

No. P23226996/A1





**Applicant** 

Everlight Electronics Co., Ltd. No.6-8, Zhonghua Rd., Shulin Dist.,

New Taipei City 23860

Taiwan

Manufacturer

Everlight Electronics Co., Ltd. No.6-8, Zhonghua Rd., Shulin Dist.,

New Taipei City 23860

Taiwan

**Factory** 

Everlight Electronic (China) Co., Ltd.

No. 2135 Zhong Shan North Rd. Wujiang Economy Development Zone (Yun Xi

Area), Songling Town Wujiang City Jiangsu Province

China

**Project Number** 

PRJ0035645

**Product** 

Optocoupler

Model/Type Ref.

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.

**Ratings** 

250Vrms

**Trademark** 

**EVERLIGHT** 

**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.

A sample of the product was tested and found to be in conformity with

EN 60335-1:2012;A11;A13;A1;A14;A2;A15 Safety

EN 61347-1:2015;A1 EN 62368-1:2014;A11 EN IEC 62368-1:2020;A11

IEC 60065:2014

IEC 60335-1:2010, IEC 60335-1:2010/AMD1:2013

IEC 60950-1:2005, IEC 60950-1:2005/AMD1:2009, IEC 60950-

1:2005/AMD2:2013 IEC 61347-1:2015 IEC 62368-1:2014

IEC 62368-1:2018

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**Validity** 

This certificate documents conformity with the standards shown, and also applies as license for use of Nemko's name and certification mark. The certificate and license is valid as long as the applicable conditions are complied with, and provided that any changes to the product are notified to Nemko for acceptance prior to implementation.

New standards or amendments to the standards may imply that the product design must be updated and/or that re-testing and re-certification is necessary.

**Additional Information** 

Additional model(s)

See next pages

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**Product** 

Optocoupler

Variant No.

1

Model/Type Ref.

6N135. /6N136. /6N137. /6N138. /6N139. /EL2502. /EL2501. /EL2503. /EL4502. /EL4503. /EL2530. /EL2531. /EL2531. /EL4534. /EL2730. /EL2731. /EL2601. /EL2601. /EL2611. /EL261A. /EL261N. /EL2630. /EL263L. /EL263A. /EL263N. /EL2631. /EL4661. /EL4504.

Ratings

250Vrms

Trademark (if different from page 1)

**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

**Product** 

Optocoupler

Variant No.

2

Model/Type Ref.

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.

**Ratings** 

250Vrms

Trademark (if different from page 1)

**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.

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**Product** 

Optocoupler

Variant No.

3

Model/Type Ref.

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

Ratings

250Vrms

Trademark (if different from page 1)

**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:  $100^{\circ}$ C. The symbol "X" in type denotes X = Part no. (0,1,2,3,4).

**Product** 

Optocoupler

Variant No.

4

Model/Type Ref.

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

Ratings

250Vrms

Trademark (if different from page 1)

**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

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**Product** 

Optocoupler

Variant No.

5

Model/Type Ref.

EX101U.

Ratings

250Vrms

Trademark (if different from page 1)

**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.

**Product** 

Optocoupler

Variant No.

6

Model/Type Ref.

EV6150A. /EL6150A. /EL603A5. /EL606A3.

Ratings

250Vrms

Trademark (if different from page 1)

**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.

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**Product** 

Variant No.

7

Model/Type Ref.

EV101U.

Optocoupler

**Ratings** 

250Vrms

Trademark (if different from page 1)

**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

**Product** 

Optocoupler

Variant No.

8

Model/Type Ref.

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

Ratings

250Vrms

Trademark (if different from page 1)

**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.

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**Product** 

Optocoupler

Variant No.

9

Model/Type Ref.

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

Ratings

250Vrms

Trademark (if different from page 1)

**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.

**Product** 

Optocoupler

Variant No.

10

Model/Type Ref.

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

Ratings

250Vrms

Trademark (if different from page 1)

**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:  $110^{\circ}$ 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,  $A \sim Z$  or numbers, and denote different pin shape.

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Philip Pedersens vei 11
1366 Lysaker, Norway
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**Product** 

Optocoupler

Variant No.

11

Model/Type Ref.

ELS680.

Ratings

250Vrms

Trademark (if different from page 1)

**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.

**Product** 

Optocoupler

Variant No.

12

Model/Type Ref.

ELS60U. / ELS61U. / ELS62U.

Ratings

250Vrms

Trademark (if different from page 1)

**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.

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**Product** 

Optocoupler

Variant No.

13

Model/Type Ref.

ELS500./ ELS501./ ELS511./ ELS050L./ ELS051L./ ELS052L./ ELS600./ ELS601./

ELS611./ ELS060L./ ELS061L./ ELS062L.

Ratings

250Vrms

Trademark (if different from page 1)

**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.

**Product** 

Optocoupler

Variant No.

14

Model/Type Ref.

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

Ratings

250Vrms

Trademark (if different from page 1)

**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

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Philip Pedersens vei 11
1366 Lysaker, Norway
TEL +47 22 96 03 30
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**Product** 

Optocoupler

Variant No.

15

Model/Type Ref.

ELS270. / ELS271. / ELS272.

**Ratings** 

250Vrms

Trademark (if different from page 1)

**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.

**Product** 

Optocoupler

Variant No.

16

Model/Type Ref.

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

Ratings

250Vrms

Trademark (if different from page 1)

**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

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Philip Pedersens vei 11
1366 Lysaker, Norway
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**Product** 

Optocoupler

Variant No.

17

Model/Type Ref.

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

Ratings

250Vrms

Trademark (if different from page 1)

**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

**Product** 

Optocoupler

Variant No.

18

Model/Type Ref.

ELM684.

Ratings

250Vrms

Trademark (if different from page 1)

**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.

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**Product** 

Optocoupler

Variant No.

19

Model/Type Ref.

ELM61U.

Ratings

250Vrms

Trademark (if different from page 1)

**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.

**Product** 

Optocoupler

Variant No.

20

Model/Type Ref.

ELM60U.

Ratings

250Vrms

**Trademark** (if different from page 1)

**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.

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**Product** 

Optocoupler

Variant No.

21

Model/Type Ref.

ELM460A./ ELM840A./ ELM860A. / ELM425A.

**Ratings** 

250Vrms

Trademark (if different from page 1)

**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.

**Product** 

Optocoupler

Variant No.

22

Model/Type Ref.

ELM456. / ELM61L. / ELM680. / ELM511.

Ratings

250Vrms

Trademark (if different from page 1)

**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.

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**Product** 

Optocoupler

Variant No.

23

Model/Type Ref.

ELM453H. / ELM611H.

**Ratings** 

250Vrms

Trademark (if different from page 1)

**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.

**Product** 

Optocoupler

Variant No.

24

Model/Type Ref.

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

Ratings

250Vrms

Trademark (if different from page 1)

**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.

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**Product** 

Optocoupler

Variant No.

25

Model/Type Ref.

ELM440A./ELM640A./ ELM660A. / ELM406A

Ratings

250Vrms

Trademark (if different from page 1)

**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.

**Product** 

Optocoupler

Variant No.

26

Model/Type Ref.

ELM312. / ELM315.

Ratings

250Vrms

Trademark (if different from page 1)

**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.

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**Product** 

Optocoupler

Variant No.

27

Model/Type Ref.

ELL300.

Ratings

250Vrms

Trademark (if different from page 1)

**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.

**Product** 

Optocoupler

Variant No.

28

Model/Type Ref.

ELL200.

Ratings

250Vrms

Trademark (if different from page 1)

**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.

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**Product** 

Optocoupler

Variant No.

29

Model/Type Ref.

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.

Ratings

250Vrms

Trademark (if different from page 1)

**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).

**Product** 

Optocoupler

Variant No.

30

Model/Type Ref.

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

Ratings

250Vrms

Trademark (if different from page 1)

**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.

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**Product** 

Optocoupler

Variant No.

31

Model/Type Ref.

EL847. / EL844. / EL845.

Ratings

250Vrms

Trademark (if different from page 1)

**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

**Product** 

Optocoupler

Variant No.

32

Model/Type Ref.

EL817H.

Ratings

250Vrms

Trademark (if different from page 1)

**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

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**Product** 

Optocoupler

Variant No.

33

Model/Type Ref.

EL815. / EL814. / EL824. / EL825.

Ratings

250Vrms

Trademark (if different from page 1)

**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

**Product** 

Optocoupler

Variant No.

34

Model/Type Ref.

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

Ratings

250Vrms

**Trademark** (if different from page 1)

**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.

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**Product** 

Optocoupler

Variant No.

35

Model/Type Ref.

EL617. / CNY75G. / CQY80.G / K233.G / TCDT110.G / TCDT111.G / TCDT112.G

/ HS817.G / TCET110.G / TCET111.G / TCET120.G

Ratings

250Vrms

Trademark (if different from page 1)

**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

**Product** 

Optocoupler

Variant No.

36

Model/Type Ref.

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

Ratings

250Vrms

Trademark (if different from page 1)

**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).

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**Product** 

Optocoupler

Variant No.

37

Model/Type Ref.

EL3H5.

Ratings

250Vrms

Trademark (if different from page 1)

**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).

**Product** 

Optocoupler

Variant No.

38

Model/Type Ref.

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

Ratings

250Vrms

Trademark (if different from page 1)

**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.

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**Product** 

Optocoupler

Variant No.

39

Model/Type Ref.

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.

Ratings

250Vrms

**Trademark** (if different from page 1)

**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).

**Product** 

Optocoupler

Variant No.

40

Model/Type Ref.

EL2514.

Ratings

250Vrms

**Trademark** (if different from page 1)

**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.

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**Product** 

Optocoupler

Variant No.

41

Model/Type Ref.

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

Ratings

250Vrms

Trademark (if different from page 1)

**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 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

**Product** 

Optocoupler

Variant No.

42

Model/Type Ref.

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

Ratings

250Vrms

Trademark (if different from page 1)

**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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**Product** 

Optocoupler

Variant No.

43

Model/Type Ref.

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

Ratings

250Vrms

Trademark (if different from page 1)

**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.

**Product** 

Optocoupler

Variant No.

44

Model/Type Ref.

EL101XH.

Ratings

250Vrms

Trademark (if different from page 1)

**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)

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**Product** 

Optocoupler

Variant No.

45

Model/Type Ref.

EL080L./ EL081L. / EL083L. / EL086L.

Ratings

250Vrms

Trademark (if different from page 1)

**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).

**Product** 

Optocoupler

Variant No.

46

Model/Type Ref.

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

**Ratings** 

250Vrms

Trademark (if different from page 1)

**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).

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**Product** 

Optocoupler

Variant No.

47

Model/Type Ref.

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

**Ratings** 

250Vrms

Trademark (if different from page 1)

**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).

**Product** 

Optocoupler

Variant No.

48

Model/Type Ref.

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.

Ratings

250Vrms

Trademark (if different from page 1)

**Principal Characteristics** 

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