

Product	Optocoupler										
Applicant	Everlight Electronics Co., Ltd. No.6-8, Zhonghua Rd., Shulin Dist., New Taipei City, Taipei, 23860 Taiwan										
Manufacturer	Everlight Electronics Co., Ltd. No.6-8, Zhonghua Rd., Shulin Dist., New Taipei City, Taipei, 23860 Taiwan										
Factory	(3) See page 2										
Ratings	250Vrms										
Trade mark	EVERLIGHT										
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.										
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.										
A sample of the product was tested and found to be in conformity with	<table><tr><td>TRON</td><td>EN 60065:2014;A11 IEC 60065:2014</td></tr><tr><td>OFF</td><td>EN 60950-1:2006;A11;A12;A2 IEC 60950-1:2005, IEC 60950-1:2005/AMD1:2009, IEC 60950-1:2005/AMD2:2013</td></tr><tr><td>LITE</td><td>EN 61347-1:2015 IEC 61347-1:2015</td></tr><tr><td>ITAV</td><td>EN 62368-1:2014;A11 IEC 62368-1:2014</td></tr><tr><td>HOUS</td><td>EN 60335-1:2012;A11;A13;A14;A2 IEC 60335-1:2010, IEC 60335-1:2010/AMD1:2013</td></tr></table>	TRON	EN 60065:2014;A11 IEC 60065:2014	OFF	EN 60950-1:2006;A11;A12;A2 IEC 60950-1:2005, IEC 60950-1:2005/AMD1:2009, IEC 60950-1:2005/AMD2:2013	LITE	EN 61347-1:2015 IEC 61347-1:2015	ITAV	EN 62368-1:2014;A11 IEC 62368-1:2014	HOUS	EN 60335-1:2012;A11;A13;A14;A2 IEC 60335-1:2010, IEC 60335-1:2010/AMD1:2013
TRON	EN 60065:2014;A11 IEC 60065:2014										
OFF	EN 60950-1:2006;A11;A12;A2 IEC 60950-1:2005, IEC 60950-1:2005/AMD1:2009, IEC 60950-1:2005/AMD2:2013										
LITE	EN 61347-1:2015 IEC 61347-1:2015										
ITAV	EN 62368-1:2014;A11 IEC 62368-1:2014										
HOUS	EN 60335-1:2012;A11;A13;A14;A2 IEC 60335-1:2010, IEC 60335-1:2010/AMD1:2013										
Replaces	This certificate replaces previous certificate No. P15219385/A8, due to addition										

Date of issue 24-08-2020

Jiyea Gim  
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ENTERPRISE NUMBER NO974404532



Order No. 397064

# CERTIFICATE

No. P15219385/A8



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## Validity

This certificate documents conformity with the standards shown, and also applies as license for use of Nemkos 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)

(47) See page 3

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[nemko.com](http://nemko.com)

## Additional model(s)

Product

Pos. No

Model / Type Ref.

Optocoupler

1

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

Trade mark (if different from page 1)

Rating

Principal characteristics

250Vrms

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

Pos. No

Model / Type Ref.

Trade mark (if different from page 1)

Rating

Principal characteristics

Optocoupler

2

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

250Vrms

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  
Pos. No  
Model / Type Ref.  
Trade mark (if different from page 1)  
Rating  
Principal characteristics

Optocoupler  
3  
ELW3120./ ELW3140./ ELW3150./ ELW3180./ ELW3184.

250Vrms  
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.

Product  
Pos. No  
Model / Type Ref.  
Trade mark (if different from page 1)  
Rating  
Principal characteristics

Optocoupler  
4  
ELD3H5./ ELD3H6./ ELD3H7./ ELD3H4./ ELQ3H4./ ELQ3H5./ ELQ3H7./ ELM314.

250Vrms  
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  
Pos. No 5  
Model / Type Ref. ELM452./ ELM453./ ELM600./ ELM601./ ELM611./ ELM452L./ ELM453L./  
ELM600L./ ELM601L./ ELM611L./ELM454./ELM80L./ ELM81L.

Trade mark (if different from page 1)

Rating

Principal characteristics

250Vrms

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  
Pos. No 6  
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.

Trade mark (if different from page 1)

Rating

Principal characteristics

250Vrms

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).

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Product  
Pos. No  
Model / Type Ref.  
Trade mark (if different from page 1)  
Rating  
Principal characteristics

Optocoupler  
7  
EL2200./EL2212./EL2231./EL2201./EL2202./EL2219./EL2211./ EL2232.

250Vrms  
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  
Pos. No  
Model / Type Ref.

Optocoupler  
8  
ELR3602./ELR3603./ELR2602./ELR2603./ELR1602./ELR1603./ELR3502./  
ELR3503./ELR2502./ELR2503./ELR1502./ELR1503./ELR0223./ELR1223./  
ELR2223./ELR3223.

Trade mark (if different from page 1)  
Rating  
Principal characteristics

250Vrms  
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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Product  
Pos. No  
Model / Type Ref.  
Trade mark (if different from page 1)  
Rating  
Principal characteristics

Optocoupler  
9  
EL847./EL844./EL845.

250Vrms

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  
Pos. No  
Model / Type Ref.

Optocoupler  
10  
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.

Trade mark (if different from page 1)  
Rating  
Principal characteristics

250Vrms

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  
Pos. No  
Model / Type Ref.  
Trade mark (if different from page 1)  
Rating  
Principal characteristics

Optocoupler  
11  
ELM60U./ ELM61U.

250Vrms

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  
Pos. No  
Model / Type Ref.  
Trade mark (if different from page 1)  
Rating  
Principal characteristics

Optocoupler  
12  
EL815./ EL814./EL824./ EL825.

250Vrms

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  
Pos. No  
Model / Type Ref.  
Trade mark (if different from page 1)  
Rating  
Principal characteristics

Optocoupler  
13  
EL617./CNY75G./CQY80.G/K233.G/TCDT110.G/TCDT111.G/TCDT112.G/  
HS817.G/TCET110.G/TCET111.G/ TCET120.G

250Vrms

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

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Product	Optocoupler
Pos. No	14
Model / Type Ref.	EL205./EL206./EL207./EL208./EL211./EL212./EL213./EL215./EL216./EL217./ ELD207./ELD208./ELD213./ELD217./ELD205./ELD206./ELD211.
Trade mark (if different from page 1)	
Rating	250Vrms
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
Product	Optocoupler
Pos. No	15
Model / Type Ref.	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.
Trade mark (if different from page 1)	
Rating	250Vrms
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

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Product	Optocoupler
Pos. No	16
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.
Trade mark (if different from page 1)	
Rating	250Vrms
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
Pos. No	17
Model / Type Ref.	EL10XX./ EL357L./ EL355L./ EL354L./ EL111X./ EL161X./ EL151X./EL101L
Trade mark (if different from page 1)	
Rating	250Vrms
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.

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Product  
Pos. No  
Model / Type Ref.  
Trade mark (if different from page 1)  
Rating  
Principal characteristics

Optocoupler  
18  
EL451./EL452./EL3H7L./ EL351./ EL352./ EL3571N./ EL357NL.  
250Vrms  
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  
Pos. No  
Model / Type Ref.

Optocoupler  
19  
H11L3./H11D1./H11D2./H11D3./H11D4./H11G1./H11G2./H11G3./EL371./  
EL725./4N50./4N51./4N52./4N53./4N54./4N55./4N56./4N57./4N58./4N59./  
EL852./EL851.

Trade mark (if different from page 1)  
Rating  
Principal characteristics

250Vrms  
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).

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ENTERPRISE NUMBER NO974404532

Product	Optocoupler
Pos. No	20
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.
Trade mark (if different from page 1)	
Rating	250Vrms
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.
Product	Optocoupler
Pos. No	21
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.
Trade mark (if different from page 1)	
Rating	250Vrms
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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ENTERPRISE NUMBER NO974404532



Product  
Pos. No  
Model / Type Ref.  
Trade mark (if different from page 1)  
Rating  
Principal characteristics

Optocoupler  
22  
ELM456. / ELM61L. / ELM680. / ELM511.

250Vrms

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  
Pos. No  
Model / Type Ref.  
Trade mark (if different from page 1)  
Rating  
Principal characteristics

Optocoupler  
23  
EL080L./EL081L./EL083L./ EL086L.

250Vrms

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).

Date of issue 24-08-2020

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Product	Optocoupler
Pos. No	24
Model / Type Ref.	ELS500./ELS501./ELS511./ELS050L./ELS051L./ELS052L./ELS600./ELS601./ELS611./ELS060L./ELS061L./ELS062L.
Trade mark (if different from page 1)	
Rating	250Vrms
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
Pos. No	25
Model / Type Ref.	ELM460A./ELM840A./ELM860A.
Trade mark (if different from page 1)	
Rating	250Vrms
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.

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Product  
Pos. No  
Model / Type Ref.  
Trade mark (if different from page 1)  
Rating  
Principal characteristics

Optocoupler

26

EL101XH.

250Vrms

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)

Product  
Pos. No  
Model / Type Ref.  
Trade mark (if different from page 1)  
Rating  
Principal characteristics

Optocoupler

27

EX357NH. / EX3H7H. / EX3H7U.

250Vrms

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  
Pos. No  
Model / Type Ref.  
Trade mark (if different from page 1)  
Rating  
Principal characteristics

Optocoupler

28

EL817H.

250Vrms

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

Product  
Pos. No  
Model / Type Ref.  
Trade mark (if different from page 1)  
Rating  
Principal characteristics

Optocoupler

29

ELM60U. / ELM61U.

250Vrms

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  
Pos. No  
Model / Type Ref.  
Trade mark (if different from page 1)  
Rating  
Principal characteristics

Optocoupler  
30  
ELS60U. / ELS61U. / ELS62U.  
250Vrms  
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  
Pos. No  
Model / Type Ref.  
Trade mark (if different from page 1)  
Rating  
Principal characteristics

Optocoupler  
31  
ELS270. / ELS271. / ELS272.  
250Vrms  
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  
Pos. No  
Model / Type Ref.  
Trade mark (if different from page 1)  
Rating  
Principal characteristics

Optocoupler  
32  
EL2514.  
250Vrms  
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  
Pos. No  
Model / Type Ref.  
Trade mark (if different from page 1)  
Rating  
Principal characteristics

Optocoupler  
33  
ELM453H. / ELM611H.

250Vrms

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  
Pos. No  
Model / Type Ref.  
Trade mark (if different from page 1)  
Rating  
Principal characteristics

Optocoupler  
34  
EL0200. / EL0201. / EL0202. / EL0210. / EL0211. / EL0212.

250Vrms

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  
Pos. No  
Model / Type Ref.  
Trade mark (if different from page 1)  
Rating  
Principal characteristics

Optocoupler  
35  
ELL300.

250Vrms

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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Product  
Pos. No  
Model / Type Ref.  
Trade mark (if different from page 1)  
Rating  
Principal characteristics

Optocoupler  
36  
ELM440A./ELM640A./ELM660A.

250Vrms

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  
Pos. No  
Model / Type Ref.  
Trade mark (if different from page 1)  
Rating  
Principal characteristics

Optocoupler  
37  
EX3H4U.

250Vrms

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  
Pos. No  
Model / Type Ref.  
Trade mark (if different from page 1)  
Rating  
Principal characteristics

Optocoupler

38

EX101U.

250Vrms

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.

Product  
Pos. No  
Model / Type Ref.  
Trade mark (if different from page 1)  
Rating  
Principal characteristics

Optocoupler

39

EX354NU. / EX357NU.

250Vrms

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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ENTERPRISE NUMBER NO974404532



Product	Optocoupler
Pos. No	40
Model / Type Ref.	ELM406A.
Trade mark (if different from page 1)	
Rating	250Vrms
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
Pos. No	41
Model / Type Ref.	ELS3120. / ELS3140. / ELS3150. / ELS3180. / ELS3184.
Trade mark (if different from page 1)	
Rating	250Vrms
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
Product	Optocoupler
Pos. No	42
Model / Type Ref.	ELR0323. / ELR1323. / ELR2323. / ELR3323. / ELR0313. / ELR1313. / ELR2313. / ELR3313. / ELR0213. / ELR1213. / ELR2213. / ELR3213.
Trade mark (if different from page 1)	
Rating	250Vrms
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

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Product  
Pos. No  
Model / Type Ref.  
Trade mark (if different from page 1)  
Rating  
Principal characteristics

Optocoupler  
43  
EX354NU. / EX357NU.

250Vrms

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.

Product  
Pos. No  
Model / Type Ref.  
Trade mark (if different from page 1)  
Rating  
Principal characteristics

Optocoupler  
44  
ELS680.

250Vrms

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  
Pos. No  
Model / Type Ref.  
Trade mark (if different from page 1)  
Rating  
Principal characteristics

Optocoupler  
45  
ELL200.

250Vrms

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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# CERTIFICATE

No. P15219385/A8



Order No. 397064

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Product  
Pos. No  
Model / Type Ref.

Optocoupler  
46

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

Trade mark (if different from page 1)  
Rating  
Principal characteristics

250Vrms

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.

Product  
Pos. No  
Model / Type Ref.

Optocoupler  
47

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

Trade mark (if different from page 1)  
Rating  
Principal characteristics

250Vrms

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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