

# Vishay Semiconductors

# **Optocoupler**



## **CERTIFICATE FI/40968**

Our Ref. HEL-CERT210300187-01

Product Optocoupler

Type 4N2., 4N3., CNY17-., CNY17F-., H11A., H11AA1, H11B., H11D., H11G2, IL., IL30, IL31, IL55, IL55B, IL55-1058, IL66-., IL66B-1, IL66B-2,IL74, IL20., IL25.,

IL755-1, IL755-2, IL755B-1, IL755B-2, IL755B-1, IL755-1059, IL766-1, IL766-2, IL766B-1, IL766B-1, IL766B-1, MCA231, MCA231, MCA255, MCT2, MCT2E, MCT27., MCT5210, MCT5211, MOC8050, MOC8111, SFH600-., SFH601-., SFH608-., SFH640-.,

K233PG, SFH636

Trademark

Certificate Holder Vishay Semiconductor GmbH

Theresienstrasse 2

D-74072, Heilbronn, Germany

Technical Basic/Supplementary/Reinforced insulation

information Environmental temperature 100 °C / 110 °C (see page 2).

Other information See page 2 of this certificate

The product is certified according to the following standard(s)
Validity

EN IEC 62368-1:2020 + A11:2020

This certificate is valid until 04 March 2026 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 04 March 2021

SGS Fimko Ltd

Signature

Con som

Tom Törn

Certification Director



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 afisification 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)



# Vishay Semiconductors



Page 2 of 3 to Certificate: FI/40968

Manufacturer

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

Manufacturing site

Vishay Semiconductor Malaysia Sdn.Bhd. No.1710-1, Kawasan Perindustrian Krubong 75250, Mukim Krubung, Melaka, Malaysia

### Additional information

#### Models

- 1) 4N2., 4N3., H11A., H11AA1, H11B., H11D., H11G2, IL., IL30, IL31, IL55, IL55B, IL55-1058, IL66-., IL66B-1, IL66B-2, IL74, IL20., IL25., IL755-1, IL755-2, IL755B-1, IL755B-2, IL755-1059, IL766-1, IL766-2, IL766B-1, IL766B-2, MCA230, MCA231, MCA255, MCT2, MCT2E, MCT27., MCT5210, MCT5211, MOC8050, MOC8111, SFH600-., SFH601-., SFH608-., SFH640-., K233PG, SFH636
- 2) CNY17-., CNY17F-.

The symbol "." in model numbering can be as follows:

- "." can be 5, 6, 7 or 8 for type 4N2.
- "." can be 2, 3, 5, 6, 7 or 8 for type 4N3.
- "." can be 1, 2, 3 or 4 for types CNY17-., CNY17F-., IL66-. and SFH601-.
- "." can be 1, 2, 3, 4 or 5 for type H11A.
- "." can be 1, 2 or 3 for types H11B., H11D., IL20. and SFH640-.
- "." can be 1, 2, 3 or 5 for type IL.
- "." can be 0, 1, 2 or 5 for type IL25.
- "." can be 0, 1, 2, 3, 4, 5, 6 or 7 for type MCT27.
- "." can be 0, 1, 2 or 3 for type SFH600-.
- "." can be 2, 3, 4 or 5 for type SFH608-.

Package: DIP-6, SMD-6

Operating temperature: 1) 100 °C, 2) 110 °C

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.

### 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)



# Vishay Semiconductors



Page 3 of 3 to Certificate: FI

FI/40968

### Additional information(continues)

Models have been tested and certified by VDE certificate Ref. No. VDE 76847 dated 13.10.2017 according to the standard EN 60747-5-5:2011+A1:2015. The used test voltages for  $V_{\text{ini,a}}$  and  $V_{\text{ini,b}}$  are 8 kVpeak.

Minimum external clearances and creepage distances:

- SMD-6: 8,1 mm
- DIP-6: 8,4 mm

For ITAV aplications, based on test voltages, optocouplers can be used in implementation where required withstand voltage is max. 6,0 kVp (Reinforced, AC mains max. 250V/OVC IV). Complying other insulation requirements construction of the optocouplers, final assembly as well as environmental conditions shall be considered.

As shown in the Test Report(s) No(s): 300196-2



### 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)