.057uA
59	961.7mV	0.071uA	959.1mV	0.085uA
60	996.7mV	0.058uA	968.3mV	0.082uA

SeCoS Corporation

High Temper High Humidity Reverse Bies Test Data

Report No : T140430-021
Part No : FR107G
Test Equipment: JUNO Test System DTS-1000
Test Condition : VF<1300mV@IF=1A, IR<5uA@VR=1000V
Test Condition: 85±2℃, 85±5%RH, 1000Hrs
Test Date: 2014.03.11 ~ 2014.04.23
Test Standard : JESD22 STANDARD Method-A101
Operator: Leo Hsia

Test Result: PASS

	Before		After	
No	VF (mV)	IR (uA)	VF (mV)	IR (uA)
61	972.2mV	0.087uA	964.8mV	0.048uA
62	996.5mV	0.062uA	988.2mV	0.088uA
63	953.7mV	0.089uA	987.0mV	0.088uA
64	991.7mV	0.051uA	967.3mV	0.083uA
65	958.4mV	0.064uA	960.0mV	0.078uA
66	994.5mV	0.066uA	981.8mV	0.056uA
67	973.4mV	0.049uA	960.8mV	0.089uA
68	965.4mV	0.069uA	953.4mV	0.056uA
69	959.4mV	0.091uA	967.6mV	0.060uA
70	983.3mV	0.059uA	994.0mV	0.051uA
71	985.5mV	0.054uA	969.6mV	0.069uA
72	955.8mV	0.070uA	974.3mV	0.080uA
73	982.7mV	0.045uA	970.0mV	0.064uA
74	975.6mV	0.054uA	969.1mV	0.085uA
75	967.5mV	0.091uA	986.5mV	0.069uA
76	983.7mV	0.088uA	953.1mV	0.081uA
77	962.6mV	0.047uA	970.9mV	0.072uA

Made By: Leo Hsia

Approval: Peter Yang

SeCoS Corporation

Solderability Test Data

Report No : T140430-021
Part No : FR107G
Test Equipment: JUNO Test System DTS-1000
Test Condition : VF<1300mV@IF=1A, IR<5uA@VR=1000V
Test Condition: 270℃ ± 5℃, 7 Sec ± 2Sec
Test Date: 2014.04.28 ~ 2014.04.28
Test Standard : JESD22 STANDER Method-A106
Operator: Leo Hsia

Test Result: PASS

	Before		After	
No	VF (mV)	IR (uA)	VF (mV)	IR (uA)
1	995.6mV	0.068uA	953.9mV	0.069uA
2	975.4mV	0.091uA	981.3mV	0.072uA
3	975.5mV	0.073uA	975.0mV	0.055uA
4	960.7mV	0.085uA	983.8mV	0.049uA
5	962.6mV	0.070uA	985.9mV	0.062uA
6	988.6mV	0.067uA	956.7mV	0.077uA
7	966.5mV	0.091uA	995.6mV	0.059uA
8	961.4mV	0.058uA	955.2mV	0.072uA
9	973.4mV	0.078uA	993.2mV	0.077uA
10	973.1mV	0.062uA	960.7mV	0.077uA

Made By: Leo Hsia

Approval: Peter Yang

簽名有效

For Question,
Please Contact with SGS
www.tw.sgs.com

Test Report

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SECOS CORPORATION

CE/2014/42772A

8F, NO. 33, LANE 155, SEC. 3, BEI-SHEN RD., SHEN KENG DIST., NEW TAIPEI CITY, TAIWAN

The following sample(s) was/were submitted and identified by/on behalf of the applicant as :

Sample Description	:	RECTIFIER(NON GREEN COMPOUND)
Style/Item No.	:	DO-15, DO-27, DO-35, DO-41, DO-201, R-1, R-6, R7 SERIES
Sample Receiving Date	:	2014/04/14
Testing Period	:	2014/04/14 TO 2014/04/18

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Test Result(s) : Please refer to next page(s).

Troy Ch
Signed
SGS TA
Chemical Laboratory – Taipei

SECOS CORPORATION *CE/2014/42772A*
8F, NO. 33, LANE 155, SEC. 3, BEI-SHEN RD., SHEN KENG DIST., NEW TAIPEI CITY, TAIWAN

Test Result(s)

PART NAME No.1 : BLACK BODY
PART NAME No.2 : PLATING LAYER OF SILVER COLORED METAL PIN
PART NAME No.3 : BASE MATERIAL OF SILVER COLORED METAL PIN
PART NAME No.4 : SILVER COLORED METAL PIN (INCLUDING THE PLATING LAYER)

Test Item(s)	Unit	Method	MDL	Result			
				No.1	No.2	No.3	No.4
Cadmium (Cd)	mg/kg	With reference to IEC 62321-5: 2013 and performed by ICP-AES.	2	n.d.	---	n.d.	---
	mg/kg	IEC 62321-5: 2013 application of modified digestion by surface etching and performed by ICP-AES.	2	---	n.d.	---	---
Lead (Pb)	mg/kg	With reference to IEC 62321-5: 2013 and performed by ICP-AES.	2	4130	---	n.d.	---
	mg/kg	IEC 62321-5: 2013 application of modified digestion by surface etching and performed by ICP-AES.	2	---	20	---	---
Mercury (Hg)	mg/kg	With reference to IEC 62321-4: 2013 and performed by ICP-AES.	2	n.d.	---	n.d.	---
	mg/kg	IEC 62321-4: 2013 application of modified digestion by surface etching and performed by ICP-AES.	2	---	n.d.	---	---
Hexavalent Chromium Cr(VI)	mg/kg	With reference to IEC 62321: 2008 and performed by UV-VIS.	2	n.d.	---	---	---
	**	With reference to IEC 62321: 2008 and performed by Boiling water extraction Method.#	#	---	Negative	Negative	---
Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified (α- HBCDD, β- HBCDD, γ- HBCDD) (CAS No.: 25637-99-4 and 3194-55-6 (134237-51-7, 134237-50-6, 134237-52-8))	mg/kg	With reference to IEC 62321: 2008 method. Analysis was performed by GC/MS.	5	n.d.	---	---	n.d.

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CE/2014/42772A

Test Item(s)	Unit	Method	MDL	Result			
				No.1	No.2	No.3	No.4
BBP (Benzyl butyl phthalate) (CAS No.: 85-68-7)	%	With reference to EN 14372. Analysis was performed by GC/MS.	0.003	n.d.	---	---	n.d.
DBP (Dibutyl phthalate) (CAS No.: 84-74-2)	%	With reference to EN 14372. Analysis was performed by GC/MS.	0.003	n.d.	---	---	n.d.
DEHP (Di- (2-ethylhexyl) phthalate) (CAS No.: 117-81-7)	%	With reference to EN 14372. Analysis was performed by GC/MS.	0.003	n.d.	---	---	n.d.
Perfluorooctane sulfonates (PFOS-Acid, Metal Salt, Amide)	mg/kg	With reference to US EPA 3550C: 2007. Analysis was performed by LC/MS.	10	n.d.	---	n.d.	---
	µg/m²	With reference to US EPA 3550C: 2007. Analysis was performed by LC/MS.	1	---	n.d.	---	---
PFOA (CAS No.: 335-67-1)	mg/kg	With reference to US EPA 3550C: 2007. Analysis was performed by LC/MS.	10	n.d.	---	n.d.	---
	µg/m²	With reference to US EPA 3550C: 2007. Analysis was performed by LC/MS.	1	---	n.d.	---	---
Halogen							
Halogen-Fluorine (F) (CAS No.: 14762-94-8)	mg/kg	With reference to BS EN 14582:2007. Analysis was performed by IC.	50	n.d.	---	---	n.d.
Halogen-Chlorine (Cl) (CAS No.: 22537-15-1)	mg/kg	With reference to BS EN 14582:2007. Analysis was performed by IC.	50	108	---	---	n.d.
Halogen-Bromine (Br) (CAS No.: 10097-32-2)	mg/kg	With reference to BS EN 14582:2007. Analysis was performed by IC.	50	5720	---	---	n.d.
Halogen-Iodine (I) (CAS No.: 14362-44-8)	mg/kg	With reference to BS EN 14582:2007. Analysis was performed by IC.	50	n.d.	---	---	n.d.

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Test Item(s)	Unit	Method	MDL	Result			
				No.1	No.2	No.3	No.4
Sum of PBBs	mg/kg	With reference to IEC 62321: 2008 and performed by GC/MS.	-	n.d.	n.d.	n.d.	---
Monobromobiphenyl	mg/kg		5	n.d.	n.d.	n.d.	---
Dibromobiphenyl	mg/kg		5	n.d.	n.d.	n.d.	---
Tribromobiphenyl	mg/kg		5	n.d.	n.d.	n.d.	---
Tetrabromobiphenyl	mg/kg		5	n.d.	n.d.	n.d.	---
Pentabromobiphenyl	mg/kg		5	n.d.	n.d.	n.d.	---
Hexabromobiphenyl	mg/kg		5	n.d.	n.d.	n.d.	---
Heptabromobiphenyl	mg/kg		5	n.d.	n.d.	n.d.	---
Octabromobiphenyl	mg/kg		5	n.d.	n.d.	n.d.	---
Nonabromobiphenyl	mg/kg		5	n.d.	n.d.	n.d.	---
Decabromobiphenyl	mg/kg		5	n.d.	n.d.	n.d.	---
Sum of PBDEs	mg/kg		-	n.d.	n.d.	n.d.	---
Monobromodiphenyl ether	mg/kg		5	n.d.	n.d.	n.d.	---
Dibromodiphenyl ether	mg/kg		5	n.d.	n.d.	n.d.	---
Tribromodiphenyl ether	mg/kg		5	n.d.	n.d.	n.d.	---
Tetrabromodiphenyl ether	mg/kg		5	n.d.	n.d.	n.d.	---
Pentabromodiphenyl ether	mg/kg		5	n.d.	n.d.	n.d.	---
Hexabromodiphenyl ether	mg/kg		5	n.d.	n.d.	n.d.	---
Heptabromodiphenyl ether	mg/kg		5	n.d.	n.d.	n.d.	---
Octabromodiphenyl ether	mg/kg		5	n.d.	n.d.	n.d.	---
Nonabromodiphenyl ether	mg/kg		5	n.d.	n.d.	n.d.	---
Decabromodiphenyl ether	mg/kg		5	n.d.	n.d.	n.d.	---

Note：

1. mg/kg = ppm；0.1wt% = 1000ppm
2. n.d. = Not Detected
3. MDL = Method Detection Limit
4. " - " = Not Regulated
5. "---" = Not Conducted
6. ** = Qualitative analysis (No Unit)
7. # = a. Positive means the presence of CrVI on the tested areas
   b. Negative means the absence of CrVI on the tested areas
   The detected concentration in boiling-water-extraction solution is equal or greater than 0.02 mg/kg with 50 cm² tested areas.

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PFOS Reference Information : POPs - (EU) 757/2010

Outlawing PFOS as substances or preparations in concentrations above 0.001% (10ppm), in semi-finished products or articles or parts at a level above 0.1%(1000ppm), in textiles or other coated materials above 1µg/m².

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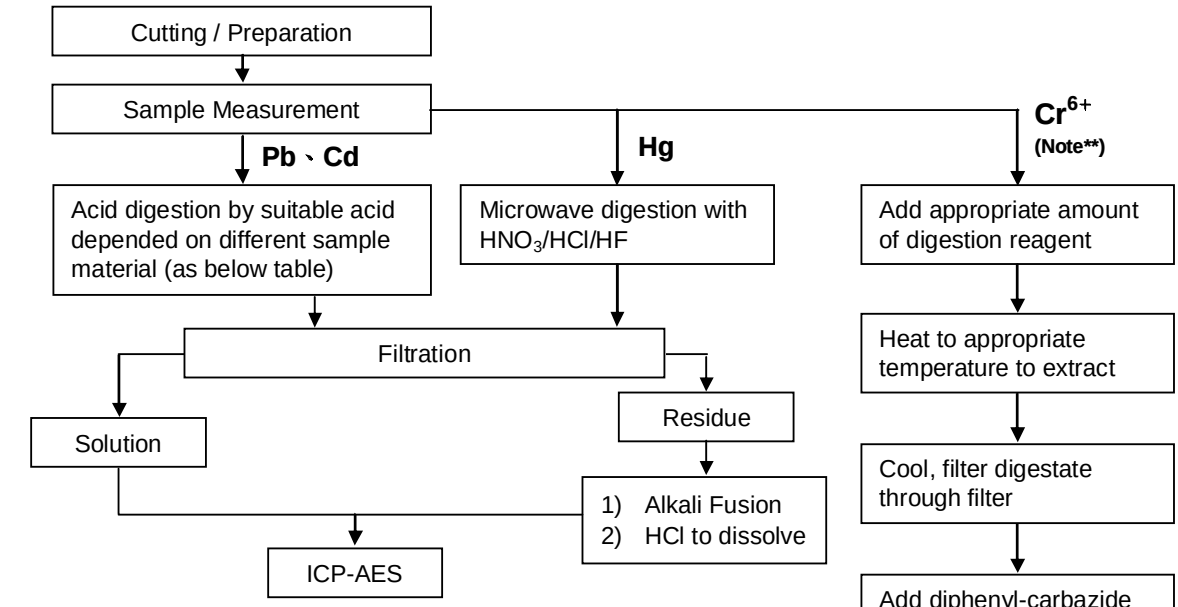
No.1, 3

1) These samples were dissolved totally by pre-conditioning method according to below flow chart. (Cr^{6+} test method excluded)
2) Name of the person who made measurement: Climbgreat Yang
3) Name of the person in charge of measurement: Troy Chang



Sample Material	Digestion Acid
Steel, copper, aluminum, solder	Aqua regia, HNO_3, HCl, HF, H_2O_2
Glass	HNO_3/HF
Gold, platinum, palladium, ceramic	Aqua regia
Silver	HNO_3
Plastic	H_2SO_4, H_2O_2, HNO_3, HCl
Others	Added appropriate reagent to total digestion

Note (For IEC 62321)**
(1) For non-metallic material, add alkaline digestion reagent and heat to 90~95℃.
(2) For metallic material, add pure water and heat to boiling.

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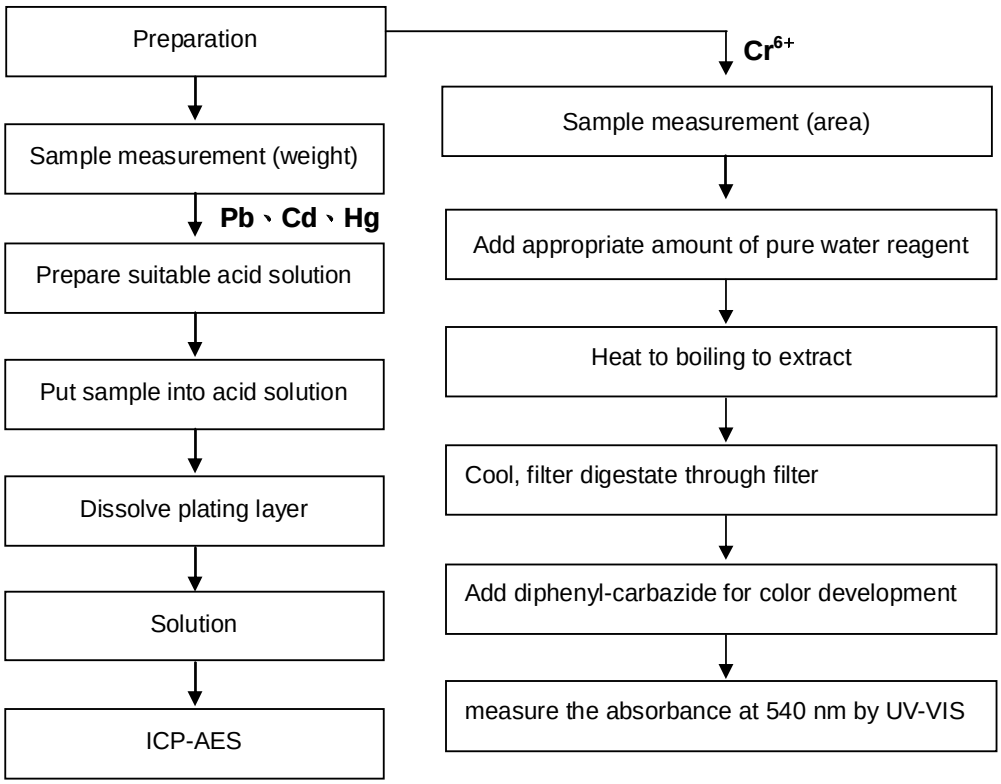
No.2

The plating layer of samples were dissolved totally by pre-conditioning method according to below flow chart. （Cr^{6+} test method excluded）

- Name of the person who made measurement: Climbgreat Yang
- Name of the person in charge of measurement: Troy Chang

Flow Chart of Stripping method for metal analysis



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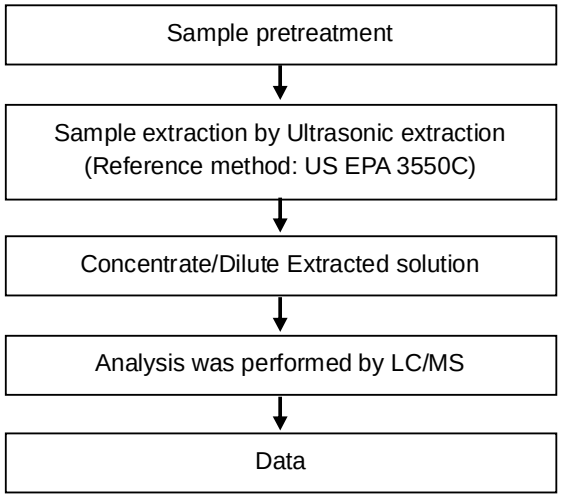
PFOA/PFOS analytical flow chart of Ultrasonic extraction (LC/MS) procedure

- Name of the person who made measurement: Roman Wong
- Name of the person in charge of measurement: Troy Chang



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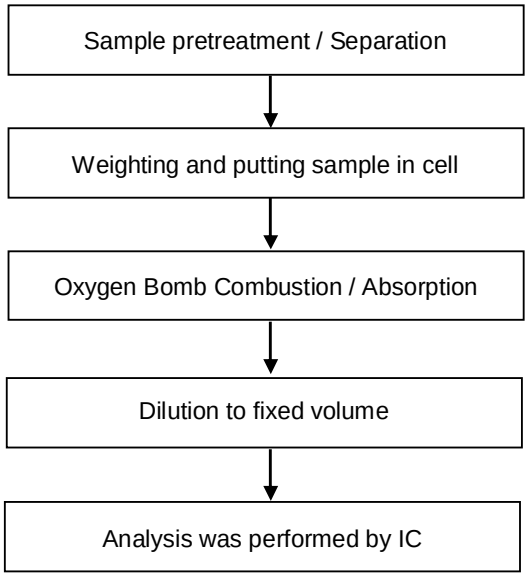
Analytical flow chart of halogen content

- Name of the person who made measurement: Rita Chen
- Name of the person in charge of measurement: Troy Chang



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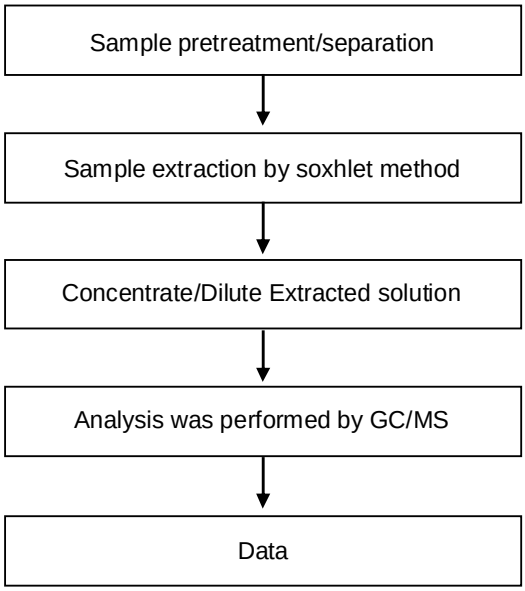
Analytical flow chart of phthalate content

- Name of the person who made measurement: Roman Wong
- Name of the person in charge of measurement: Troy Chang



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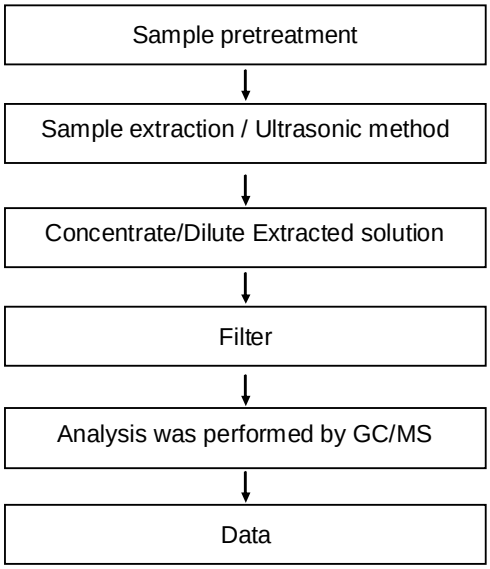
TAIWAN

HBCDD analytical flow chart

- Name of the person who made measurement: Roman Wong
- Name of the person in charge of measurement: Troy Chang



SECOS CORPORATION *CE/2014/42772A*
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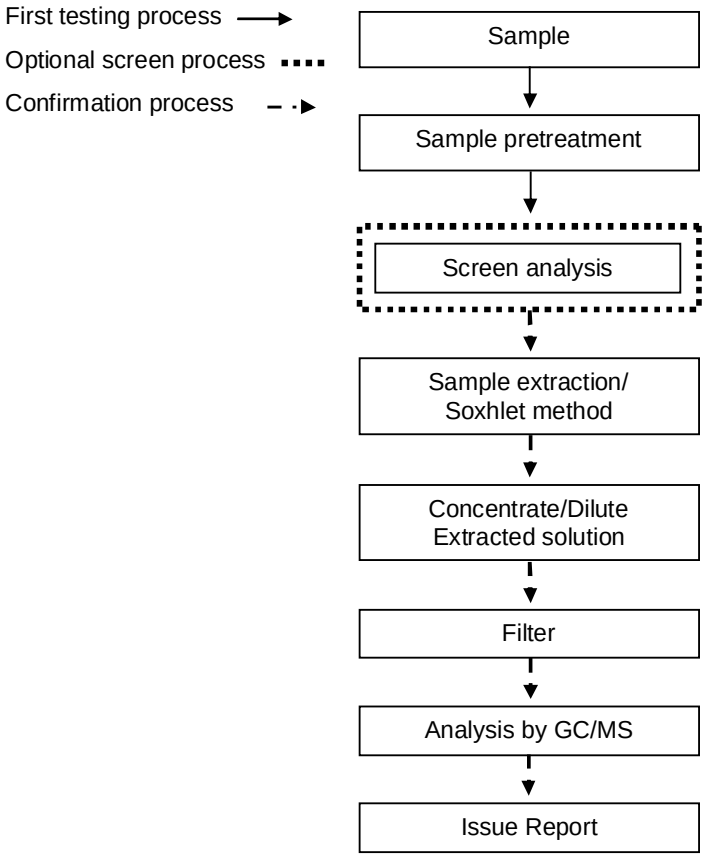
PBB/PBDE analytical FLOW CHART

- Name of the person who made measurement: Roman Wong
- Name of the person in charge of measurement: Troy Chang



SECOS CORPORATION *CE/2014/42772A*
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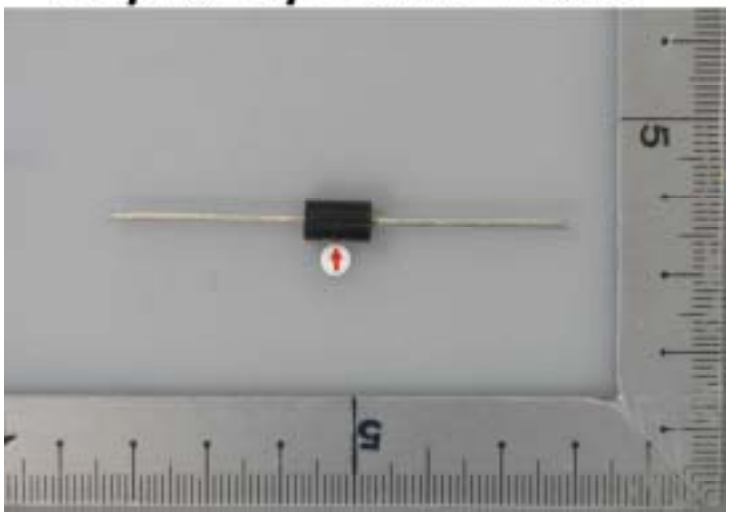
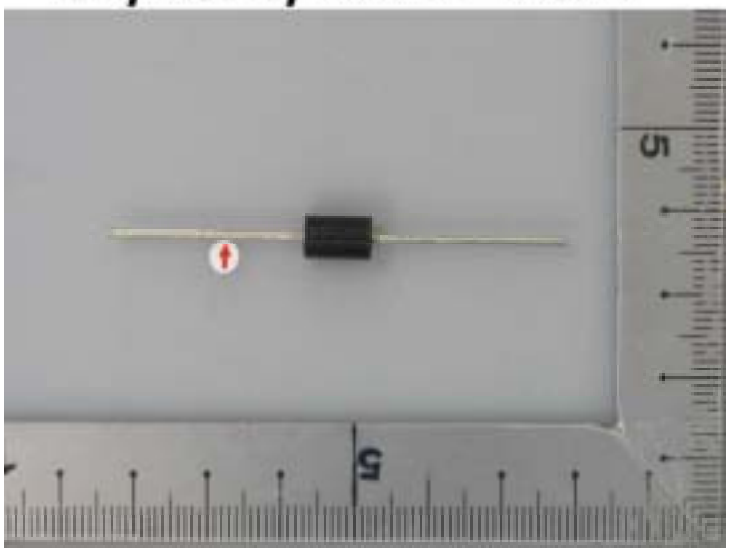
TAIWAN

*** The tested sample / part is marked by an arrow if it's shown on the photo. ***

CE/2014/42772 NO.1



CE/2014/42772 NO.2



SECOS CORPORATION *CE/2014/42772A*
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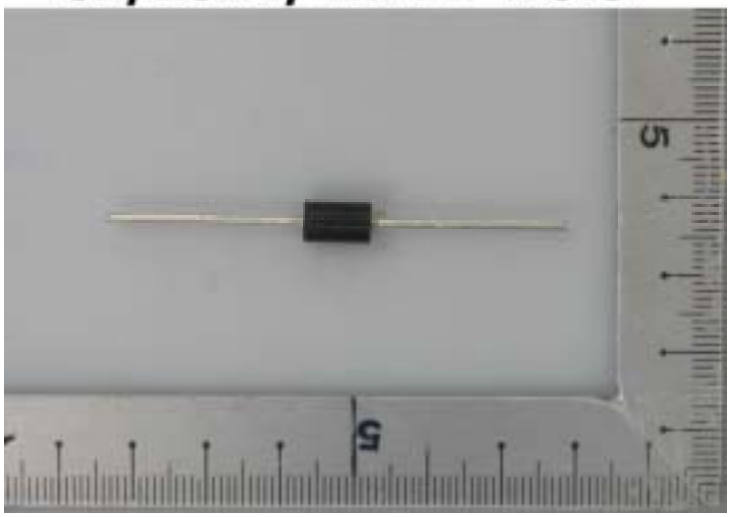
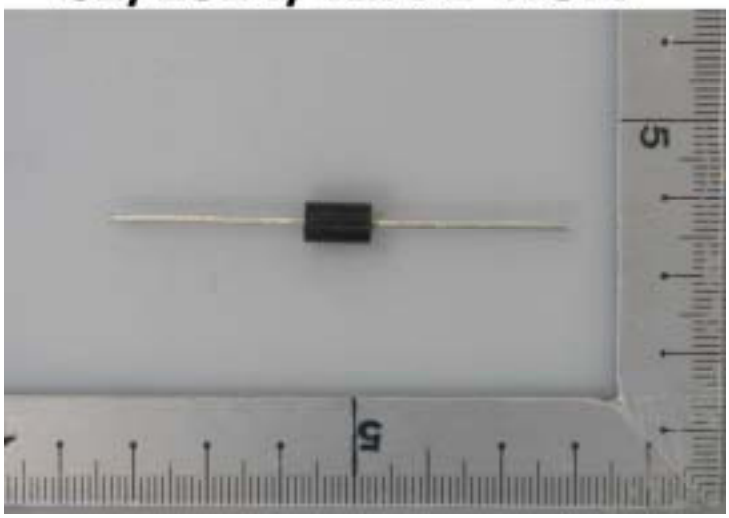
CE/2014/42772 NO.3



CE/2014/42772 NO.4



** End of Report **