

Product Specification for Approval

CUSTOMER : 麗臺科技股份有限公司

PART NO. : CBA-0804-2G4S2-A1

DESCRIPTION: CHIP ANTENNA

DATE : 2006.06.08.

APPROVED BY CUSTOMER

歷 隆 企 業 有 限 公 司

SOFTECH ELECTRONICS CORP.

8/F, NO.82, SHING DE ROAD.,

SHAN CHUNG CITY 241, TAIPEI HSIEN, TAIWAN R.O.C.

TEL: 886-2-29952886

FAX:886-2-29952523

APPLICATION

WLAN, Home RF, Bluetooth, etc.

FEATURES

- Compact Size**
Miniaturized SMD packaged in low profile and lightweight.
- Wide Bandwidth**
- High Soldering Heat Resistance**
High quality termination allows both flow and re-flow soldering methods to be applied.
- Available in Tape and Reel Packaging for Automatic Mounting**
- No Ground Clearance to Save Real Estate**

PRODUCT IDENTIFICATION

C B A - 0 8 0 4 - # # # x x - A 1
① ② ③ ④

- ① Product Code
- ② Dimension Code
- ③ Series Type (### represents center frequency and xx represents material type)
- ④ Design Code

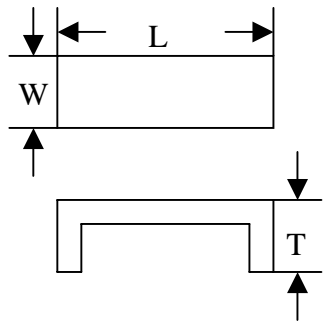
ELECTRICAL REQUIREMENTS

Part NO.	Frequency	Impedance	Bandwidth*	Gain*	VSWR	Polarization
CBA-0804-2G4S2-A1	2450 MHz	50 Ohms	>100 MHz	>1 dBi	3.0max.	Linear

*Depend on PCB layout.



PRODUCT DIMENSION



L	W	T
8.0 ± 0.2	4.0 ± 0.2	3 ± 0.2

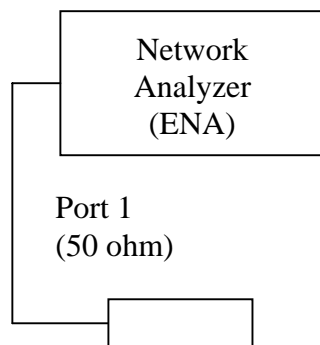
NOTE : Dimensions in mm

TERMINAL CONFIGURATION



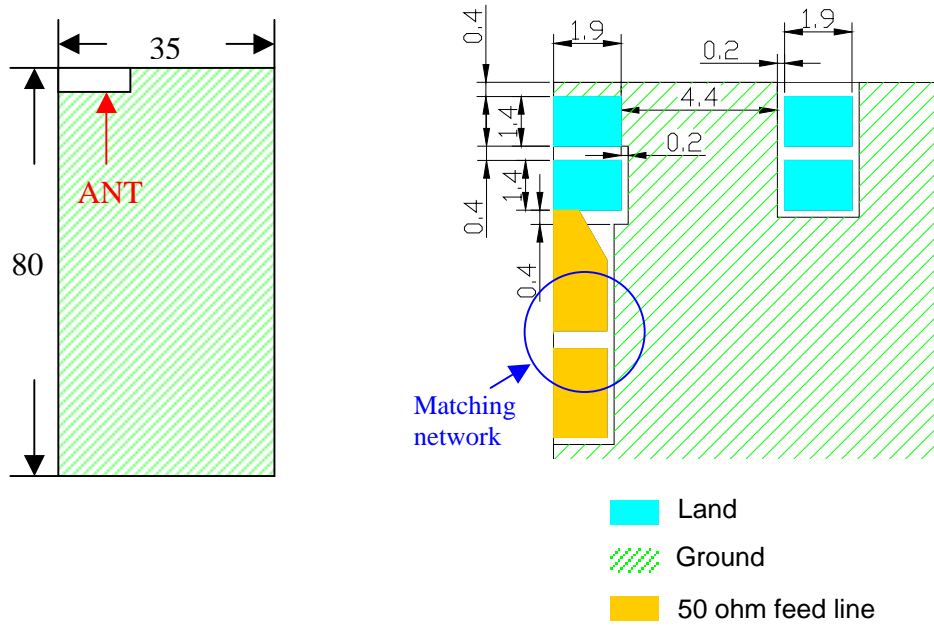
- ① GND
- ② Feed Termination
- ③ N.C.
- ④ N.C.

MEASURING DIAGRAM



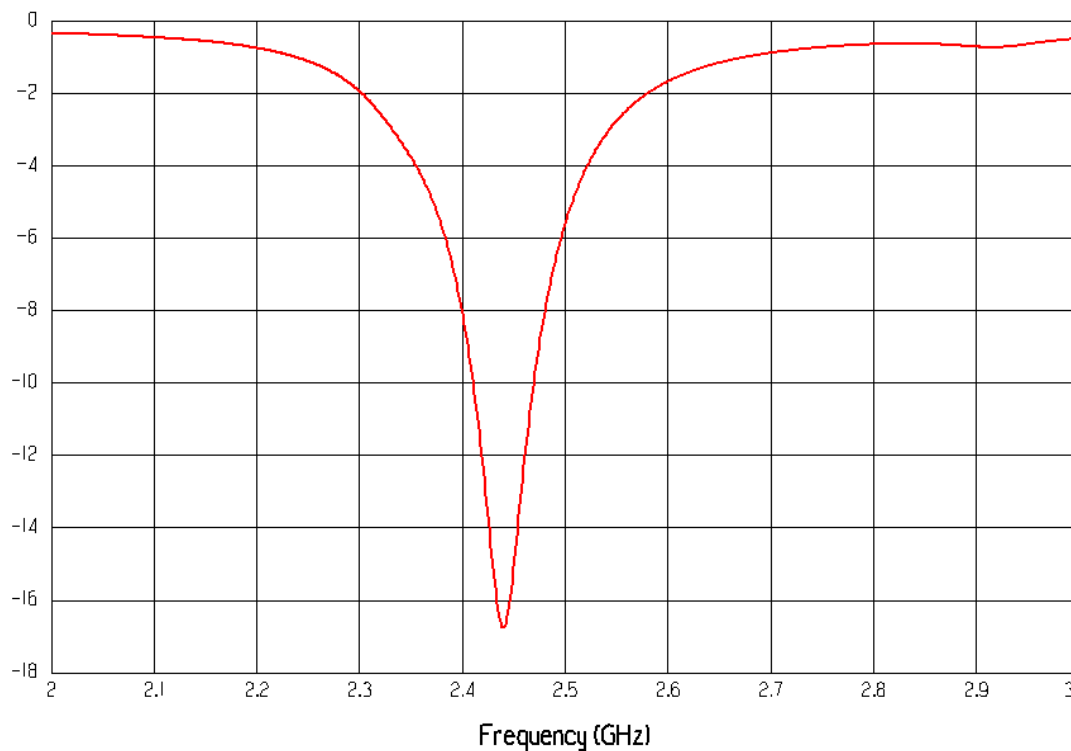
Test Instrument:
Agilent E5071A Network Analyzer

RECOMMENDED PCB LAYOUT

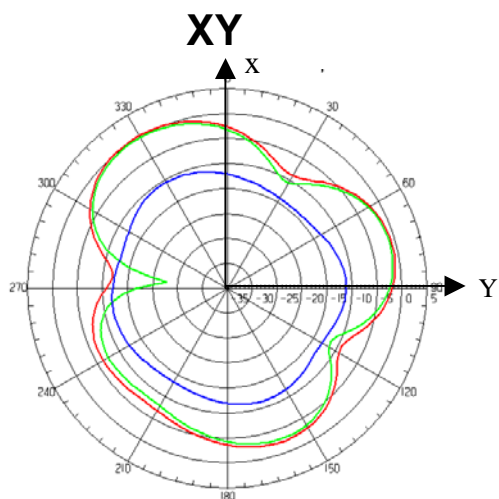


Unit : mm

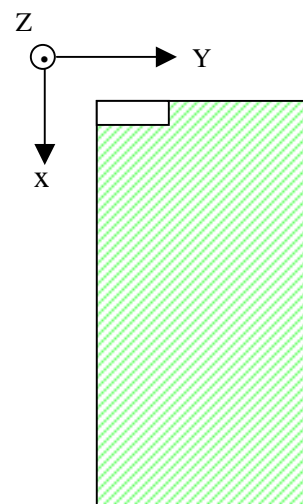
ELECTRICAL CHARACTERISTICS (T=25°C)



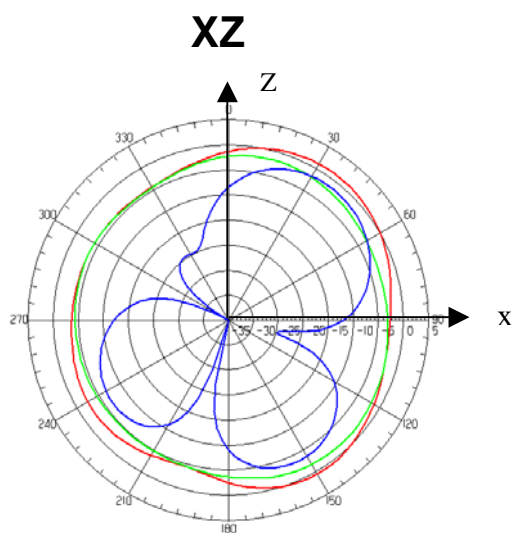
RADIATION PATTERN



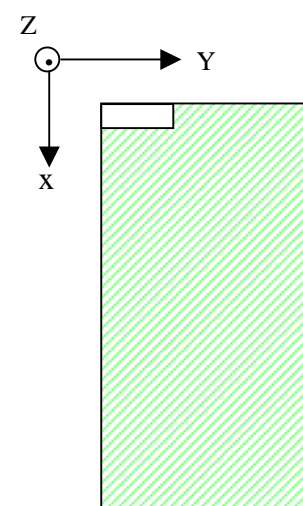
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— Horizontal
— Vertical



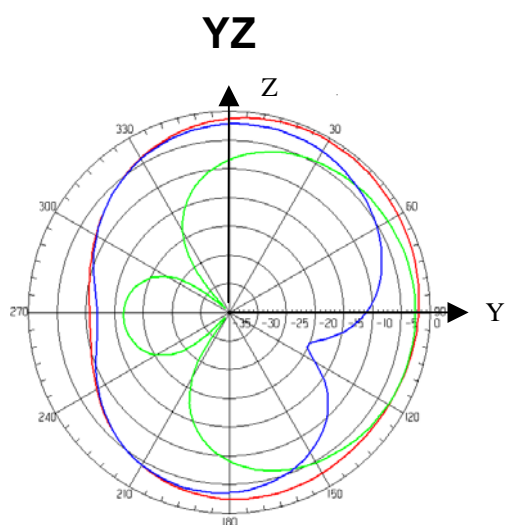
Peak Gain = 0.31076571 dBi



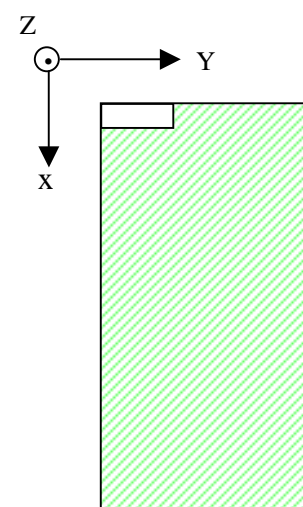
— Total
— Horizontal
— Vertical



Peak Gain = 1.1191249 dBi

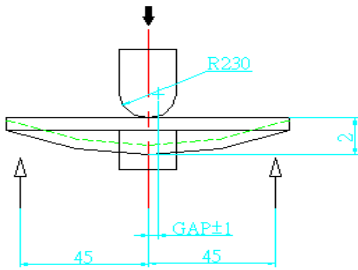


— Total
— Horizontal
— Vertical



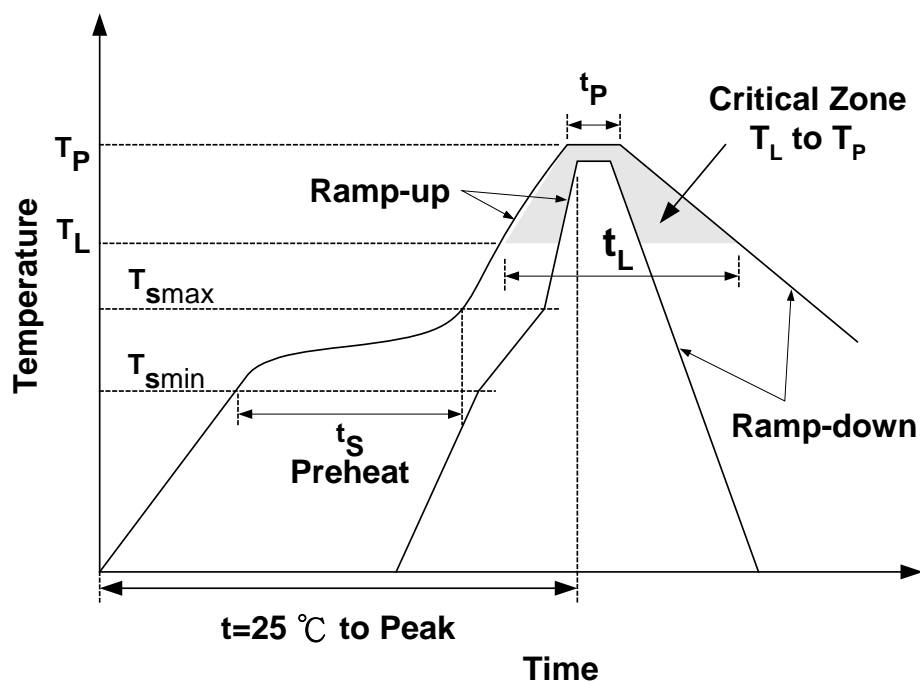
Peak Gain = -0.57884579 dBi

RELIABILITY TEST

Item	Condition	Specification
Thermal shock	-40°C~+85°C for 100 cycles each cycle being 30 min	No apparent damage Fulfill the electrical spec. after test
Humidity resistance	85±2°C, 80~90% R.H. for 500 hours	No apparent damage Fulfill the electrical spec. after test
High temperature resistance	+85±2°C for 500 hours	No apparent damage Fulfill the electrical spec. after test
Low temperature resistance	-40±3°C for 500 hours	No apparent damage Fulfill the electrical spec. after test
Vibration	10 Hz/min~55 Hz/min~10 Hz/min vibration frequency with 1.5 mm amplitude for two hours in x, y, z directions	No apparent damage
Drop shock	Dropped onto printed circuit board from 100cm height three times in x, y, z directions. The terminals shall be protected.	No apparent damage
Soldering heat resistance	Preheating temperature : 150±10°C Preheating time : 1 to 2 minutes Solder bath temperature : 260±5°C Bathing time : 5±0.5 seconds	No apparent damage
Bending test onto printed circuit board	<p>Solder specimen LTCC components on the test printed circuit board (L: 100 x W: 40 x T: 1.6mm) in appended recommended PCB pattern. Apply the load in direction of the arrow until bending reaches 2 mm.</p>  <p>Unit: mm</p>	No apparent damage
Solderability	The dipped surface of the terminal shall be at least 75% covered with solder after dipped in solder bath of 235±5°C for 3±0.5 seconds.	No apparent damage



RECOMMENDED REFLOW SOLDERING PROFILE



Profile Feature		Sn-Pb	Pb-Free
Preheat	ts	60~120 seconds	60~180 seconds
	Tsmin	100°C	150°C
	Tsmax	150°C	200°C
Average ramp-up rate (Tsmax to Tp)		3°C/second max.	3°C/second max.
Time main above	Temperature (TL)	183°C	217°C
	Time (tL)	60~150 seconds	60~150 seconds
Peak temperature (Tp)		230°C	250~255°C
Time within 5°C of actual peak temperature (tp)		10 seconds	10 seconds
Ramp-down rate		6°C/sec max.	6°C/sec max.
Time 25°C to peak temperature		6 minutes max.	8 minutes max.

NOTES

The contents of this data sheet are subject to change without notice. Please confirm the specifications and delivery conditions when placing your order.





Mag Layers Scientific-Technics., Co., Ltd

Material description

Report No:GP/2006/01003-C

Mag. Layers certify below statement for material description
Component type :

- I .Multilayer Ferrite Chip Bead and Inductor Series
- II .Multilayer Common Mode Filters CMF Series
- III .High Frequency Ceramic Chip Inductor HFI Series
- IV .Low Temperature Cofired Ceramics Series

Compliant to Restriction of the use of certain hazardous substances in Electrical and Electronic Equipment (RoHs) and Sony SS-00259.

Terminal : Ag/Cu/Ni/Sn alloy ---- Lead free for alloy

Material testing report :

Name of material	Supplier Name	Pb	Hg	Cr+6	Cd	PBBs	PBDEs	Report NO
Ag Paste	EXOJET	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	CE/2005/96755 CE/2005/96756 CE/2005/96757
Copper (Cu layer)	NATURE	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	CV/2006/50020
Nickel (Ni layer)	KUEN TING	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	CV/2006/50019
Tin (Sn layer)	JAU JANQ	21.5	N.D.	N.D.	N.D.	N.D.	N.D.	KA/2005/80235/A-1

Prepared by : QC Dept. Miinshiong Hsu

Checked by : QC Manager Thomas Liao

Date : 2006 / 06 / 06

Form No:QAR014-A

Test Report

EXOJET TECHNOLOGY CORPORATION
6F, NO. 22, TAI YUEN STREET, CHUPEI, HSINCHU,
TAIWAN (TAI YUEN HI-TECH IND. PARK)

Report No. : CE/2005/96755
Date : 2005/10/07
Page : 1 of 2

The following merchandise was (were) submitted and identified by the client as :

Type of Product : PASTE
Style/Item No : ML-5175, ML-5175A, ML-5175B, ML-5175S, ML-5175H,
ML-5175K, ML-5175A2, ML-5175B2, ML-5175S2,
ML-5175H2, ML-5175K2, ML-5175X1, ML-5175X2,
ML-5175X3, ML-5175X4, ML-5175X5, ML-5175X6
Sample Received : 2005/09/30
Testing Date : 2005/09/30 TO 2005/10/07

Test Result

PART NAME NO.1 : BLACKISH GREEN PASTE (PLEASE REFER TO THE
PHOTO ATTACHED)

Test Item (s):	Unit	Method	MDL	Result
				No. 1
Cadmium (Cd)	ppm	ICP-AES after reference to EN 1122, method B:2001 or other acid digestion.	2	N.D.

NOTE: (1) N.D. = Not detected (<MDL)
(2) ppm = mg/kg
(3) MDL = Method Detection Limit


Daniel Yeh, M.R. / Operation Manager
Signed for and on behalf of
SGS TAIWAN LTD.

Test Report

EXOJET TECHNOLOGY CORPORATION
6F, NO. 22, TAI YUEN STREET, CHUPEI, HSINCHU,
TAIWAN (TAI YUEN HI-TECH IND. PARK)

Report No. : CE/2005/96755
Date : 2005/10/07
Page : 2 of 2



Test Report

EXOJET TECHNOLOGY CORPORATION
6F, NO. 22, TAI YUEN STREET, CHUPEI, HSINCHU,
TAIWAN (TAI YUEN HI-TECH IND. PARK)

Report No. : CE/2005/96756
Date : 2005/10/07
Page : 1 of 2

The following merchandise was (were) submitted and identified by the client as :


Type of Product : PASTE
Style/Item No : ML-5175, ML-5175A, ML-5175B, ML-5175S, ML-5175H,
ML-5175K, ML-5175A2, ML-5175B2, ML-5175S2,
ML-5175H2, ML-5175K2, ML-5175X1, ML-5175X2,
ML-5175X3, ML-5175X4, ML-5175X5, ML-5175X6
Sample Received : 2005/09/30
Testing Date : 2005/09/30 TO 2005/10/07

Test Result

PART NAME NO.1 : BLACKISH GREEN PASTE (PLEASE REFER TO THE
PHOTO ATTACHED)

Test Item (s):	Unit	Method	MDL	Result
				No. 1
Lead (Pb)	ppm	ICP-AES after reference to US EPA 3050B or other acid digestion.	2	N.D.

NOTE: (1) N.D. = Not detected (<MDL)
(2) ppm = mg/kg
(3) MDL = Method Detection Limit


Daniel Yeh, M.R. / Operation Manager
Signed for and on behalf of
SGS TAIWAN LTD.

Test Report

EXOJET TECHNOLOGY CORPORATION
6F, NO. 22, TAI YUEN STREET, CHUPEI, HSINCHU,
TAIWAN (TAI YUEN HI-TECH IND. PARK)

Report No. : CE/2005/96756
Date : 2005/10/07
Page : 2 of 2



Test Report

EXOJET TECHNOLOGY CORPORATION
6F, NO. 22, TAI YUEN STREET, CHUPEI, HSINCHU,
TAIWAN (TAI YUEN HI-TECH IND. PARK)

Report No. : CE/2005/96757
Date : 2005/10/07
Page : 1 of 4

The following merchandise was (were) submitted and identified by the client as :

<u>Type of Product</u>	:	PASTE
<u>Style/Item No</u>	:	ML-5175, ML-5175A, ML-5175B, ML-5175S, ML-5175H, ML-5175K, ML-5175A2, ML-5175B2, ML-5175S2, ML-5175H2, ML-5175K2, ML-5175X1, ML-5175X2, ML-5175X3, ML-5175X4, ML-5175X5, ML-5175X6
<u>Sample Received</u>	:	2005/09/30
<u>Testing Date</u>	:	2005/09/30 TO 2005/10/07

Test Result : - Please see the next page -


Daniel Yeh, M.R. / Operation Manager
Signed for and on behalf of
SGS TAIWAN LTD.

Test Report

EXOJET TECHNOLOGY CORPORATION
6F, NO. 22, TAI YUEN STREET, CHUPEI, HSINCHU,
TAIWAN [TAI YUEN HI-TECH IND. PARK]

Report No. : CE/2005/96757
Date : 2005/10/07
Page : 2 of 4

Test Result

PART NAME NO.1 : BLACKISH GREEN PASTE (PLEASE REFER TO THE PHOTO ATTACHED)

Test Item (s):	Unit	Method	MDL	Result
				No.1
Monobromobiphenyl	%	With reference to USEPA3540C or USEPA3550C. Analysis was performed by HPLC/DAD, LC/MS or GC/MS. [prohibited by 2002/95/EC (RoHS), 83/264/EEC, and 76/769/EEC]	0.0005	N.D.
Dibromobiphenyl	%		0.0005	N.D.
Tribromobiphenyl	%		0.0005	N.D.
Tetrabromobiphenyl	%		0.0005	N.D.
Pentabromobiphenyl	%		0.0005	N.D.
Hexabromobiphenyl	%		0.0005	N.D.
Heptabromobiphenyl	%		0.0005	N.D.
Octabromobiphenyl	%		0.0005	N.D.
Nonabromobiphenyl	%		0.0005	N.D.
Decabromobiphenyl	%		0.0005	N.D.
Total PBBs (Polybrominated biphenyls)/ Sum of above	%		-	N.D.
Monobromobiphenyl ether	%	With reference to USEPA3540C or USEPA3550C. Analysis was performed by HPLC/DAD, LC/MS or GC/MS. [prohibited by 2002/95/EC (RoHS), 83/264/EEC, and 76/769/EEC]	0.0005	N.D.
Dibromobiphenyl ether	%		0.0005	N.D.
Tribromobiphenyl ether	%		0.0005	N.D.
Tetrabromobiphenyl ether	%		0.0005	N.D.
Pentabromobiphenyl ether	%		0.0005	N.D.
Hexabromobiphenyl ether	%		0.0005	N.D.
Heptabromobiphenyl ether	%		0.0005	N.D.
Octabromobiphenyl ether	%		0.0005	N.D.
Nonabromobiphenyl ether	%		0.0005	N.D.
Decabromobiphenyl ether	%		0.0005	N.D.
Total PBBEs(PBDEs) (Polybrominated biphenyl ethers)/ Sum of above	%		-	N.D.

Test Report

EXOJET TECHNOLOGY CORPORATION
6F, NO. 22, TAI YUEN STREET, CHUPEI, HSINCHU,
TAIWAN [TAI YUEN HI-TECH IND. PARK]

Report No. : CE/2005/96757
Date : 2005/10/07
Page : 3 of 4

Test Item (s):	Unit	Method	MDL	Result
				No.1
Chromium VI (Cr+6)	ppm	UV-VIS after reference to US EPA 3060A.	2	N.D.
Mercury (Hg)	ppm	ICP-AES after reference to US EPA 3052 or other acid digestion.	2	N.D.

NOTE: [1] N.D. = Not detected (<MDL)
[2] ppm = mg/kg
[3] MDL = Method Detection Limit
[4] " - " = No Regulation

Test Report

EXOJET TECHNOLOGY CORPORATION
6F, NO. 22, TAI YUEN STREET, CHUPEI, HSINCHU,
TAIWAN (TAI YUEN HI-TECH IND. PARK)

Report No. : CE/2005/96757
Date : 2005/10/07
Page : 4 of 4



Test Report

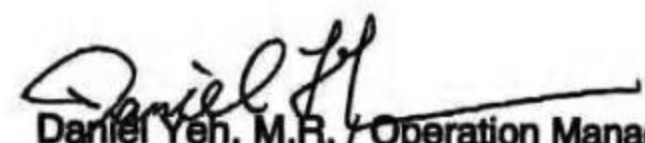
MAG. LAYERS SCIENTIFIC-TECHNICS CO., LTD.
18 TZ-CHIANG RD., HSIN-CHU INDUSTRIAL PARK,
HUKOU, HSIN-CHU, TAIWAN 303, R. O. C.

Report No. : CV/2006/50020
Date : 2006/06/06
Page : 1 of 4

The following merchandise was (were) submitted and identified by the client as :

Type of Product : PLATING Cu-DHP BALL
Style/Item No : Cu-DHP BALL
Sample Received : 2006/05/29
Testing Date : 2006/05/29 TO 2006/06/06

Test Result : - Please see the next page -


Daniel Yeh, M.R. / Operation Manager
Signed for and on behalf of
SGS TAIWAN LTD.

Test Report

MAG. LAYERS SCIENTIFIC-TECHNICS CO., LTD.
18 TZ-CHIANG RD., HSIN-CHU INDUSTRIAL PARK,
HUKOU, HSIN-CHU, TAIWAN 303, R. O. C.

Report No. : CV/2006/50020
Date : 2006/06/06
Page : 2 of 4

Test Result

PART NAME NO.1 : GOLDEN COLORED METAL

Test Item (s):	Unit	Method	MDL	Result
				No.1
Monobromobiphenyl	%	With reference to USEPA3540C or USEPA3550C. Analysis was performed by HPLC/DAD, LC/MS or GC/MS. (prohibited by 2002/95/EC (RoHS), 83/264/EEC, and 76/769/EEC)	0.0005	N.D.
Dibromobiphenyl	%		0.0005	N.D.
Tribromobiphenyl	%		0.0005	N.D.
Tetrabromobiphenyl	%		0.0005	N.D.
Pentabromobiphenyl	%		0.0005	N.D.
Hexabromobiphenyl	%		0.0005	N.D.
Heptabromobiphenyl	%		0.0005	N.D.
Octabromobiphenyl	%		0.0005	N.D.
Nonabromobiphenyl	%		0.0005	N.D.
Decabromobiphenyl	%		0.0005	N.D.
Total PBBs (Polybrominated biphenyls)/Sum of above	%		-	N.D.
Monobromobiphenyl ether	%	With reference to USEPA3540C or USEPA3550C. Analysis was performed by HPLC/DAD, LC/MS or GC/MS. (prohibited by 2002/95/EC (RoHS), 83/264/EEC, and 76/769/EEC)	0.0005	N.D.
Dibromobiphenyl ether	%		0.0005	N.D.
Tribromobiphenyl ether	%		0.0005	N.D.
Tetrabromobiphenyl ether	%		0.0005	N.D.
Pentabromobiphenyl ether	%		0.0005	N.D.
Hexabromobiphenyl ether	%		0.0005	N.D.
Heptabromobiphenyl ether	%		0.0005	N.D.
Octabromobiphenyl ether	%		0.0005	N.D.
Nonabromobiphenyl ether	%		0.0005	N.D.
Decabromobiphenyl ether	%		0.0005	N.D.
Total PBBEs(PBDEs) (Polybrominated biphenyl ethers)/Sum of above	%		-	N.D.
Total of Mono to Nona-brominated biphenyl ether. (Note 4)	%		-	N.D.

Test Report

MAG. LAYERS SCIENTIFIC-TECHNICS CO., LTD.
18 TZ-CHIANG RD., HSIN-CHU INDUSTRIAL PARK,
HUKOU, HSIN-CHU, TAIWAN 303, R. O. C.

Report No. : CV/2006/50020
Date : 2006/06/06
Page : 3 of 4

Test Item (s):	Unit	Method	MDL	Result
				No.1
Chromium VI (Cr+6)	ppm	UV-VIS(US EPA 7196A) after reference to US EPA 3060A.	2	N.D.
Cadmium (Cd)	ppm	ICP-AES after reference to EN 1122, method B:2001 or other acid digestion.	2	N.D.
Mercury (Hg)	ppm	ICP-AES after reference to US EPA 3052 or other acid digestion.	2	N.D.
Lead (Pb)	ppm	ICP-AES after reference to US EPA 3050B or other acid digestion.	2	N.D.

- NOTE: (1) N.D. = Not detected (<MDL)
(2) ppm = mg/kg
(3) MDL = Method Detection Limit
(4) Decabromobiphenyl ether (DecaBDE) in polymeric applications is exempted by
Commission Decision of 13 Oct 2005 amending Directive 2002/95/EC notified
under document 2005/717/EC.
(5) PBBEs=PBDEs=Polybrominated Diphenyl Ethers=PBDOs=PBBOs.
(6) " - " = Not Regulation

Test Report

MAG. LAYERS SCIENTIFIC-TECHNICS CO., LTD.
18 TZ-CHIANG RD., HSIN-CHU INDUSTRIAL PARK,
HUKOU, HSIN-CHU, TAIWAN 303, R. O. C.

Report No. : CV/2006/50020
Date : 2006/06/06
Page : 4 of 4



Test Report

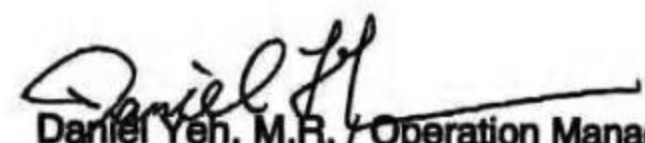
MAG. LAYERS SCIENTIFIC-TECHNICS CO., LTD.
18 TZ-CHIANG RD., HSIN-CHU INDUSTRIAL PARK,
HUKOU, HSIN-CHU, TAIWAN 303, R. O. C.

Report No. : CV/2006/50019
Date : 2006/06/06
Page : 1 of 4

The following merchandise was (were) submitted and identified by the client as :

Type of Product : PLATING Ni BALL
Style/Item No : Ni BALL
Sample Received : 2006/05/29
Testing Date : 2006/05/29 TO 2006/06/06

Test Result : - Please see the next page -


Daniel Yeh, M.R. / Operation Manager
Signed for and on behalf of
SGS TAIWAN LTD.

Test Report

MAG. LAYERS SCIENTIFIC-TECHNICS CO., LTD.
18 TZ-CHIANG RD., HSIN-CHU INDUSTRIAL PARK,
HUKOU, HSIN-CHU, TAIWAN 303, R. O. C.

Report No. : CV/2006/50019
Date : 2006/06/06
Page : 2 of 4

Test Result

PART NAME NO.1 : GRAY METAL

Test Item (s):	Unit	Method	MDL	Result No.1
Monobromobiphenyl	%	With reference to USEPA3540C or USEPA3550C. Analysis was performed by HPLC/DAD, LC/MS or GC/MS. (prohibited by 2002/95/EC (RoHS), 83/264/EEC, and 76/769/EEC)	0.0005	N.D.
Dibromobiphenyl	%		0.0005	N.D.
Tribromobiphenyl	%		0.0005	N.D.
Tetrabromobiphenyl	%		0.0005	N.D.
Pentabromobiphenyl	%		0.0005	N.D.
Hexabromobiphenyl	%		0.0005	N.D.
Heptabromobiphenyl	%		0.0005	N.D.
Octabromobiphenyl	%		0.0005	N.D.
Nonabromobiphenyl	%		0.0005	N.D.
Decabromobiphenyl	%		0.0005	N.D.
Total PBBs (Polybrominated biphenyls)/Sum of above	%		-	N.D.
Monobromobiphenyl ether	%	With reference to USEPA3540C or USEPA3550C. Analysis was performed by HPLC/DAD, LC/MS or GC/MS. (prohibited by 2002/95/EC (RoHS), 83/264/EEC, and 76/769/EEC)	0.0005	N.D.
Dibromobiphenyl ether	%		0.0005	N.D.
Tribromobiphenyl ether	%		0.0005	N.D.
Tetrabromobiphenyl ether	%		0.0005	N.D.
Pentabromobiphenyl ether	%		0.0005	N.D.
Hexabromobiphenyl ether	%		0.0005	N.D.
Heptabromobiphenyl ether	%		0.0005	N.D.
Octabromobiphenyl ether	%		0.0005	N.D.
Nonabromobiphenyl ether	%		0.0005	N.D.
Decabromobiphenyl ether	%		0.0005	N.D.
Total PBBEs(PBDEs) (Polybrominated biphenyl ethers)/Sum of above	%		-	N.D.
Total of Mono to Nona-brominated biphenyl ether. (Note 4)	%		-	N.D.

Test Report

MAG. LAYERS SCIENTIFIC-TECHNICS CO., LTD.
18 TZ-CHIANG RD., HSIN-CHU INDUSTRIAL PARK,
HUKOU, HSIN-CHU, TAIWAN 303, R. O. C.

Report No. : CV/2006/50019
Date : 2006/06/06
Page : 3 of 4

Test Item (s):	Unit	Method	MDL	Result
				No.1
Chromium VI (Cr+6)	ppm	UV-VIS(US EPA 7196A) after reference to US EPA 3060A.	2	N.D.
Cadmium (Cd)	ppm	ICP-AES after reference to EN 1122, method B:2001 or other acid digestion.	2	N.D.
Mercury (Hg)	ppm	ICP-AES after reference to US EPA 3052 or other acid digestion.	2	N.D.
Lead (Pb)	ppm	ICP-AES after reference to US EPA 3050B or other acid digestion.	2	N.D.

- NOTE: (1) N.D. = Not detected (<MDL)
(2) ppm = mg/kg
(3) MDL = Method Detection Limit
(4) Decabromobiphenyl ether (DecaBDE) in polymeric applications is exempted by
Commission Decision of 13 Oct 2005 amending Directive 2002/95/EC notified
under document 2005/717/EC.
(5) PBBEs=PBDEs=Polybrominated Diphenyl Ethers=PBDOs=PBBOs.
(6) " - " = Not Regulation

Test Report

MAG. LAYERS SCIENTIFIC-TECHNICS CO., LTD.
18 TZ-CHIANG RD., HSIN-CHU INDUSTRIAL PARK,
HUKOU, HSIN-CHU, TAIWAN 303, R. O. C.

Report No. : CV/2006/50019
Date : 2006/06/06
Page : 4 of 4



TEST REPORT

REPORT NO.KA/2005/80235/A-1

DATE: 2005/8/9

PAGE: 1 OF 1

THE FOLLOWING MERCHANDISE WAS(WERE) SUBMITTED AND IDENTIFIED BY THE CLIENT AS :

CLIENT : JAU JANQ ENTERPRISE CO.,LTD..
 PRODUCT DESCRIPTION : PURE TIN.
 SAMPLE : AS ATTACHED PHOTO .
 TESTING DATE : 2005/8/2 TO 2005/8/9 .
 SAMPLE RECEIVED : 2005/08/02.

WE HAVE TESTED THE SAMPLE(S) SUBMITTED AS REQUESTED AND THE FOLLOWING RESULTS WERE OBTAINED.

TEST ITEM(S)	UNIT	METHOD	DET. LMT	RESULT
CADMIUM	ppm	ANALYSIS BY ICP-AES WITH ADVANCE TREATMENT EN1122, METHOD B:2001.	2	n.d.
CHROMIUM VI	ppm	ANALYSIS BY US EPA 7196A WITH ADVANCE TREATMENT US EPA 3060A.	2	n.d.
MERCURY	ppm	ANALYSIS BY ICP-AES WITH ADVANCE TREATMENT US EPA 3052	2	n.d.
LEAD	ppm	ANALYSIS BY ICP-AES WITH ADVANCE TREATMENT US EPA 3050B	2	21.5
PBBs(Polybrominated biphenyls)	---	---	---	---
Bromobiphenyl	%	With reference to USEPA3540C or USEPA3550C. Analysis was performed by HPLC/DAD, LC/MS or GC/MS. (prohibited by 2002/95/EC (RoHS), 83/264/EEC, and 76/769/EEC)	0.0005	n.d.
Dibromobiphenyl	%		0.0005	n.d.
Tribromobiphenyl	%		0.0005	n.d.
Tetrabromobiphenyl	%		0.0005	n.d.
Pentabromobiphenyl	%		0.0005	n.d.
Hexabromobiphenyl	%		0.0005	n.d.
Heptabromobiphenyl	%		0.0005	n.d.
Octabromobiphenyl	%		0.0005	n.d.
Nonabromobiphenyl	%		0.0005	n.d.
Decabromobiphenyl	%		0.0005	n.d.
PBDEs(Polybrominated biphenyl ethers)	---	---	---	---
Monobromobiphenyl ether	%	With reference to USEPA3540C or USEPA3550C. Analysis was performed by HPLC/DAD, LC/MS or GC/MS. (prohibited by 2002/95/EC (RoHS), 83/264/EEC, and 76/769/EEC)	0.0005	n.d.
Dibromobiphenyl ether	%		0.0005	n.d.
Tribromobiphenyl ether	%		0.0005	n.d.
Tetrabromobiphenyl ether	%		0.0005	n.d.
Pentabromobiphenyl ether	%		0.0005	n.d.
Hexabromobiphenyl ether	%		0.0005	n.d.
Heptabromobiphenyl ether	%		0.0005	n.d.
Octabromobiphenyl ether	%		0.0005	n.d.
Nonabromobiphenyl ether	%		0.0005	n.d.
Decabromobiphenyl ether	%		0.0005	n.d.

NOTE : n.d. = not detected.

<END>



Kueilan Chen for
 Kueilan Chen / Asst. Supervisor
 Sign for and on behalf of
 SGS Taiwan Limited