

Test Report

No.: CANEC25000162233

Date: Jan 23, 2025

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Client Name: BRIGHT-E ELECTRONIC TECHNOLOGY LIMITED

Client Address: NO.1 HE SHI ROAD,HUANG NI TANG,CHANGPING TOWN,DONGGUAN
CITR,GUANGDONG PROVINCE

Sample Name: Phosphor copper Pin needle: Nickel plated bottom, Tin plated surface

Client Ref. Information: Please see attachment

Material: Phosphor Copper Pin Needle

The above sample(s) and information were provided by the client.

SGS Job No.: SZP25-000257

Sample Receiving Date: Jan 03, 2025

Testing Period: Jan 03, 2025 ~ Jan 10, 2025

Test Requested: Select test(s) as requested by the client.

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

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

Test Requirement	Conclusion
EU RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU - Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBB), Polybrominated diphenyl ethers (PBDE), Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP)	Pass

Signed for and on behalf of
SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch

Allie Chen

Allie Chen
Approved Signatory

scan to see the report



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Test Result(s):

Test Part Description:

SN ID	Sample No.	SGS Sample ID	Description
SN1	A32	CAN25-0001622-0001.C032	Silver-gray plated metal

Remarks:

- (1) 1 mg/kg = 1 ppm = 0.0001%
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected (< MDL)
- (4) "-" = Not Regulated

EU RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU - Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBB), Polybrominated diphenyl ethers (PBDE), Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP)

Test Method: With reference to IEC 62321-4:2013+AMD1:2017, IEC 62321-5:2013, IEC 62321-7-1:2015 and IEC 62321-12:2023, analysis was performed by ICP-OES/AAS, UV-Vis and GC-MS.

Test Item(s)	Limit	Unit(s)	MDL	A32
Lead (Pb)	1000	mg/kg	2	14
Mercury (Hg)	1000	mg/kg	2	ND
Cadmium (Cd)	100	mg/kg	2	ND
Hexavalent Chromium (Cr(VI))▼	-	µg/cm ²	0.10	ND
Polybrominated biphenyls (PBB)	1000	mg/kg	-	ND
Monobrominated biphenyl (MonoBB)	-	mg/kg	25	ND
Dibrominated biphenyl (DiBB)	-	mg/kg	25	ND
Tribrominated biphenyl (TriBB)	-	mg/kg	25	ND
Tetrabrominated biphenyl (TetraBB)	-	mg/kg	25	ND
Pentabrominated biphenyl (PentaBB)	-	mg/kg	25	ND
Hexabrominated biphenyl (HexaBB)	-	mg/kg	25	ND
Heptabrominated biphenyl (HeptaBB)	-	mg/kg	25	ND
Octabrominated biphenyl (OctaBB)	-	mg/kg	25	ND
Nonabrominated biphenyl (NonaBB)	-	mg/kg	25	ND
Decabrominated biphenyl (DecaBB)	-	mg/kg	25	ND
Polybrominated diphenyl ethers (PBDE)	1000	mg/kg	-	ND
Monobrominated diphenyl ether (MonoBDE)	-	mg/kg	25	ND
Dibrominated diphenyl ether (DiBDE)	-	mg/kg	25	ND
Tribrominated diphenyl ether (TriBDE)	-	mg/kg	25	ND
Tetrabrominated diphenyl ether (TetraBDE)	-	mg/kg	25	ND
Pentabrominated diphenyl ether (PentaBDE)	-	mg/kg	25	ND
Hexabrominated diphenyl ether (HexaBDE)	-	mg/kg	25	ND
Heptabrominated diphenyl ether (HeptaBDE)	-	mg/kg	25	ND



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Test Item(s)	Limit	Unit(s)	MDL	A32
Octabrominated diphenyl ether (OctaBDE)	-	mg/kg	25	ND
Nonabrominated diphenyl ether (NonaBDE)	-	mg/kg	25	ND
Decabrominated diphenyl ether (DecaBDE)	-	mg/kg	25	ND
Di-2-Ethyl Hexyl Phthalate (DEHP)	1000	mg/kg	50	ND
Benzyl Butyl Phthalate (BBP)	1000	mg/kg	50	ND
Dibutyl Phthalate (DBP)	1000	mg/kg	50	ND
Diisobutyl Phthalate (DIBP)	1000	mg/kg	50	ND

Notes:

- (1) The maximum permissible limit is quoted from RoHS Directive (EU) 2015/863.
- (2) IEC 62321 series is equivalent to EN 62321 series.
- (3) ▼ =
 - a. The sample is positive for Cr(VI) if the Cr(VI) concentration is greater than 0.13 µg/cm². The sample coating is considered to contain Cr(VI).
 - b. The sample is negative for Cr(VI) if Cr(VI) is ND (concentration less than 0.10 µg/cm²). The coating is considered a non-Cr(VI) based coating.
 - c. The result between 0.10 µg/cm² and 0.13 µg/cm² is considered to be inconclusive-unavoidable coating variations may influence the determination.

Information on storage conditions and production date of the tested sample is unavailable and thus Cr(VI) results represent status of the sample at the time of testing.

Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule ($w=0$) stated in ILAC-G8:09/2019.



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Elements Testing Flow Chart

These samples were dissolved totally by pre-conditioning method according to below flow chart.



Hexavalent Chromium (Cr(VI)) Testing Flow Chart



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PBB/PBDE/Phthalates Testing Flow Chart



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Attachment:

.031" (0.8 mm) Pitch Wafer/housing/.039" (1.0 mm) Pitch Wafer/housing/
 .047" (1.2 mm) Pitch Wafer/housing/.049" (1.25 mm) Pitch Wafer/housing/
 .050" (1.27 mm) Pitch Wafer/housing/.059" (1.50 mm) Pitch Wafer/housing/
 .070" (1.8 mm) Pitch Wafer/housing/.079" (2.00 mm) Pitch Wafer/housing/
 .085 (2.16mm) Pitch Wafer/housing/.087" (2.20 mm) Pitch Wafer/housing/
 .098" (2.50 mm) Pitch Wafer/housing/.100" (2.54 mm) Pitch Wafer/housing/
 .118" (3.00 mm) Pitch Wafer/housing/.138" (3.50 mm) Pitch Wafer/housing/
 0.15"(3.81mm)Pitch Wafer/housing/.156" (3.96 mm) Pitch Wafer/housing/
 .157" (4.00 mm) Pitch Wafer/housing/.162" (4.14 mm) Pitch Wafer/housing/
 .165" (4.20 mm) Pitch Wafer/housing/.175"(4.45mm)Pitch Wafer/housing/
 .197" (5.00 mm) Pitch Wafer/housing/.200" (5.08 mm) Pitch Wafer/housing/
 .224" (5.70 mm) Pitch Wafer/housing/.240" (6.10 mm)Pitch Wafer/housing/
 .246" (6.20 mm) Pitch Wafer/housing/.250" (6.35 mm) Pitch Wafer/housing/
 .263" (6.70 mm) Pitch Wafer/housing/.300" (7.50 mm) Pitch Wafer/housing/
 .350" (8.90 mm) Pitch Wafer/housing/.394" (10.0 mm) Pitch Wafer/
 housing.031" (0.80 mm)Pitch Female header/.039" (1.00 mm)Pitch Female header/
 .005" (1.27mm)Pitch Female header/.079" (2.00mm)Pitch Female header/
 .100" (2.54mm)Pitch Female header/.156" (3.96mm)Pitch Female header/
 .031" (0.80mm)Pitch Pin header/.039" (1.00mm) Pitch Pin header/
 .049" (1.25mm) Pitch Pin header/.005" (1.27mm) Pitch Pin header/
 .059" (1.50mm) pitch pin header/.079" (2.00mm) pitch Pin header/
 .869" (2.20mm) pitch Pin header/.098" (2.50mm) Pitch Pin header/
 .100" (2.54 mm)Pitch Pin header/.137" (3.50mm) Pitch Pin header/
 .156" (3.96mm) Pitch Pin header/.165" (4.2mm) Pitch Pin header/
 .200" (5.08mm)Pitch Pin header/Press-Fit connectors/.039" (1.00mm) Pitch Box Header/
 .050" (1.27mm)Pitch Box Header/.079" (2.00mm)Pitch Box Header/
 .100" (2.54mm)Pitch Box Header/.050" (1.27mm)Pitch Male IDC\ DIP Type/
 .100" (2.54mm)Pitch Male IDC\ DIP Type/.156" (3.96mm)Pitch Male IDC\ DIP Type/
 .012" (0.30mm)Pitch FFC/FPC/.020" (0.50mm)Pitch FFC/FPC/.031" (0.80mm)Pitch FFC/FPC/
 .039" (1.00mm)Pitch FFC/FPC/.049" (1.25mm)Pitch FFC/FPC/.100" (2.54mm)Pitch FFC/FPC/
 .050" (1.27mm)Pitch FFC/FPC/.D-SUB High Current/USB2.0/USB3.0/Mini USB/Micro USB/
 Type-c/SCSI/Telephone/Modular Jack/PLCC/IC Sockets/Fakra/HSD/Power Module/
 DIN 41612 Power/DC Jack/battery connector/POGO Pin/High Speed Connector/
 Hard Metric connector/SIP Sockets and Adapters/PCI EXPRESS/Board To Board 0.4MM/
 Board To Board 0.8MM/Floating board to board/Micro Pitch Board-To-Board/Mini Jumper/
 Medical connector/Terminal Blocks/Sensor/SATA/Waterproof connector/PHONE JACK/SMC/
 Terminal/HDMI/AVX/MaxiBridge/MicroBridge/Mini Bridge/Sim Card/iBridge Ultra/
 RASTER 5.0MM/0801/'0802/'0803/'0804/'0805/'0806/1001/1002/1003/1004/1005/1006/1007/
 1008/1009/10022/10023/10024/10025/10026/10027/10028/10029/1200/1250/1251/1252/1253/
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 2505/2506/2507/2508/2509/2510/2511/2512/2513/2514/2515/2516/2517/2518/2519/2520/2581/



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25014/25015/25016/25017/25018/25019/25020/25080/25083/25120/25140/25150/25170/25180/
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6204/6350/6351/6352/6353/6354/6355/6700/7501/7502/7503/7504/7505/8901/8902/8903/8904/
8905/89001/89002/10001/10002/10003/10004/10005



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