

Test Report

No.: SZXEC25000839505

Date: Mar 24, 2025

Page 1 of 6

Client Name: GUANGDONG NIUHANG ELECTRONIC TECHNOLOGY CO., LTD

Client Address: 3RD FLOOR, BUILDING 1, NO.3 DAYUAN ROAD, ZHANGCUN, DONGCHENG STREET, DONGGUAN CITY, GUANGDONG PROVINCE

Sample Name: SemiconductorComponents

Model No.: SOD-323

Client Ref. Information: Please see attachment

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

SGS Job No.: SZP25-012274

Sample Receiving Date: Mar 18, 2025

Testing Period: Mar 18, 2025 ~ Mar 24, 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
Halogen	See Results

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

Andy

Andy Ni
Approved Signatory

Scan to see the report



ODBB9058



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch
Room 101-501, Plant 4 & Room 101, Plant 2 & Room 101, Plant 3 & Room 301-501, Plant 3, Jianghao (Banlan) Industrial Plant Area, No. 430, Jihua Road, Banlan Community, Banlan Street, Longgang District, Shenzhen, Guangdong, China 518129 www.sgs.com.cn
中国·广东·深圳市龙岗区坂田街道坂田社区吉华路430号江豪(坂田)工业厂区厂房4号101-501、2号101、3号101、3号301-501 邮编:518129 t:(86-755) 25328888 sgs.china@sgs.com

Test Report

No.: SZXEC25000839505

Date: Mar 24, 2025

Page 2 of 6

Test Result(s):

Test Part Description:

SN ID	Sample No.	SGS Sample ID	Description
SN1	A1	SZX25-0008395-0001.C001	"SemiconductorComponents"

Remarks:

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

Halogen

Test Method: With reference to EN 14582:2016, analysis was performed by IC.

Test Item(s)	Unit(s)	MDL	A1
Fluorine(F)	mg/kg	20	ND
Chlorine(Cl)	mg/kg	50	78
Bromine(Br)	mg/kg	50	ND
Iodine(I)	mg/kg	50	ND

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.



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

SGS-CS Standards Technical Services Co., Ltd.
Shenzhen Branch

Room 101-901, Plant 4 & Room 101, Plant 2 & Room 101, Plant 3 & Room 301-501, Plant 3, Jianghao (Bantian) Industrial Plant Area, No. 430, Jihua Road, Bantian Community, Bantian Street, Longgang District, Shenzhen, Guangdong, China 518129 www.sgs.com
中国·广东·深圳市龙岗区坂田街道坂田社区吉华路430号江豪(坂田)工业厂区厂房4号101-901、2号101、3号301-501 邮编:518129 t:(86-755)25328888 sgs.china@sgs.com

Test Report

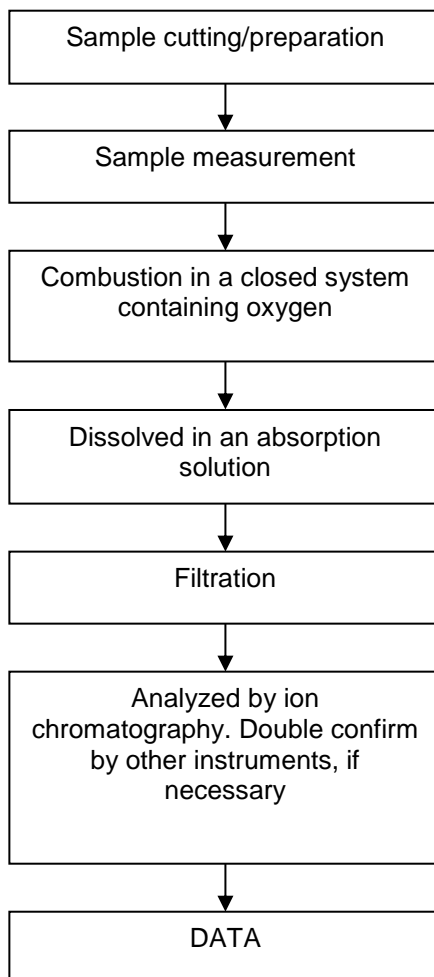
ATTACHMENTS

No.: SZXEC25000839505

Date: Mar 24, 2025

Page 3 of 6

Halogen Testing Flow Chart



SGS-CSI Standards Technical Services Co., Ltd.
Shenzhen Branch Inspection & Testing Services Laboratory

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

Room 101-901, Plant 4 & Room 101, Plant 2 & Room 101, Plant 3 & Room 301-501, Plant 3, Jianghao (Bantian) Industrial Plant Area, No. 430, Jihua Road, Bantian Community, Bantian Street, Longgang District, Shenzhen, Guangdong, China 518129 www.sgs.com
中国·广东·深圳市龙岗区坂田街道坂田社区吉华路430号江豪(坂田)工业厂区厂房4号101-901、2号101、3号301-501 邮编:518129 t:(86-755)25328888 sgs.china@sgs.com

Test Report

No.: SZXEC25000839505

Date: Mar 24, 2025

Page 4 of 6

Attachment:
DIODE:

R-1, R-6, R-Series, A-405, DO-41, DO-15, DO-27(DO-201AD), DO-35, DO-201AC(SMA), DO-201AA(SMB), DO-201AB(SMC), DO-213AA, DO-213AB(LL-41), DO-218AB, DO-Series, TO-251, TO-251S, TO-252, PTO-252, TO-262, TO-263, TO-220AB, TO-220AC, TO-220C, TO-220C-2L, ITO-220AB, ITO-220AC, TO-220F, TO-220F-2L, TO-3P, TO-247, TO-247S, TO-277, TO-277A, TO-277B, TO-247, TO-247S, TO-3P, TO-3PS, TO-3PF, TO-264-3L, TO-264PLUS-3L, TO-Series TOLL, TOLT1, TOLT2, SOD-923, SOD-723, SOD-523, SOD-323, SOD-123, SOD-123FL, SOD-123HE, SOD-323HE, SOD-80(LL-34), SOD882, SOD Series SMAW, SMAF, SMAFL, SMAFHE, SMBF, SMBFL, SMP, SM Series 0402, 0603, 0805, 1206, SOT-23, SOT-89, SOT-223, SOT Series SC-88, SC-89, SC-70, SC Series, DFN0603, DFN1608, DFN1610, DFN2020, DFN2018, DFN Series, PDFN3*3, PDFN5*6, PDFN8*8, PDFN Series, AK3 Series

BRIDGE RECTIFIER:

SM-1, MBF, MBFS, MBS, MBSS, MBM, ABS, ABF, AKB, TMBF, HBS, LDB-S, DB-1, DB-S, RS, RB, KBL, KBU, KBP, TBP, TBP-1, KBPC, GBP, GBPC, GBU, GBL, SGBJ, GBJ, KBJ, KBJL, BR, WOL, WOM, WOG, D3K, HV, GH, BCT, PSD, LD, SBL, BU, IBS, WOB, WOBM

DIODE MODULE、RECTIFIER MODULE、BRIDGE RECTIFIER MODULE:

MDC Series, QL Series, SQL Series, MDS Series, MDA Series, MDK Series, MDQ Series, XQ Series, KPBC Series

PHOTOVOLTAIC MODULE:

09E, QC3Q, Z8X, TS306X, JA005, 09ES

MOSFET、IGBT、SIC、GAN、SCR、TRIAC、TRANSISTOR:

DIP25, DIP24, DIP24F, DIP Series module, TO-92, TO-251, TO-251S, TO-252, TO-252-4L, PTO-252, TO-126, TO-220A, TO-220B, TO-220AB, TO-220C, ITO-220AB, TO-220F, TO-220FJ, TO-263, TO-263-5L, TO-263-6L, TO-263-7L, TO-262, TO-3P, TO-3PF, TO-247, TO-247S, TO-247L, TO-247H, TO-247-4L, TO-247Plus-3L, TO-247Plus-4L, TO-264-3L, TO-264PLUS-3L, TO Series, TOLL, TOLT1, TOLT2, SOT-23, SOT-23-3L, SOT-89, SOT-223, SOT-143, SOT Series, SOP-89, SOP-8, SOP Series, DFN3*3, DFN5*6, DFN8*8, DFN2020, DFN3030, DFN Series, PDFN3*3, PDFN3*3-D, PDFN5*6, PDFN5*6-D, LFPK5*6, PDFN8*8, PDFN Series QFN3*3, QFN Series

IC:

SOT-23-5/6, SOP-8/14/16/18/20/24/28/30/36/48, SOT Series, SSOP-8/14/16/18/20/24/28/36/48, SSOP Series, MSOP-10/14, MSOP Series, TSSOP-14/20/28, TSSOP Series, DIP-8/14/16/20/24/28/36/48, DIP Series, QFN16/20/24/28/32/40/48/64, QFN Series



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing / inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

SGS-CSI Standards Technical Services Co., Ltd.
Shenzhen Branch

Room 101-901, Plant 4 & Room 101, Plant 2 & Room 101, Plant 3 & Room 301-501, Plant 3, Jiangnan (Bantian) Industrial Plant Area, No. 430, Jihua Road, Bantian Community, Bantian Street, Longgang District, Shenzhen, Guangdong, China 518129 www.sgs.com.cn
中国·广东·深圳市龙岗区坂田街道坂田社区吉华路430号江澜(坂田)工业厂区厂房4号101-901、2号101、3号301-501 邮编:518129 t:(86-755)25328888 sgs.china@sgs.com

Test Report

No.: SZXEC25000839505

Date: Mar 24, 2025

Page 5 of 6

DFN6/8/10/20, DFN Series, LQPF32/44/48/52/64/100, LQPF Series

SOP-8L, SOP Series, SOP Series+

Low Dropout Regulator(LDO)、Three-terminal precision voltage regulator、Voltage Regulator:

SOT-23, SOT-89, SOT-223, SOT Series, TO-252, TO-220, TO-263, TO-263-5L, TO Series



SGS-CS Standards Technical Service Co., Ltd.
Shenzhen Branch

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

Room 101-901, Plant 4 & Room 101, Plant 2 & Room 101, Plant 3 & Room 301-501, Plant 3, Jianghao (Bantian) Industrial Plant Area, No. 430, Jihua Road, Bantian Community, Bantian Street, Longgang District, Shenzhen, Guangdong, China 518129 www.sgs.com.cn
中国·广东·深圳市龙岗区坂田街道坂田社区吉华路430号江豪(坂田)工业厂区厂房4号101-901、2号101、3号301-501 邮编:518129 t:(86-755)25328888 sgs.china@sgs.com

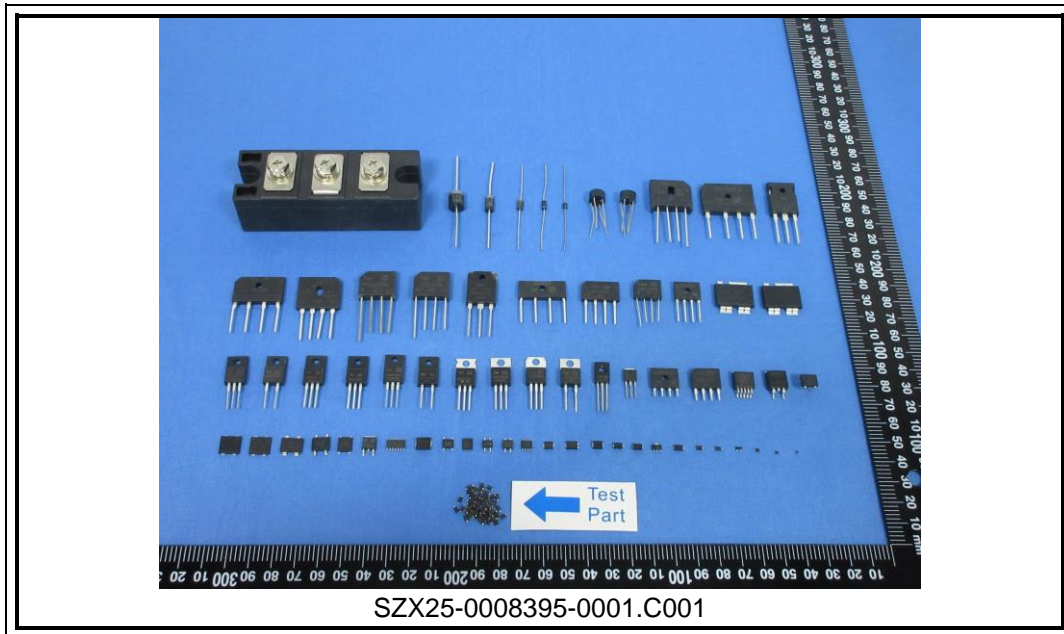
Test Report

No.: SZXEC25000839505

Date: Mar 24, 2025

Page 6 of 6

Sample Photo:



SGS authenticate the photo on original report only

*** End of Report ***



Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <https://www.sgs.com/en/Terms-and-Conditions>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

Attention: To check the authenticity of testing /inspection report & certificate, please contact us at telephone: (86-755) 8307 1443, or email: CN.Doccheck@sgs.com

SGS-Standard Technical Services Co., Ltd.
Shenzhen Branch

Room 101-901, Plant 4 & Room 101, Plant 2 & Room 101, Plant 3 & Room 301-501, Plant 3, Jianghao (Bantian) Industrial Plant Area, No. 430, Jihua Road, Bantian Community, Bantian Street, Longgang District, Shenzhen, Guangdong, China 518129 www.sgs.com
中国·广东·深圳市龙岗区坂田街道坂田社区吉华路430号江豪(坂田)工业厂区厂房4号101-901、2号101、3号301-501 邮编:518129 t:(86-755) 25328888 sgs.china@sgs.com