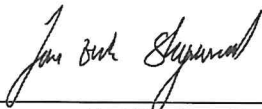


DEMKO CERTIFICATE

Certificate No.	D-08197
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Date of Issue	2020-10-20
Certificate Holder	EVERLIGHT ELECTRONICS CO LTD 6-8 ZHONGHUA RD SHULIN DISTRICT NEW TAIPEI, 23860 Taiwan
Manufacturer	EVERLIGHT ELECTRONICS CO LTD 6-8 ZHONGHUA RD SHULIN DISTRICT NEW TAIPEI, 23860 Taiwan
Production site	EVERLIGHT ELECTRONIC (CHINA) CO LTD 2135 ZHONG SHAN NORTH RD WUJIANG ECONOMY DEVELOPMENT ZONE (YUN XI AREA), SONGLING TOWN WUJIANG CITY,, 215000 JIANG SU China
	See Page 19
Certified Product	Optocoupler
Model	4N29., 4N30., 4N31., 4N32., 4N33., 4N50., See Page 2 - 18
Trademark	EVERLIGHT
Rated Voltage / Frequency	250Vrms
Rated Current / Power	-
Insulation Class	-
Degree of protection (IP)	-
Tested acc. to	EN 60335-1:2012/A11:2014, EN 60335-1:2012/A13:2017, EN 60335-1:2012/A14:2019, EN 60335-1:2012/A1:2019, EN 60335-1:2012/A2:2019, EN 60335-1:2012, EN 61347-1:2015 EN 62368-1:2014/A11:2017, EN 62368-1:2014
Test Report No.	P15219385/A8 issued on 2020-09-10 P15219385/A8 issued on 2020-08-24
Additional	Additionally evaluated to: EN 60065:2014/A11:2017 EN 60950-1:2006/A11:2009/A1:2010/A12:2011/A2:2013
Expire date	2030-10-19



Certification Manager
Jan-Erik Storgaard

This is to certify that representative sample(s) of the Product described herein ("Certified Product") have been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the D-Mark Requirements. As specified in the respective appendix below the Designated Certificate holder is entitled to use the D-Mark or its alternative for cables, for the Certified Product manufactured at the production site(s) identified above, in accordance with the D-Mark Service Agreement, including without limitation the D-Mark Testing and Certification Services Service Terms. Only those Products bearing the D-Mark should be considered as being covered by UL's D-Mark Service. This Certificate shall remain valid through the expiration date, unless terminated earlier in accordance with the Service Agreement including without limitation if the Standard identified on this Certificate is amended or withdrawn prior the expiration date.

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Model Details:

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.

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.

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.

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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.

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.

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.

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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).

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 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

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

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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

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).

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.

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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 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

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

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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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

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).

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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 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.

For model EL101XH.: The symbol “X” in type denotes X = Part no. (0,1,2,3,4,5,6,7,8,9)

For model EX101U.: The symbol “X” may be L or V, and denotes different application.

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).

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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).

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

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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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.

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.

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).

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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.

ELM460A./ELM840A./ELM860A.

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.

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.

For model EL101XH.: The symbol “X” in type denotes X = Part no.
(0,1,2,3,4,5,6,7,8,9)

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EX357NH. / EX3H7H. / EX3H7U.

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

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. The symbol "X" may be L or V, and denotes different application. Maximum operating temperature: 125° C

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.

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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.

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.

L2514.

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.

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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.

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).

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.

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ELM440A./ELM640A./ELM660A.

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.

EX3H4U.

Principal characteristics

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

EX101U.

Principal characteristics

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. For model EL101XH.: The symbol “X” in type denotes X = Part no. (0,1,2,3,4,5,6,7,8,9) For model EX101U.: The symbol “X” may be L or V, and denotes different application.

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EX354NU.

Principal characteristics

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

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.

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

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

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

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

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.

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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.

EL806A./ EL810A./ EL820A./ EL825A./ EL835A./ EL840A./ EL860A./
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.

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.

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Production Sites:

Everlight Electronics Co Ltd Tongluo Plant
26 Zhongxing Rd
Tongluo Township
Miaoli Hsien, 36647 Taiwan

Additional Information:

This certificate replaces earlier issued D-06106-A2 to add new models, a new factory location and new materials.

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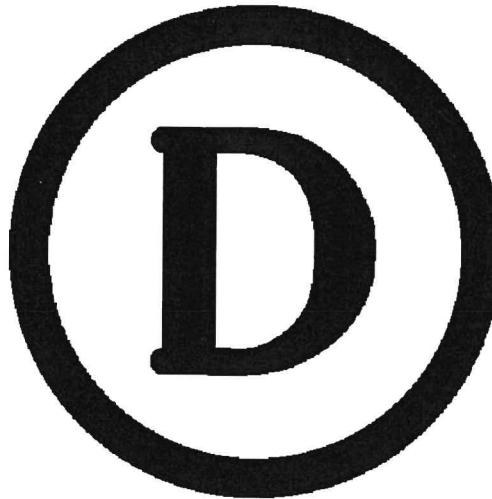


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Certification Mark D-Mark

The D-Mark, as displayed below, shall appear on certified products only. Minimum size is not specified, as long as the Mark is legible.



The size of the Mark may be reduced or enlarged on the condition that it remains readable and that the proportions of width and height are kept. The use of dark text for the D-Mark on light backgrounds and light text on dark backgrounds is permitted.

When putting the product on the EU market, the manufacturer's name, trademark or mark of origin must be affixed in a clearly visible location and position on the product, on the package and in the user manual. It can be affixed by label, be directly imprinted, or cast or molded into the product.

Alternate certification Mark for cables

As an alternative to the D-Mark specified above the alternate D-Mark, displayed below, can appear on certified cables only. Minimum size is not specified, as long as the mark is legible.

<DEMKO>

The alternate D-Mark may be cast, stamped or molded into the cable and continue throughout the length of the cable as specified in the applicable cable standard.

All content shall be in accordance with the details provided on this D-Mark Certificate.

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