

CERTIFICATE

FOR EUROPEAN PRODUCT SAFETY

Reference No. SE-S-2300578

Optocouplers

Type designation:

EL817. /EL816. /EL819. /EL829. /EL826. /EL827. /EL717. /4N25. /4N26. /4N27. /4N28. /4N35. /4N36. /4N37. /4N38. /MCT2. /MCT2E. /MCT210. /CNY17-1. /CNY17-2. /CNY17-3. /CNY17-4. /MOC8111. /MOC8112. /MOC8113. /H11A1. /H11A2. /H11A3. /H11A4. /H11A5. /TIL111. 6N135. /6N136. /6N137. /6N138. /6N139. /EL2502. /EL250L. /EL2503. /EL4502. /EL4503. /EL2530. /EL253L. /EL2531. /EL4534. /EL2730. /EL2731. /EL2601. /EL260L. /EL2611. /EL261A. /EL261N. /EL2630. /EL263L. /EL263A. /EL263N. /EL2631. /EL4661. /EL4504. /TIL117. TCET111. /TCET120. /VO610A. /VO615A. /CNY17G. /CNY75. /CQY80. /K233. /TCDT110. /TCDT111. /TCDT112. /EL2501. /EL2561. /EL8171. /CNY171-1. /CNY171-2. /CNY171-3. /CNY171-4. /CNY17F1-1. /CNY17F1-2. /CNY17F1-3. /CNY17F1-4. /EL610. /EL817L. /CNX35U. H11L3. / H11D1. / H11D2. / H11D3. / H11D4. / H11G1. / H11G2. / H11G3. /EL371. / EL725. / 4N50. / 4N51. / 4N52. / 4N53. / 4N54. / 4N55. / 4N56. /4N57. / 4N58. / 4N59. /EL852. /EL851. EX357NH. / EX3H7H. / EX3H7U. / EX3H4U. / EX354NU. / EX357NU. EX101U. EV6150A. /EL6150A. /EL603A5. /EL606A3. EV101U. ELW3120. / ELW3140. / ELW3150. / ELW3180. / ELW3184. ELW137. / ELW139. / ELW2601. / ELW2611. / ELW136. / ELW135. /ELW4502. / ELW4503. / ELW138. / ELW260L. / ELW250L. / ELW4504. /ELW2200. / ELW2201. / ELW2202. / ELW2219. / ELW2211. / ELW2212. ELT301X. / ELT302X. / ELT305X. / ELT303X. / ELT304X. / ELT306X. / ELT308X. / ELT307X. ELS680. ELS60U. / ELS61U. / ELS62U. ELS500. / ELS501. / ELS511. / ELS050L. / ELS051L. / ELS052L. / ELS600. / ELS601. / ELS611. / ELS060L. / ELS061L. / ELS062L. ELS3120. / ELS3140. / ELS3150. / ELS3180. / ELS3184. ELS270. / ELS271. / ELS272. ELR3602. / ELR3603. / ELR2602. / ELR2603. / ELR1602. / ELR1603. /ELR3502. / ELR3503. / ELR2502. / ELR2503. / ELR1502. / ELR1503. /ELR0223. / ELR1223. / ELR2223. / ELR3223. ELR0323. / ELR1323. / ELR2323. / ELR3323. / ELR0313. / ELR1313. / ELR2313. / ELR3313. / ELR0213. / ELR1213. / ELR2213. / ELR3213. / ELR3203. ELM684. ELM61U. ELM60U. ELM460A. / ELM840A. / ELM860A. / ELM425A. ELM456. / ELM61L. / ELM680. / ELM511. ELM453H. / ELM611H. ELM452. / ELM453. / ELM600. / ELM601. / ELM611. / ELM452L. / ELM453L. / ELM600L. / ELM601L. / ELM611L. / ELM454. / ELM80L. / ELM81L. ELM440A. /ELM640A. / ELM660A. / ELM406A. ELM312. / ELM315. ELL300. ELL200. ELD851. /ELD852. /4N29. /4N30. /4N31. /4N32. /4N33. /H11B1. /H11B2. /H11B3. /H11B255. /TIL113. /MOC119. /MOC8020. /MOC8021. /MOC8030. /MOC8050. /MOC8080. /EL301X. /EL302X. /EL305X. /EL307X. /EL303X. /EL304X. /EL306X. /EL308X. /EL3161. /EL3162. /EL3163. /H11L1. /H11L2. ELD3H5. / ELD3H6. / ELD3H7. / ELD3H4. / ELQ3H4. / ELQ3H5. / ELQ3H7. / ELM314. EL847. / EL844. / EL845. EL817H. EL815. / EL814. / EL824. / EL825. EL806A. /EL810A. /EL820A. /EL825A. /EL835A. /EL840A. /EL860A. /EL860A-V / EL406A. /EL410A.

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APPENDIX:

Reference No. SE-S-2300578

/EL420A. /EL425A. /EL435A. /EL440A. /EL460A. /EL606A. /EL610A.
/EL620A. /EL625A. /EL635A. /EL640A. /EL660A. EL617. / CNY75G. /
CQY80.G / K233.G / TCDT110.G / TCDT111.G / TCDT112.G / HS817.G /
TCET110.G / TCET111.G / TCET120.G. EL451. / EL452. / EL3H7L. /
EL351. / EL352. / EL3571N. / EL357NL. EL3H5. EL3120. / EL3140. /
EL3150. / EL3180. / EL3184. EL2801. /EL354. /EL355. /EL356. /EL357.
/EL359. /EL121. /EL124. /EL2701. /EL2705. /EL357N. /EL356N.
/EL121N. /EL124N. /EL2701N. /EL354N. /EL2705N. /EL3H7. /EL281.
/EL3H4. /EL280. /EL3H71. /ELM301X. /ELM302X. /ELM305X.
/ELM307X. /ELM303X. /ELM304X. /ELM306X. /ELM308X. EL2514.
EL2200. / EL2212. / EL2231. / EL2201. / EL2202. / EL2219. / EL2211. /
EL2232. EL205. / EL206. / EL207. / EL208. / EL211. / EL212. / EL213. /
EL215. /EL216. / EL217. / ELD207. / ELD208. / ELD213. / ELD217. /
ELD205. /ELD206. / ELD211. EL10XX. / EL357L. / EL355L. / EL354L. /
EL111X. / EL161X. / EL151X. / EL101L. EL101XH. EL080L. / EL081L. /
EL083L. / EL086L. EL0500. /EL0501. /EL0452. /EL0453. /EL0454.
/EL0600. /EL0601. /EL0611. /EL0700. /EL050L. /EL060L. /EL0701.
/EL061A. /EL061N. /EL0551. /EL0530. /EL0531. /EL0533. /EL063X.
/EL0661. /EL0730. /EL0731. /EL053L. EL0200. / EL0201. / EL0202. /
EL0210. / EL0211. / EL0212. CNX36U. /CNX38U. /CNX39U. /SL5500.
/SL5501. /SL5504. /SL5511. /MOC8100. /MOC8101. /MOC8102.
/MOC8103. /MOC8104. /MOC8105. /MOC8106. /MOC8107. /MOC8108.
/EL9001. /CNY17F-1. /CNY17F-2. /CNY17F-3. /CNY17F-4. /H11AA1.
/H11AA2. /H11AA3. /H11AA4. /HS817. /K817P. /TCET110.

Certificate holder:

Everlight Electronics Co. Ltd.
No.6-8 Zhonghua Rd. Shulin Dist. 23860 New Taipei City Taiwan

The product complies with the standard(s):

EN 60335-1:2012+A11+A13+A1+A14+A2+A15
IEC 60335-1:2010+A1,
EN 61347-1:2015+A1
EN 62368-1:2014+A11, EN IEC 62368-1:2020+A11
IEC 60065:2014
IEC 60950-1:2005+A1+A2
IEC 61347-1:2015
IEC 62368-1:2014, IEC 62368-1:2018

'Date of expiry:

29 June, 2028

Additional information in Appendix

Certification Body:

Intertek Semko AB, Product Certification

Place: Kista - Stockholm

Signed:



Date: 29 June, 2023

Quan Li

APPENDIX:

Reference No. SE-S-2300578

Technical Data:

Ratings 250Vrms
Trademark EVERLIGHT

Type

EL817./EL816./EL819./EL829./EL826./EL827./EL717./4N25./4N26./4N27./4N28./4N35./4N36./4N37./4N38./MCT2./MCT2E./MCT210./CNY17-1./CNY17-2./CNY17-3./CNY17-4./MOC8111./MOC8112./MOC8113./H11A1./H11A2./H11A3./H11A4./H11A5./TIL111./TIL117./CNX35U.

Principal characteristics:

Minimum external creepage distance is measured to 7.7mm, minimum internal creepage distance is measured to 6.0mm and minimum distance through insulation is measured to 0.5mm. Tested for reinforced insulation. Thermal cycling test, 10 cycles. Each cycle: 68h in 110 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 4800Vac/1 minute. The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape. Maximum operating temperature: 110°C. Tested for 5000m.

Pos. No. 1

Type

6N135./6N136./6N137./6N138./6N139./EL2502./EL250L./EL2503./EL4502./EL4503./EL2530./EL253L./EL2531./EL4534./EL2730./EL2731./EL2601./EL260L./EL2611./EL261A./EL261N./EL2630./EL263L./EL263A./EL263N./EL2631./EL4661./EL4504.

Principal characteristics

High Speed Optocoupler. Minimum external creepage distance is measured to 8.0mm, minimum internal creepage distance is measured to 5.0mm and minimum distance through insulation is measured to 0.5mm. Tested for reinforced insulation. Thermal cycling test, 10 cycles. Each cycle: 68h in 100 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 4800Vac/1 minute. The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape. Maximum operating temperature: 100°C

Pos. No. 2

Type

TCET111./TCET120./VO610A./VO615A./CNY17G./CNY75./CQY80./K233./TCDT110./TCDT111./TCDT112./EL2501./EL2561./EL8171./CNY171-1./CNY171-2./CNY171-3./CNY171-4./CNY17F1-1./CNY17F1-2./CNY17F1-3./CNY17F1-4./EL610./EL817L.

Principal characteristics

Optocoupler. Minimum external creepage distance is measured to 7.7mm, minimum internal creepage distance is measured to 6.0mm and minimum distance through insulation is measured to 0.5mm. Tested for reinforced insulation. Thermal cycling test, 10 cycles. Each cycle: 68h in 110 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 4800Vac/1 minute. The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape. Maximum operating temperature: 110°C. Tested for 5000m.

APPENDIX:

Reference No. SE-S-2300578

Pos. No. 3

Type

H11L3. / H11D1. / H11D2. / H11D3. / H11D4. / H11G1. / H11G2. / H11G3. /EL371. / EL725. / 4N50. / 4N51. / 4N52. / 4N53. / 4N54. / 4N55. / 4N56. /4N57. / 4N58. / 4N59. /EL852. /EL851.

Principal characteristics

Optocoupler. Minimum external creepage distance is measured to 7.7mm, minimum internal creepage distance is measured to 5.5mm and minimum distance through insulation is measured to 0.5mm. Tested for reinforced insulation. Thermal cycling test, 10 cycles. Each cycle: 68h in 100 degree C, 1h in 25degree 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 4800Vac/1 minute. The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape. Maximum operating temperature: 100°C. The symbol "X" in type denotes X = Part no. (0,1,2,3,4).

Pos. No. 4

Type

EX357NH. / EX3H7H. / EX3H7U. / EX3H4U. / EX354NU. / EX357NU.

Principal characteristics

Optocoupler. Minimum external creepage distance is measured to 5.0mm, minimum internal creepage distance is measured to 4.0mm and minimum distance through insulation is measured to 0.4mm. Tested for reinforced insulation. Thermal cycling test, 10 cycles. Each cycle: 68h in 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 4800Vac/1 minute. The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape. The symbol "X" may be L or V, and denotes different application. Maximum operating temperature: 125°C

Pos. No. 5

Type

EX101U.

Principal characteristics

Optocoupler. Minimum external creepage distance is measured to 8.1mm, minimum internal creepage distance is measured to 5.2mm and minimum distance through insulation is measured to 0.4mm. Tested for reinforced insulation. Thermal cycling test, 10 cycles. Each cycle: 68h in 125 degree C, 1h in 25degree 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 4800Vac/1 minute. The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape. Maximum operating temperature: 125°C. The symbol "X" may be L or V, and denotes different application.

Pos. No. 6

Type

EV6150A. /EL6150A. /EL603A5. /EL606A3.

Principal characteristics

Solid State Relay. Minimum external creepage distance is measured to 7.7mm, minimum internal creepage distance is measured to 6.0mm and minimum distance through insulation is measured to 0.5mm. Tested for reinforced insulation. Maximum operating temperature: 125°C. Thermal cycling test, 10 cycles. Each cycle: 68h in 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 4800Vac/1 minute. The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape.

APPENDIX:

Reference No. SE-S-2300578

Pos. No. 7

Type

EV101U.

Principal characteristics

Optocoupler. Minimum external creepage distance is measured to 8.1mm, minimum internal creepage distance is measured to 5.2mm and minimum distance through insulation is measured to 0.4mm. Tested for reinforced insulation. Thermal cycling test, 10 cycles. Each cycle: 68h in 125 degree C, 1h in 25degree 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 4800Vac/1 minute. The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape. Maximum operating temperature: 125°C

Pos. No. 8

Type

ELW3120. / ELW3140. / ELW3150. / ELW3180. / ELW3184.

Principal characteristics

IGBT Gate Drive Optocoupler. Minimum external creepage distance is measured to 11.85mm, minimum internal creepage distance is measured to 7.72mm and minimum distance through insulation is measured to 0.9mm. Tested for reinforced insulation. Maximum operating temperature: 110°C. Thermal cycling test, 10 cycles. Each cycle: 68h in 110 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 4800Vac/1 minute. The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape.

Pos. No.9

Type

ELW137. / ELW139. / ELW2601. / ELW2611. / ELW136. / ELW135. /ELW4502. / ELW4503. / ELW138. / ELW260L. / ELW250L. / ELW4504. /ELW2200. / ELW2201. / ELW2202. / ELW2219. / ELW2211. / ELW2212.

Principal characteristics

High Speed Optocoupler. Minimum external creepage distance is measured to 11.85mm, minimum internal creepage distance is measured to 7.72mm and minimum distance through insulation is measured to 0.9mm. Tested for reinforced insulation. Maximum operating temperature: 100°C. Thermal cycling test, 10 cycles. Each cycle: 68h in 100 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 4800Vac/1 minute. The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape.

Pos. No. 10

Type

ELT301X. / ELT302X. / ELT305X. / ELT303X. / ELT304X. / ELT306X. / ELT308X. / ELT307X.

Principal characteristics

Triac Optocoupler. Minimum external creepage distance is measured to 7.7mm, minimum internal creepage distance is measured to 6.0mm and minimum distance through insulation is measured to 0.5mm. Tested for reinforced insulation. Maximum operating temperature: 110°C. Thermal cycling test, 10 cycles. Each cycle: 68h in 110 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 4800Vac/1 minute. 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.

APPENDIX:

Reference No. SE-S-2300578

Pos. No. 11

Type

ELS680.

Principal characteristics

High Speed Optocoupler . Minimum external creepage distance is measured to 8.4mm, minimum internal creepage distance is measured to 5.56mm and minimum distance through insulation is measured to 0.4mm.

Tested for reinforced insulation.

Thermal cycling test, 10 cycles. Each cycle: 68h in 100 degree C, 1h in 25degree 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 4800Vac/1 minute. The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape. Maximum operating temperature: 100 °C.

Pos. No. 12

Type

ELS60U. / ELS61U. / ELS62U.

Principal characteristics

High Speed Optocoupler . Minimum external creepage distance is measured to 8.4mm, minimum internal creepage distance is measured to 5.56mm and minimum distance through insulation is measured to 0.4mm.

Tested for reinforced insulation.

Thermal cycling test, 10 cycles. Each cycle: 68h in 100 degree C, 1h in 25degree 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 4800Vac/1 minute. The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape. Maximum operating temperature: 100 °C.

Pos. No. 13

Type

ELS500./ ELS501./ ELS511./ ELS050L./ ELS051L./ ELS052L./ ELS600./ ELS601./ ELS611./ ELS060L./ ELS061L./ ELS062L.

Principal characteristics

High Speed Optocoupler . Minimum external creepage distance is measured to 8.4mm, minimum internal creepage distance is measured to 5.56mm and minimum distance through insulation is measured to 0.4mm.

Tested for reinforced insulation.

Thermal cycling test, 10 cycles. Each cycle: 68h in 100 degree C, 1h in 25degree 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 4800Vac/1 minute. The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape. Maximum operating temperature: 100 °C.

Pos. No. 14

Type

ELS3120. / ELS3140. / ELS3150. / ELS3180. / ELS3184.

Principal characteristics

High Speed Optocoupler . Minimum external creepage distance is measured to 8.4mm, minimum internal creepage distance is measured to 5.56mm and minimum distance through insulation is measured to 0.4mm.

Tested for reinforced insulation.

Thermal cycling test, 10 cycles. Each cycle: 68h in 110 degree C, 1h in 25degree 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 4800Vac/1 minute. The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape. Maximum operating temperature: 110 °C

APPENDIX:

Reference No. SE-S-2300578

Pos. No. 15

Type

ELS270. / ELS271. / ELS272.

Principal characteristics

High Speed Optocoupler . Minimum external creepage distance is measured to 8.4mm, minimum internal creepage distance is measured to 5.56mm and minimum distance through insulation is measured to 0.4mm.

Tested for reinforced insulation.

Thermal cycling test, 10 cycles. Each cycle: 68h in 100 degree C, 1h in 25degree 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 4800Vac/1 minute. The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape. Maximum operating temperature: 100 °C.

Pos. No. 16

Type

ELR3602. / ELR3603. / ELR2602. / ELR2603. / ELR1602. / ELR1603. /ELR3502. / ELR3503. / ELR2502. / ELR2503. / ELR1502. / ELR1503. /ELR0223. / ELR1223. / ELR2223./ ELR3223.

Principal characteristics

Power Triac Optocoupler. Minimum external creepage distance is measured to 8.2mm, minimum internal creepage distance is measured to 5.1mm and minimum distance through insulation is measured to 0.5mm. Tested for reinforced insulation. Thermal cycling test, 10 cycles. Each cycle: 68h in 100 degree C, 1h in 25degree 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 tests, between input and output 4800Vac/1 minute. The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape. Maximum operating temperature: 100°C

Pos. No. 17

Type

ELR0323. / ELR1323. / ELR2323. / ELR3323. / ELR0313. / ELR1313. / ELR2313. / ELR3313. / ELR0213. / ELR1213. / ELR2213. / ELR3213. / ELR3203.

Principal characteristics

Power Triac Optocoupler. Minimum external creepage distance is measured to 8.2mm, minimum internal creepage distance is measured to 5.1mm and minimum distance through insulation is measured to 0.5mm. Tested for reinforced insulation. Thermal cycling test, 10 cycles. Each cycle: 68h in 85 degree C, 1h in 25degree 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 tests, between input and output 4800Vac/1 minute. The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape. Maximum operating temperature: 85°C

Pos. No. 18

Type

ELM684.

Principal characteristics

High Speed Optocoupler. Minimum external creepage distance is measured to 5.0mm, minimum internal creepage distance is measured to 4.0mm and minimum distance through insulation is measured to 0.4mm. Tested for reinforced insulation. Maximum operating temperature: 100°C. Thermal cycling test, 10 cycles. Each cycle: 68h in 100 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 4800Vac/1 minute. The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape.

APPENDIX:

Reference No. SE-S-2300578

Pos. No. 19

Type

ELM61U.

Principal characteristics

High Speed Optocoupler. Minimum external creepage distance is measured to 5.0mm, minimum internal creepage distance is measured to 4.0mm and minimum distance through insulation is measured to 0.4mm. Tested for reinforced insulation. Maximum operating temperature: 100°C. Thermal cycling test, 10 cycles. Each cycle: 68h in 100 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 4800Vac/1 minute. The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape.

Pos. No. 20

Type

ELM60U.

Principal characteristics

High Speed Optocoupler. Minimum external creepage distance is measured to 5.0mm, minimum internal creepage distance is measured to 4.0mm and minimum distance through insulation is measured to 0.4mm. Tested for reinforced insulation. Maximum operating temperature: 100°C. Thermal cycling test, 10 cycles. Each cycle: 68h in 100 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 4800Vac/1 minute. The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape.

Pos. No. 21

Type

ELM460A./ ELM840A./ ELM860A. / ELM425A.

Principal characteristics

Solid State Relay. Minimum external creepage distance is measured to 5.7mm, minimum internal creepage distance is measured to 4.31mm and minimum distance through insulation is measured to 0.3mm. Tested for basic and supplementary insulation.

Thermal cycling test, 10 cycles. Each cycle: 68h in 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 4800Vac/1 minute. The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape. Maximum operating temperature 125 °C.

Pos. No. 22

Type

ELM456. / ELM61L. / ELM680. / ELM511.

Principal characteristics

High Speed Optocoupler. Minimum external creepage distance is measured to 5.0mm, minimum internal creepage distance is measured to 4.0mm and minimum distance through insulation is measured to 0.4mm. Tested for reinforced insulation. Maximum operating temperature: 100°C. Thermal cycling test, 10 cycles. Each cycle: 68h in 100 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 4800Vac/1 minute. The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape.

APPENDIX:

Reference No. SE-S-2300578

Pos. No. 23

Type

ELM453H. / ELM611H.

Principal characteristics

High Speed Optocoupler. Minimum external creepage distance is measured to 5.0mm, minimum internal creepage distance is measured to 4.0mm and minimum distance through insulation is measured to 0.4mm. Tested for reinforced insulation. Maximum operating temperature: 125°C. Thermal cycling test, 10 cycles. Each cycle: 68h in 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 4800Vac/1 minute. The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape.

Pos. No. 24

Type

ELM452. / ELM453. / ELM600. / ELM601. / ELM611. / ELM452L. / ELM453L. / ELM600L. / ELM601L. / ELM611L. / ELM454. / ELM80L. / ELM81L.

Principal characteristics

High Speed Optocoupler. Minimum external creepage distance is measured to 5.0mm, minimum internal creepage distance is measured to 4.0mm and minimum distance through insulation is measured to 0.4mm. Tested for reinforced insulation. Maximum operating temperature: 100°C. Thermal cycling test, 10 cycles. Each cycle: 68h in 100 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 4800Vac/1 minute. The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape.

Pos. No. 25

Type

ELM440A./ELM640A./ ELM660A. / ELM406A

Principal characteristics

Solid State Relay. Minimum external creepage distance is measured to 5.7mm, minimum internal creepage distance is measured to 4.31mm and minimum distance through insulation is measured to 0.4mm. Tested for reinforced insulation.

Thermal cycling test, 10 cycles. Each cycle: 68h in 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 4800Vac/1 minute. The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape. Maximum operating temperature: 125 °C.

Pos. No. 26

Type

ELM312. / ELM315.

Principal characteristics

Optocoupler. Minimum external creepage distance is measured to 5.0mm, minimum internal creepage distance is measured to 4.0mm and minimum distance through insulation is measured to 0.4mm. Tested for reinforced insulation. Maximum operating temperature: 110°C. Thermal cycling test, 10 cycles. Each cycle: 68h in 110 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 4800Vac/1 minute. The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape.

APPENDIX:

Reference No. SE-S-2300578

Pos. No. 27

Type

ELL300.

Principal characteristics

Linear Optocoupler. Minimum external creepage distance is measured to 8.0mm, minimum internal creepage distance is measured to 0.90mm and minimum distance through insulation is measured to 0.90mm. Tested for basic/supplementary insulation. Thermal cycling test, 10 cycles. Each cycle: 68h in 110 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 4800Vac/1 minute. The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape. Maximum operating temperature: 110 °C.

Pos. No. 28

Type

ELL200.

Principal characteristics

Linear Optocoupler. Minimum external creepage distance is measured to 11.85mm, and minimum distance through insulation is measured to 1.0mm. Tested for reinforced insulation. Thermal cycling test, 10 cycles. Each cycle: 68h in 110 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 4800Vac/1 minute. The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape. Maximum operating temperature: 110 °C.

Pos. No. 29

Type

ELD851. /ELD852. /4N29. /4N30. /4N31. /4N32. /4N33. /H11B1. /H11B2. /H11B3. /H11B255. /TIL113. /MOC119. /MOC8020. /MOC8021. /MOC8030. /MOC8050. /MOC8080. /EL301X. /EL302X. /EL305X. /EL307X. /EL303X. /EL304X. /EL306X. /EL308X. /EL3161. /EL3162. /EL3163. /H11L1. /H11L2.

Principal characteristics

Optocoupler. Minimum external creepage distance is measured to 7.7mm, minimum internal creepage distance is measured to 5.5mm and minimum distance through insulation is measured to 0.5mm. Tested for reinforced insulation. Thermal cycling test, 10 cycles. Each cycle: 68h in 100 degree C, 1h in 25degree 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 4800Vac/1 minute. The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape. Maximum operating temperature: 100°C. The symbol "X" in type denotes X = Part no. (0,1,2,3,4).

Pos. No. 30

Type

ELD3H5. / ELD3H6. / ELD3H7. / ELD3H4. / ELQ3H4. / ELQ3H5. / ELQ3H7. / ELM314.

Principal characteristics

Optocoupler. Minimum external creepage distance is measured to 5.0mm, minimum internal creepage distance is measured to 4.0mm and minimum distance through insulation is measured to 0.4mm. Tested for reinforced insulation. Maximum operating temperature: 110°C. Thermal cycling test, 10 cycles. Each cycle: 68h in 110 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 4800Vac/1 minute. The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape.

APPENDIX:

Reference No. SE-S-2300578

Pos. No. 31

Type

EL847. / EL844. / EL845.

Principal characteristics

Optocoupler. Minimum external creepage distance is measured to 8.0mm, minimum internal creepage distance is measured to 5.1mm and minimum distance through insulation is measured to 0.5mm. Tested for reinforced insulation. Thermal cycling test, 10 cycles. Each cycle: 68h in 110 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 tests, between input and output 4800Vac/1 minute. The symbol "." in type designation may be A to Z, numbers or blank, denote different pin shape. Maximum operating temperature: 110°C

Pos. No. 32

Type

EL817H.

Principal characteristics

Optocoupler. Minimum external creepage distance is measured to 7.7mm, minimum internal creepage distance is measured to 6.0mm and minimum distance through insulation is measured to 0.5mm. Tested for reinforced insulation. Thermal cycling test, 10 cycles. Each cycle: 68h in 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 4800Vac/1 minute. The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape. Maximum operating temperature: 125°C

Pos. No. 33

Type

EL815. / EL814. / EL824. / EL825.

Principal characteristics

Optocoupler. Minimum external creepage distance is measured to 7.9mm, minimum internal creepage distance is measured to 6.0mm and minimum distance through insulation is measured to 0.5mm. Tested for reinforced insulation. Thermal cycling test, 10 cycles. Each cycle: 68h in 110 degree C, 1h in 25degree 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 4800Vac/1 minute. The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape. Maximum operating temperature: 110°C

Pos. No. 34

Type

EL806A. /EL810A. /EL820A. /EL825A. /EL835A. /EL840A. /EL860A. /EL860A-V / EL406A. /EL410A. /EL420A. /EL425A. /EL435A. /EL440A. /EL460A. /EL606A. /EL610A. /EL620A. /EL625A. /EL635A. /EL640A. /EL660A.

Principal characteristics

Solid State Relay. Minimum external creepage distance is measured to 7.7mm, minimum internal creepage distance is measured to 6.0mm and minimum distance through insulation is measured to 0.5mm. Tested for reinforced insulation. Maximum operating temperature: 125°C. Thermal cycling test, 10 cycles. Each cycle: 68h in 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 4800Vac/1 minute. The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape.

APPENDIX:

Reference No. SE-S-2300578

Pos. No. 35

Type

EL617. / CNY75G. / CQY80.G / K233.G / TCDT110.G / TCDT111.G / TCDT112.G / HS817.G / TCET110.G / TCET111.G / TCET120.G

Principal characteristics

Optocoupler. Minimum external creepage distance is measured to 8.0mm, minimum internal creepage distance is measured to 6.0mm and minimum distance through insulation is measured to 0.5mm. Tested for reinforced insulation. Thermal cycling test, 10 cycles. Each cycle: 68h in 110 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 4800Vac/1 minute. The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape. Maximum operating temperature: 110°C

Pos. No. 36

Type

EL451. / EL452. / EL3H7L. / EL351. / EL352. / EL3571N. / EL357NL.

Principal characteristics

Optocoupler. Minimum external creepage distance is measured to 5.0mm, minimum internal creepage distance is measured to 4.0mm and minimum distance through insulation is measured to 0.4mm. Tested for reinforced insulation. Thermal cycling test, 10 cycles. Each cycle: 68h in 110 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 4800Vac/1 minute. The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape. Maximum operating temperature: 110°C. The symbol "X" in type denotes X = Part no. (0,1,2,3,4).

Pos. No. 37

Type

EL3H5.

Principal characteristics

Optocoupler. Minimum external creepage distance is measured to 5.0mm, minimum internal creepage distance is measured to 4.0mm and minimum distance through insulation is measured to 0.4mm. Tested for reinforced insulation. Thermal cycling test, 10 cycles. Each cycle: 68h in 110 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 4800Vac/1 minute. The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape. Maximum operating temperature: 110°C. The symbol "X" in type denotes X = Part no. (0,1,2,3,4).

Pos. No. 38

Type

EL3120. / EL3140. / EL3150. / EL3180. / EL3184.

Principal characteristics

IGBT Gate Drive Optocoupler. Minimum external creepage distance is measured to 7.7mm, minimum internal creepage distance is measured to 6.0mm and minimum distance through insulation is measured to 0.5mm. Tested for reinforced insulation. Maximum operating temperature: 110°C. Thermal cycling test, 10 cycles. Each cycle: 68h in 110 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 4800Vac/1 minute. The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape.

APPENDIX:

Reference No. SE-S-2300578

Pos. No. 39

Type

EL2801. /EL354. /EL355. /EL356. /EL357. /EL359. /EL121. /EL124. /EL2701. /EL2705. /EL357N. /EL356N. /EL121N. /EL124N. /EL2701N. /EL354N. /EL2705N. /EL3H7. /EL281. /EL3H4. /EL280. /EL3H71. /ELM301X. /ELM302X. /ELM305X. /ELM307X. /ELM303X. /ELM304X. /ELM306X. /ELM308X.

Principal characteristics

Optocoupler. Minimum external creepage distance is measured to 5.0mm, minimum internal creepage distance is measured to 4.0mm and minimum distance through insulation is measured to 0.4mm. Tested for reinforced insulation. Thermal cycling test, 10 cycles. Each cycle: 68h in 110 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 4800Vac/1 minute. The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape. Maximum operating temperature: 110°C. The symbol "X" in type denotes X = Part no. (0,1,2,3,4).

Pos. No. 40

Type

EL2514.

Principal characteristics

Optocoupler. Minimum external creepage distance is measured to 7.7mm, minimum internal creepage distance is measured to 6.0mm and minimum distance through insulation is measured to 0.5mm. Tested for reinforced insulation. Thermal cycling test, 10 cycles. Each cycle: 68h in 110 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 4800Vac/1 minute. The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape. Maximum operating temperature: 110°C. Tested for 5000m.

Pos. No. 41

Type

EL2200. / EL2212. / EL2231. / EL2201. / EL2202. / EL2219. / EL2211. / EL2232.

Principal characteristics

High Speed Optocoupler. Minimum external creepage distance is measured to 8.2mm, minimum internal creepage distance is measured to 5.1mm and minimum distance through insulation is measured to 0.5mm. Tested for reinforced insulation. Thermal cycling test, 10 cycles. Each cycle: 68h in 100 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 tests, between input and output 4800Vac/1 minute. The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape. Maximum operating temperature: 100°C

Pos. No. 42

Type

EL205. / EL206. / EL207. / EL208. / EL211. / EL212. / EL213. / EL215. /EL216. / EL217. / ELD207. / ELD208. / ELD213. / ELD217. / ELD205. /ELD206. / ELD211.

Principal characteristics

Optocoupler. Minimum external creepage distance is measured to 4.4mm, minimum internal creepage distance is measured to 3.5mm and minimum distance through insulation is measured to 0.4mm. Tested for basic and supplementary insulation. Thermal cycling test, 10 cycles. Each cycle: 68h in 110 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 2400Vac/1 minute. The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape. Maximum operating temperature: 110°C

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Pos. No. 43

Type

EL10XX. / EL357L. / EL355L. / EL354L. / EL111X. / EL161X. / EL151X. / EL101L.

Principal characteristics

Optocoupler. Minimum external creepage distance is measured to 8.1mm, minimum internal creepage distance is measured to 5.2mm and minimum distance through insulation is measured to 0.4mm. Tested for reinforced insulation. Thermal cycling test, 10 cycles. Each cycle: 68h in 110 degree C, 1h in 25degree 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 4800Vac/1 minute. The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape. Maximum operating temperature: 110°C. The symbol "X" in type denotes X = Part no. (0,1,2,3,4,5,6,7,8,9). Tested for 5000m.

Pos. No. 44

Type

EL101XH.

Principal characteristics

Optocoupler. Minimum external creepage distance is measured to 8.1mm, minimum internal creepage distance is measured to 5.2mm and minimum distance through insulation is measured to 0.4mm. Tested for reinforced insulation. Thermal cycling test, 10 cycles. Each cycle: 68h in 125 degree C, 1h in 25degree 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 4800Vac/1 minute. The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape. Maximum operating temperature: 125°C. The symbol "X" in type denotes X = Part no. (0,1,2,3,4,5,6,7,8,9)

Pos. No. 45

Type

EL080L. / EL081L. / EL083L. / EL086L.

Principal characteristics

High Speed Optocoupler . Minimum external creepage distance is measured to 4.4mm, minimum internal creepage distance is measured to 3.5mm and minimum distance through insulation is measured to 0.4mm. Tested for basic and supplementary insulation. Thermal cycling test, 10 cycles. Each cycle: 68h in 100 degree C, 1h in 25degree 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 2400Vac/1 minute. The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape. Maximum operating temperature: 100°C. The symbol "X" in type denotes X = Part no. (0,1,L,A,N).

Intertek

APPENDIX:

Reference No. SE-S-2300578

Pos. No. 46

Type

EL0500. /EL0501. /EL0452. /EL0453. /EL0454. /EL0600. /EL0601. /EL0611. /EL0700. /EL050L. /EL060L. /EL0701. /EL061A. /EL061N. /EL0551. /EL0530. /EL0531. /EL0533. /EL063X. /EL0661. /EL0730. /EL0731. /EL053L.

Principal characteristics

High Speed Optocoupler . Minimum external creepage distance is measured to 4.4mm, minimum internal creepage distance is measured to 3.5mm and minimum distance through insulation is measured to 0.4mm. Tested for basic and supplementary insulation. Thermal cycling test, 10 cycles. Each cycle: 68h in 100 degree C, 1h in 25degree 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 2400Vac/1 minute. The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape. Maximum operating temperature: 100°C. The symbol "X" in type denotes X = Part no. (0,1,L,A,N).

Pos. No. 47

Type

EL0200. / EL0201. / EL0202. / EL0210. / EL0211. / EL0212.

Principal characteristics

High Speed Optocoupler . Minimum external creepage distance is measured to 4.4mm, minimum internal creepage distance is measured to 3.5mm and minimum distance through insulation is measured to 0.4mm. Tested for basic and supplementary insulation. Thermal cycling test, 10 cycles. Each cycle: 68h in 100 degree C, 1h in 25degree 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 2400Vac/1 minute. The symbol "." in type designation may be blank, A~Z or numbers, and denote different pin shape. Maximum operating temperature: 100°C. The symbol "X" in type denotes X = Part no. (0,1,L,A,N).

Pos. No. 48

Type

CNX36U. /CNX38U. /CNX39U. /SL5500. /SL5501. /SL5504. /SL5511. /MOC8100. /MOC8101. /MOC8102. /MOC8103. /MOC8104. /MOC8105. /MOC8106. /MOC8107. /MOC8108. /EL9001. /CNY17F-1. /CNY17F-2. /CNY17F-3. /CNY17F-4. /H11AA1. /H11AA2. /H11AA3. /H11AA4. /HS817. /K817P. /TCET110.

Principal characteristics

V

Intertek

APPENDIX:

Reference No. SE-S-2300578

Manufacturing Sites: Everlight Electronics (China) Co., Ltd
No. 2135 Zhong Shan North Road
Wujiang Economy Development Zone
(Yun Xi Area), Songling Town
Wujiang City Jiangsu Province
China

This certificate is based on a certificate with ref. No. P23226996/A1 dated 09 May 2023 issued by Nemko AS according to the Nordic Certification Service Agreement.

Certification Body: Intertek Semko AB, Product Certification **Place:** Kista - Stockholm

Signed:  **Date:** 29 June, 2023

Quan Li

Intertek