

Optocoupler



CERTIFICATE FI/40970/M1

Our Ref. HEL-CERT210300189-02

Product Optocoupler

Type LH1500....., LH1501....., LH1504....., LH1510....., LH1511....., LH1518....., LH1525....., LH1530....., LH1535....., LH1540....., LH1541....., LH1547....., LH1550....., LH1262....., LH1502....., LH1505....., LH1512....., LH1520....., LH1521....., LH1522....., LH1523....., LH1524....., LH1526....., LH1531....., LH1532....., LH1533....., LH1544....., LH1528....., LH1529....., LH1549....., LH1546AD, LH1500A, LH1510A, LH1535A, LH1540A, LH1550A1, LH1546A, VO14642A, LH1518A, LH1503A, LH1520A, LH1513A, LH1522A, LH1505A, LH1529A, LH1529B, LH1532A, LH1556A, LH1533, VO15665, VO1263A, LH1262

Trademark

Certificate Holder Vishay Semiconductor GmbH
Theresienstrasse 2, D-74072, Heilbronn, Germany

Technical information Basic/Supplementary/Reinforced insulation
Environmental temperature 100 °C

Other information See page 2 of this Certificate

The product is certified according to the following standard(s) EN IEC 62368-1:2020 + A11:2020

Validity This certificate is valid until 2026-03-11 provided that the Conditions for FI certification are met. This certificate includes the right to use the FI mark under the condition that changes (if any) will be checked at SGS Fimko before the product is brought onto market and that the conditions for FI certification are met.

Date of issue 2023-06-05

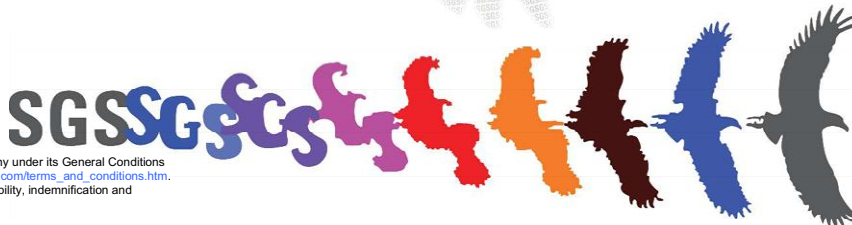
SGS Fimko Ltd

Signature
Joonas Leinonen
Certification Manager

Page 1 of 3

This document is issued by the Company under its General Conditions of Service accessible at http://www.sgs.com/terms_and_conditions.htm. 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. 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.



SGS Fimko Ltd

Takomotie 8, FI-00380 Helsinki, Finland
t. +358 9 696 361 www.sgs.fi

Business ID 0978538-5

Member of the SGS Group (SGS SA)



Page 2 of 3 to Certificate: **FI/40970/M1**

Manufacturer	Vishay Semiconductor GmbH Theresienstrasse 2, D-74072, Heilbronn, Germany
Manufacturing site	Vishay Semiconductor Malaysia Sdn.Bhd. No.1710-1, Kawasan Perindustrian Krubong, 75250, Melaka, Malaysia
Additional information	<p>Models:</p> <p>1) LH1500....., LH1501....., LH1504....., LH1510....., LH1511....., LH1518....., LH1525....., LH1530....., LH1535....., LH1540....., LH1541....., LH1547....., LH1550....., LH1262....., LH1502....., LH1505....., LH1512....., LH1520....., LH1521....., LH1522....., LH1523....., LH1524....., LH1526....., LH1531....., LH1532....., LH1533....., LH1544....., LH1528....., LH1529....., LH1549.....</p> <p>2) LH1546AD, LH1500A, LH1510A, LH1535A, LH1540A, LH1550A1, LH1546A, VO14642A, LH1518A, LH1503A, LH1520A, LH1513A, LH1522A, LH1505A, LH1529A, LH1529B, LH1532A, LH1556A, LH1533, VO15665, VO1263A, LH1262</p> <p>The symbol "....." in the end of the model numbering can be as follows:</p> <ul style="list-style-type: none"> - LH1500....., LH1510....., LH1511....., LH1518....., LH1525....., LH1530....., LH1535..... and LH1540..... = letters AAB, AABTR, AT, HT, HAB or HABTR - LH1501..... = letters AAB, AABTR, AT, HT or HAB - LH1504....., LH1541....., LH1547..... and LH1550..... = letters AAB1, AAB1TR, AT1, HT1, HAB1 or HAB1TR - LH1262..... = letters AAC, AACTR, AB, BAC, BACTR, BB, CAC, CACTR, CB, HAC, HACTR or HB - LH1502....., LH1505....., LH1512....., LH1520....., LH1521....., LH1522....., LH1523....., LH1524....., LH1526....., LH1531....., LH1532....., LH1533....., LH1544..... and LH1528... = letters AAC, AACTR, AB, HB, HAC or HACTR - LH1529..... = letters AAC, AACTR, AB, ACC, ACCTR, ACF, ACFTR, BAC, BACTR, BB, BCC, BCCTR, HB, HAC or HACTR - LH1549..... = letters AB, AAC, AACTR, HB, HAC or HACTR <p>Package: DIP-6, SMD-6 except - DIP-8, SMD8: LH1502....., LH1505....., LH1512....., LH1520....., LH1522....., LH1526....., LH1532....., VO1263.....</p> <p>Operating temperature 100 °C except VO15665 105 °C</p>

Page 2 of 3

This document is issued by the Company under its General Conditions of Service accessible at http://www.sgs.com/terms_and_conditions.htm. 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. 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.

SGS Fimko Ltd

Takomotie 8, FI-00380 Helsinki, Finland
t. +358 9 696 361 www.sgs.fi

Business ID 0978538-5

Member of the SGS Group (SGS SA)



Page 3 of 3 to Certificate: **FI/40970/M1**

Additional information

According to standard EN IEC 62368-1:2020/A11:2020 optocoupler used as safeguard shall comply with the requirements of clause 5.4 or Annex G.12 for optocouplers which requires component to fulfill standard IEC 60747-5-5:2007. In addition, the type testing voltage Vini,a and routine testing voltage Vini,b shall be at least equal to the appropriate test voltage in EN IEC 62368-1:2020/A11:2020 clauses 5.4.9.1 and 5.4.9.2.

Models have been tested and certified by VDE certificate Ref. No. 112774 (2023-02-16) and 112777 (2023-03-17) according to the standard EN IEC 60747-5-5:2020. The used test voltages for Vini,a and Vini,b are 6,8 kVpeak.

Minimum external clearances and creepage distances:

- 1) 8,3 mm
- 2) 7,5 mm

For ITAV applications, based on test voltages, optocouplers can be used in implementation where required withstand voltage is max. 4,0 kVp (Reinforced, AC mains max. 250V/OVC III).

Compliance to other insulation requirements, construction of the optocouplers (enclosure option), as well as environmental conditions shall be considered in final assembly.

This certificate is based on and replaces previous certificate FI/40970, dated 2021-03-11, due to addition of new mold compound and junction coat material.

As shown in the Test Report(s) No(s): 300196-4, 300196-4 Amendment 1



Page 3 of 3

This document is issued by the Company under its General Conditions of Service accessible at http://www.sgs.com/terms_and_conditions.htm. 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. 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.

SGS Fimko Ltd

Takomotie 8, FI-00380 Helsinki, Finland
t. +358 9 696 361 www.sgs.fi

Business ID 0978538-5

Member of the SGS Group (SGS SA)