CERTIFICATE FI/40815

Our Ref. HEL-CERT200900418-01

Product	Optocoupler
Type	EL357., EL354., EL355., EL356., EL359., EL121., EL124., EL2701., EL2705., EL357N., EL356N., EL121N., EL124N., EL2701N., EL354N., EL2705N., EL3H7., EL281., EL2801., EL3H4., EL280., ELD207., ELD208., ELD213., ELD217., EL060L., EL0452., EL0501., EL050L., EL0701., EL0700., EL061A., EL0601., ELD205., ELD206., ELD211., ELM302X., EL0551., EL063X., EL0661., ELM305X., ELM307X., ELM303X., ELM301X., ELM304X., ELM306X., ELM308X., EL451., EL452., EL061N., EL0500., EL0600., EL0611., ELM452L., ELM453L., ELM600L., ELM601L., ELM611L., ELD3H5., ELD3H6., ELD3H7., ELD3H4., ELM452., ELM453., ELM600., ELM601., ELM611., ELQ3H4., ELQ3H5., ELQ3H7., ELM314., ELM454., EL3H71., EL205., EL206., EL207., EL208., EL211., EL212., EL213., EL215., EL216., EL217., EL0730., EL0731., EL0454., EL0530., EL0531., EL0453., EL0533., EL053L., EL080L., EL081L., EL3H7L., EL351., EL352., EL3571N., EL357NL., EX357NH., EX3H7H., ELM80L., ELM81L., EL083L., EL086L., EX3H7U., EX3H4U., ELS680., EX354NU., EX357NU., ELM456., ELM61L., ELM680., ELM511., ELM453H., ELM611H.
Trademark	EVERLIGHT
Certificate Holder	Everlight Electronics Co., Ltd. 6-8, Zhonghua Road, Shulin, New Taipei City, 23860, Taiwan
Technical information	250 V rms
The product is certified according to the following standard(s)	EN 60065:2014 + A11:2017 EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013 EN 61347-1:2015 EN 62368-1:2014 + A11:2017 EN 60335-1:2012 + A11:2014 + A13:2017 + A1:2019 + A14:2019 + A2:2019
Validity	This certificate is valid until 2025-09-18 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	2020-09-18

SGS Fimko Ltd

Signature

Matti Huttunen

Certification Engineer

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)

Manufacturer	Everlight Electronics Co., Ltd. 6-8, Zhonghua Road, Shulin, New Taipei City, 23860, Taiwan
Manufacturing site	1. Everlight Electronic (China) Co., Ltd. No. 2135 Zhong Shan North Road, Wujiang Economy Development, Zone (Yun Xi Area), Songling Town, Wujiang City, Suzhou, 215200, Jiangsu, China
	3. Everlight Electronics Co., Ltd. Tongluo Plan No. 26, Chung Hsin Road, Chung Hsin Industrial Park, Miaoli County, 36647, Taiwan
Additional information	The product has certificate P15219385/A8 issued by Nemko AS in accordance with the Nordic Certification Service system. ELS680. Minimum external creepage distance is measured to 8.4 mm, minimum internal creepage distance is measured to 5.56 mm and minimum distance through insulation is measured to 0.4 mm. Maximum operating temperature: 100 °C EX357NH., EX3H7H., EX3H7U., EX3H4U., EX354NU., EX357NU., ELM453H., ELM611H. Minimum external creepage distance is measured to 5.0 mm, minimum internal creepage distance is measured to 4.0 mm and minimum distance through insulation is measured to 0.4 mm. Maximum operating temperature: 125 °C EL121., EL121N., EL124., EL124N., EL2701., EL2701N., EL2705., EL2705N., EL280., EL281., EL2801., EL351., EL352., EL354., EL354N., EL355., EL356., EL356N., EL357., EL357N., EL3571N., EL357NL., EL359., EL451., EL452., EL3H4., EL3H7., EL3H7L., EL3H71., ELD3H4., ELD3H5., ELD3H6., ELD3H7., ELM301X., ELM302X., ELM305X., ELM307X., ELM303X., ELM304X., ELM306X., ELM308X., ELQ3H4., ELQ3H5., ELQ3H7., ELM314. Minimum external creepage distance is measured to 5.0 mm, minimum internal creepage distance is measured to 4.0 mm and minimum distance through insulation is measured to 0.4 mm. Maximum operating temperature: 110 °C

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)

Additional information

ELM452., ELM452L., ELM453., ELM453L., ELM454., ELM456., ELM511., ELM600., ELM600L., ELM601., ELM601L., ELM611., ELM611L., ELM61L., ELM680., ELM80L., ELM81L.
Minimum external creepage distance is measured to 5.0 mm, minimum internal creepage distance is measured to 4.0 mm and minimum distance through insulation is measured to 0.4 mm.
Maximum operating temperature: 100 °C

EL205., EL206., EL207., EL208., EL211., EL212., EL213., EL215., EL216., EL217., ELD207., ELD208., ELD213., ELD217., ELD205., ELD206., ELD211.
Minimum external creepage distance is measured to 4.4 mm, minimum internal creepage distance is measured to 3.5 mm and minimum distance through insulation is measured to 0.4 mm.
Maximum operating temperature: 110 °C

EL0452., EL0453., EL0454., EL0500., EL050L., EL0501., EL0530., EL0531., EL0533., EL0551., EL0600., EL060L., EL0601., EL061A., EL061N., EL0611., EL063X., EL0661., EL0700., EL0701., EL0730., EL0731., EL053L., EL080L., EL081L., EL083L., EL086L.
Minimum external creepage distance is measured to 4.4 mm, minimum internal creepage distance is measured to 3.5 mm and minimum distance through insulation is measured to 0.4 mm.
Maximum operating temperature: 100 °C

Tested for reinforced insulation.
Tested for 5000 m.
The symbol "X" in type denotes X = Part no. (0,1,2,3,4).
The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape.

Thermal cycling test, 10 cycles. Each cycle: 68h in 85 or 100 or 110 or 125 degree C, 1h in 25 degree C, 2h in 0 degree C and 1h in 25 degree C. After the cycling test a humidity test for 48h in 93% relative humidity.
Electric strength test between input and output 4800 Vac/1 minute.

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)

Additional information

The product is certified according to the following standards:
IEC 60065:2014
IEC 60950-1:2005 + A1:2009 + A2:2013
IEC 61347-1:2015
IEC 62368-1:2014
IEC 60335-1:2010 + A1:2013

This certificate replaces previous certificate FI 29132 A3 dated 7 May 2018. Renewal of the certificate due standard update, addition of new factory, addition of new models, change of operation temperature and addition of new materials.

As shown in the Test Report(s) No(s): 397064

FINAS
Finnish Accreditation Service
S003 (EN ISO/IEC 17065)

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)

CERTIFICATE FI/40818

Our Ref. HEL-CERT200900421-01

Product	Optocoupler
Type	EL0200., EL0201., EL0202., EL0210., EL0211., EL0212., EL2514., ELL300., ELM440A., ELM460A., ELM60U., ELM61U., ELM640A., ELM660A., ELM840A., ELM860A., ELS050L., ELS051L., ELS052L., ELS060L., ELS061L., ELS062L., ELS270., ELS271., ELS272., ELS500., ELS501., ELS511., ELS600., ELS601., ELS60U., ELS611., ELS61U., ELS62U., ELM406A., ELS3120., ELS3140., ELS3150., ELS3180., ELS3184.
Trademark	EVERLIGHT
Certificate Holder	Everlight Electronics Co., Ltd. 6-8, Zhonghua Road, Shulin, New Taipei City, 23860, Taiwan
Technical information	250 V rms
The product is certified according to the following standard(s)	EN 60065:2014 + A11:2017 EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013 EN 61347-1:2015 EN 62368-1:2014 + A11:2017 EN 60335-1:2012 + A11:2014 + A13:2017 + A1:2019 + A14:2019 + A2:2019
Validity	This certificate is valid until 2025-09-18 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	2020-09-18

SGS Fimko Ltd

Signature

Matti Huttunen

Matti Huttunen
Certification Engineer

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)

Manufacturer

Everlight Electronics Co., Ltd.
6-8, Zhonghua Road, Shulin, New Taipei City, 23860, Taiwan

Manufacturing site

1. Everlight Electronic (China) Co., Ltd.
No. 2135 Zhong Shan North Road, Wujiang Economy Development, Zone (Yun Xi Area), Songling Town, Wujiang City, Suzhou, 215200, Jiangsu, China

3. Everlight Electronics Co., Ltd. Tongluo Plan
No. 26, Chung Hsin Road, Chung Hsin Industrial Park, Miaoli County, 36647, Taiwan

Additional information

The product has certificate P15219385/A8 issued by Nemko AS in accordance with the Nordic Certification Service system.

ELS3120., ELS3140., ELS3150., ELS3180., ELS3184.
Minimum external creepage distance is measured to 8.4 mm, minimum distance through insulation is measured to 5.56 mm, and minimum distance through insulation is measured to 0.4 mm.
Maximum operation temperature: 110 °C

ELS270., ELS271., ELS272., ELS500., ELS050L., ELS501., ELS051L., ELS511., ELS052L., ELS600., ELS601., ELS060L., ELS60U., ELS611., ELS061L., ELS61U., ELS062L., ELS62U.
Minimum external creepage distance is measured to 8.4 mm, minimum distance through insulation is measured to 5.56 mm, and minimum distance through insulation is measured to 0.4 mm.
Maximum operation temperature: 100 °C

ELL300.
Minimum external creepage distance is measured to 8.0 mm, minimum distance through insulation is measured to 0.9 mm, and minimum distance through insulation is measured to 0.9 mm.
Maximum operation temperature: 110 °C

EL2514.
Minimum external creepage distance is measured to 7.7 mm, minimum distance through insulation is measured to 3.5 mm, and minimum distance through insulation is measured to 0.4 mm.
Maximum operation temperature: 110 °C

ELM406A.,ELM440A., ELM460A., ELM660A.
Minimum external creepage distance is measured to 5.7 mm, minimum distance through insulation is measured to 4.31 mm, and minimum distance through insulation is measured to 0.4 mm.
Maximum operation temperature: 125 °C

SGS Fimko Ltd | Takomotie 8, FI-00380 Helsinki, Finland
t. +358 9 696 361 www.sgs.fi
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Additional information

ELM840A., ELM860A.
Minimum external creepage distance is measured to 5.7 mm, minimum distance through insulation is measured to 4.31 mm, and minimum distance through insulation is measured to 0.3 mm.
Maximum operation temperature: 125 °C

ELM60U., ELM61U.
Minimum external creepage distance is measured to 5.0 mm, minimum distance through insulation is measured to 4.0 mm, and minimum distance through insulation is measured to 0.4 mm.
Maximum operation temperature: 100 °C

EL0200., EL0201., EL0202., EL0210., EL0211., EL0212.
Minimum external creepage distance is measured to 4.4 mm, minimum distance through insulation is measured to 3.5 mm, and minimum distance through insulation is measured to 0.4 mm.
Maximum operation temperature: 100 °C

Tested for reinforced insulation.
Tested for 5000 m.
The symbol "X" in type denotes X = Part no. (0,1,2,3,4).
The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape.

Thermal cycling test, 10 cycles. Each cycle: 68h in 85 or 100 or 110 or 125 degree C, 1h in 25 degree C, 2h in 0 degree C and 1h in 25 degree C. After the cycling test a humidity test for 48h in 93% relative humidity. Electric strength test between input and output 4800 Vac/1 minute.

The product is certified according to the following standards:
IEC 60065:2014
IEC 60950-1:2005 + A1:2009 + A2:2013
IEC 61347-1:2015
IEC 62368-1:2014
IEC 60335-1:2010 + A1:2013

This certificate replaces previous certificate FI 29499 A2 dated 7 May 2018. Renewal of the certificate due standard update, addition of new factory, addition of new models, change of operation temperature and addition of new materials.

As shown in the Test Report(s) No(s): 397064

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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)

CERTIFICATE FI/40816

Our Ref. HEL-CERT200900417-01

Product	Optocoupler
Type	4N25., 4N26., 4N27., 4N28., 4N29., 4N30., 4N31., 4N32., 4N33., 4N35., 4N36., 4N37., 4N38., 4N50., 4N51., 4N52., 4N53., 4N54., 4N55., 4N56., 4N57., 4N58., 4N59., CNX35U., CNX36U., CNX38U., CNX39U., CNY17-1., CNY171-1., CNY171-2., CNY171-3., CNY171-4., CNY17-2., CNY17-3., CNY17-4., CNY17F-1., CNY17F1-1., CNY17F1-2., CNY17F1-3., CNY17F1-4., CNY17F-2., CNY17F-3., CNY17F-4., CNY17G., CNY75., CQY80., EL2501., EL2561., EL301X., EL302X., EL303X., EL304X., EL305X., EL306X., EL307X., EL308X., EL3120., EL3140., EL3150., EL3161., EL3162., EL3163., EL3180., EL3184., EL371., EL406A., EL410A., EL420A., EL425A., EL435A., EL440A., EL460A., EL606A., EL610., EL610A., EL620A., EL625A., EL635A., EL640A., EL660A., EL717., EL725., EL806A., EL810A., EL814., EL815., EL816., EL817., EL8171., EL817H., EL817L., EL819., EL820A., EL824., EL825., EL825A., EL826., EL827., EL829., EL835A., EL840A., EL851., EL852., EL860A., EL9001., ELD851., ELD852., ELT301X., ELT302X., ELT303X., ELT304X., ELT305X., ELT306X., ELT307X., ELT308X., H11A1., H11A2., H11A3., H11A4., H11A5., H11AA1., H11AA2., H11AA3., H11AA4., H11B1., H11B2., H11B255., H11B3., H11D1., H11D2., H11D3., H11D4., H11G1., H11G2., H11G3., H11L1., H11L2., H11L3., HS817., K233., K817P., MCT2., MCT210., MCT2E., MOC119., MOC8020., MOC8021., MOC8030., MOC8050., MOC8080., MOC8100., MOC8101., MOC8102., MOC8103., MOC8104., MOC8105., MOC8106., MOC8107., MOC8108., MOC8111., MOC8112., MOC8113., SL5500., SL5501., SL5504., SL5511., TCDT110., TCDT111., TCDT112., TCET110., TCET111., TCET120., TIL111., TIL113., TIL117., VO610A., VO615A.
Trademark	EVERLIGHT
Certificate Holder	Everlight Electronics Co., Ltd. 6-8, Zhonghua Road, Shulin, New Taipei City, 23860, Taiwan
Technical information	250 V rms
The product is certified according to the following standard(s)	EN 60065:2014 + A11:2017 EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013 EN 61347-1:2015 EN 62368-1:2014 + A11:2017 EN 60335-1:2012 + A11:2014 + A13:2017 + A1:2019 + A14:2019 + A2:2019
Validity	This certificate is valid until 2025-09-18 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	2020-09-18

SGS Fimko Ltd

Signature

Matti Huttunen

Matti Huttunen
Certification Engineer

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)

Manufacturer	Everlight Electronics Co., Ltd. 6-8, Zhonghua Road, Shulin, New Taipei City, 23860, Taiwan
Manufacturing site	1. Everlight Electronic (China) Co., Ltd. No. 2135 Zhong Shan North Road, Wujiang Economy Development, Zone (Yun Xi Area), Songling Town, Wujiang City, Suzhou, 215200, Jiangsu, China
	3. Everlight Electronics Co., Ltd. Tongluo Plan No. 26, Chung Hsin Road, Chung Hsin Industrial Park, Miaoli County, 36647, Taiwan
Additional information	The product has certificate P15219385/A8 issued by Nemko AS in accordance with the Nordic Certification Service system. EL817H. Minimum external creepage distance is measured to 7.7 mm, minimum internal creepage distance is measured to 6.0 mm and minimum distance through insulation is measured to 0.5 mm. Maximum operating temperature: 125 °C EL814., EL815., EL824., EL825. Minimum external creepage distance is measured to 7.9 mm, minimum internal creepage distance is measured to 6.0 mm and minimum distance through insulation is measured to 0.5 mm. Maximum operating temperature: 110 °C ELD851., ELD852., 4N29., 4N30., 4N31., 4N32., 4N33., 4N50., 4N51., 4N52., 4N53., 4N54., 4N55., 4N56., 4N57., 4N58., 4N59., H11B1., H11B2., H11B3., H11L3., H11B255., H11D1., H11D2., H11D3., H11D4., H11G1., H11G2., H11G3., H11L1., H11L2., TIL113., MOC119., MOC8020., MOC8021., MOC8030., MOC8050., MOC8080., EL301X., EL302X., EL303X., EL304X., EL305X., EL306X., EL307X., EL308X., EL3161., EL3162., EL3163., EL371., EL725., EL851., EL852. Minimum external creepage distance is measured to 7.7 mm, minimum internal creepage distance is measured to 5.5 mm and minimum distance through insulation is measured to 0.5 mm. Maximum operating temperature: 100 °C

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)

Additional information

EL2501., EL2561., EL3120., EL3140., EL3150., EL3180., EL3184., EL406A., EL410A., EL420A., EL425A., EL435A., EL440A., EL460A., EL606A., EL610., EL610A., EL620A., EL625A., EL635A., EL640A., EL660A., EL717., EL806A., EL810A., EL816., EL817., EL817L., EL819., EL826., EL827., EL829., EL8171., EL820A., EL825A., EL835A., EL840A., EL860A., EL9001., ELT301X., ELT302X., ELT303X., ELT304X., ELT305X., ELT306X., ELT307X., ELT308X., 4N25., 4N26., 4N27., 4N28., 4N35., 4N36., 4N37., 4N38., MCT210., MCT2., MCT2E., CNY17-1., CNY17-2., CNY17-3., CNY17-4., CNY17F-1., CNY17F-2., CNY17F-3., CNY17F-4., CNY17G., CNY171-1., CNY171-2., CNY171-3., CNY171-4., CNY17F1-1., CNY17F1-2., CNY17F1-3., CNY17F1-4., CNY75., CNX36U., CNX38U., CNX39U., CQY80., K233., MOC8100., MOC8101., MOC8102., MOC8103., MOC8104., MOC8105., MOC8106., MOC8107., MOC8108., MOC8111., MOC8112., MOC8113., H11A1., H11A2., H11A3., H11A4., H11A5., H11AA1., H11AA2., H11AA3., H11AA4., HS817., K817P., TCET110., TCET111., TCET120., TCDT110., TCDT111., TCDT112., TIL111., TIL117., CNX35U., SL5500., SL5501., SL5504., SL5511., VO610A., VO615A.
Minimum external creepage distance is measured to 7.7 mm, minimum internal creepage distance is measured to 6.0 mm and minimum distance through insulation is measured to 0.5 mm.
Maximum operating temperature: 110 ºC

Tested for reinforced insulation.
Tested for 5000 m.
The symbol “X” in type denotes X = Part no. (0,1,2,3,4).
The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape.

Thermal cycling test, 10 cycles. Each cycle: 68h in 85 or 100 or 110 or 125 degree C, 1h in 25 degree C, 2h in 0 degree C and 1h in 25 degree C. After the cycling test a humidity test for 48h in 93% relative humidity. Electric strength test between input and output 4800 Vac/1 minute.

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)

Additional information

The product is certified according to the following standards:
IEC 60065:2014
IEC 60950-1:2005 + A1:2009 + A2:2013
IEC 61347-1:2015
IEC 62368-1:2014
IEC 60335-1:2010 + A1:2013

This certificate replaces previous certificate FI 29128 A3 dated 4 May 2018. Renewal of the certificate due standard update, addition of new factory, change of operation temperature and addition of new materials.

As shown in the Test Report(s) No(s): 397064

FINAS
Finnish Accreditation Service
S003 (EN ISO/IEC 17065)

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)

CERTIFICATE FI/40817

Our Ref. HEL-CERT200900419-01

Product	Optocoupler
Type	EL617., 6N135., 6N136., 6N137., 6N138., 6N139., EL2502., EL2503., EL4502., EL4503., EL253L., EL2531., EL4534., EL2730., EL2731., EL2601., EL2611., EL2630., EL2631., EL4661., EL354L., EL357L., EL355L., EL10XX., EL111X., EL161X., EL151X., EL260L., EL2530., EL261A., EL261N., EL263L., EL263A., EL263N., EL250L., ELW139., ELW3184., ELW260L., ELW250L., ELW137., ELW2601., ELW2611., ELW136., ELW135., ELW4502., ELW4503., ELW138., ELW3120., ELW3140., ELW3150., ELW3180., CNY75G., CQY80.G, K233.G, TCDT110.G, TCDT111.G, TCDT112.G, HS817.G, TCET110.G, TCET111.G, TCET120.G, EL4504., EL2200., ELR2502., ELR2503., ELR1502., ELR1503., ELR3602., ELR3603., ELR2602., ELR2603., ELR1602., ELR1603., EL2211., EL847., EL844., EL845., ELW4504., EL2201., EL2202., EL2219., EL2212., EL2231., EL2232., ELR3502., ELR3503., ELR0223., ELR1223., ELR2223., ELR3223., EL101L., EL101XH., ELW2200., ELW2201., ELW2202., ELW2219., ELW2211., ELW2212., EX101U., ELL200., ELR0323., ELR1323., ELR2323., ELR3323., ELR0313., ELR1313., ELR2313., ELR3313., ELR0213., ELR1213., ELR2213., ELR3213.
Trademark	EVERLIGHT
Certificate Holder	Everlight Electronics Co., Ltd. 6-8, Zhonghua Road, Shulin, New Taipei City, 23860, Taiwan
Technical information	250 V rms
The product is certified according to the following standard(s)	EN 60065:2014 + A11:2017 EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013 EN 61347-1:2015 EN 62368-1:2014 + A11:2017 EN 60335-1:2012 + A11:2014 + A13:2017 + A1:2019 + A14:2019 + A2:2019
Validity	This certificate is valid until 2025-09-18 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	2020-09-18
	SGS Fimko Ltd
Signature	Matti Huttunen Matti Huttunen Certification Engineer

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)

Manufacturer	Everlight Electronics Co., Ltd. 6-8, Zhonghua Road, Shulin, New Taipei City, 23860, Taiwan
Manufacturing site	1. Everlight Electronic (China) Co., Ltd. No. 2135 Zhong Shan North Road, Wujiang Economy Development, Zone (Yun Xi Area), Songling Town, Wujiang City, Suzhou, 215200, Jiangsu, China
	3. Everlight Electronics Co., Ltd. Tongluo Plan No. 26, Chung Hsin Road, Chung Hsin Industrial Park, Miaoli County, 36647, Taiwan
Additional information	The product has certificate P15219385/A8 issued by Nemko AS in accordance with the Nordic Certification Service system. ELL200. Minimum external creepage distance is measured to 11.85 mm and minimum distance through insulation is measured to 1.0 mm. Maximum operation temperature: 110 °C ELW135., ELW136., ELW137., ELW138., ELW139., ELW250L., ELW260L., ELW2200., ELW2201., ELW2202., ELW2211., ELW2212.,ELW2219., ELW2601., ELW2611., ELW3120., ELW3140., ELW3150., ELW3180., ELW3184., ELW4502., ELW4503., ELW4504. Minimum external creepage distance is measured to 11.85 mm, minimum internal creepage distance is measured to 7.72 mm and minimum distance through insulation is measured to 0.9 mm. Maximum operation temperature: 100 °C EL2200., EL2201., EL2202., EL2211., EL2212., EL2219., EL2231., EL2232., ELR0223., ELR1223., ELR1502., ELR1503., ELR1602., ELR1603., ELR2223., ELR2502., ELR2503., ELR2602., ELR2603., ELR3223., ELR3502., ELR3503., ELR3602., ELR3603. Minimum external creepage distance is measured to 8.2 mm, minimum internal creepage distance is measured to 5.1 mm and minimum distance through insulation is measured to 0.5 mm. Maximum operation temperature: 100 °C

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)

Additional information

ELR0323., ELR1323., ELR2323., ELR3323., ELR0313., ELR1313., ELR2313., ELR3313., ELR0213., ELR1213., ELR2213., ELR3213.
Minimum external creepage distance is measured to 8.2 mm, minimum internal creepage distance is measured to 5.1 mm and minimum distance through insulation is measured to 0.5 mm.
Maximum operation temperature: 85 °C

EL10XX., EL101L., EL101XH., EX101U., EL111X., EL354L., EL355L., EL357L., EL151X., EL161X.
Minimum external creepage distance is measured to 8.1 mm, minimum internal creepage distance is measured to 5.2 mm and minimum distance through insulation is measured to 0.4 mm.
Maximum operation temperature: 125 °C

EL617., CNY75G., CQY80.G, K233.G, TCDT110.G, TCDT111.G, TCDT112.G, HS817.G, TCET110.G, TCET111.G, TCET120.G
Minimum external creepage distance is measured to 8.0 mm, minimum internal creepage distance is measured to 6.0 mm and minimum distance through insulation is measured to 0.5 mm.
Maximum operation temperature: 110 °C

EL847., EL844., EL845.,
Minimum external creepage distance is measured to 8.0 mm, minimum internal creepage distance is measured to 5.1 mm and minimum distance through insulation is measured to 0.5 mm.
Maximum operation temperature: 110 °C

6N135., 6N136., 6N137., 6N138., 6N139., EL2502., EL250L., EL2503., EL2530., EL253L., EL2531., EL4502., EL4503., EL4534., EL2730., EL2731., EL2601., EL260L., EL2611., EL261A., EL261N., EL2630., EL2631., EL263A., EL263L., EL263N., EL4504., EL4661.
Minimum external creepage distance is measured to 8.0 mm, minimum internal creepage distance is measured to 5.0 mm and minimum distance through insulation is measured to 0.5 mm.
Maximum operation temperature: 100 °C

Tested for reinforced insulation.
Tested for 5000 m.
The symbol "X" in type denotes X = Part no. (0,1,2,3,4).
The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape.

Thermal cycling test, 10 cycles. Each cycle: 68h in 85 or 100 or 110 or 125 degree C, 1h in 25 degree C, 2h in 0 degree C and 1h in 25 degree C. After the cycling test a humidity test for 48h in 93% relative humidity.
Electric strength test between input and output 4800 Vac/1 minute.

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Additional information

The product is certified according to the following standards:
IEC 60065:2014
IEC 60950-1:2005 + A1:2009 + A2:2013
IEC 61347-1:2015
IEC 62368-1:2014
IEC 60335-1:2010 + A1:2013

This certificate replaces previous certificate FI 29133 A3 dated 7 May 2018. Renewal of the certificate due standard update, addition of new factory, addition of new models, change of operation temperature and addition of new materials.

As shown in the Test Report(s) No(s): 397064

FINAS
Finnish Accreditation Service
S003 (EN ISO/IEC 17065)

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