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Model Numbers	Section	Date	Requirements Evaluated to (US and/or CN)
<p>Double Protection Optical Isolators, Models 817, CNY75, CQY80, EL10XX, EL101, EL101L, EL101U, EL101XH, EL111, EL121, EL121N, EL124, EL124N, EL151, EL161, EL354, EL354L, EL354N, EL354NU, EL355, EL355L, EL356, EL356N, EL357, EL357L, EL357N, EL357NH, EL357NL, EL357NU, EL3571N, EL359, EL610, EL617, EL7X7, EL8X4, EL8X5, EL8X6, EL8X7, EL8X9, EL844, EL845, EL847, EL2501, EL2514, EL2561, EL2701, EL2701N, EL2705, EL2705N, EL817H, EL817L, EL8171, EL9001, EV1010U, EV354NU, EV357NH, EV357NU, HS817, K233, K817P, TCDT110, TCDT111, TCDT112, TCET110, TCET111, TCET120, VO610A, and, VO615A. "X" may be 0 to 9.</p> <p>Double Protection Optical Isolators, Models 4N, MCT2, CNY17, MOC811, H11A, MOC810, TIL11, CNX3 and SL55.</p> <p>Double Protection Optical Isolators, Models EL3010, EL3011, EL3012, EL3013, EL3014, EL3020, EL3021, EL3022, EL3023, EL3024, EL3050, EL3051, EL3052, EL3053, EL3054, EL3030, EL3031, EL3032, EL3033, EL3034, EL3040, EL3041, EL3042, EL3043, EL3044, EL3060, EL3061, EL3062, EL3063, EL3064, EL3070, EL3071, EL3072, EL3073, EL3074, EL3080, EL3081, EL3082, EL3083, EL3084, EL3161, EL3162, EL3163, ELM4, ELM6, H11AA1, H11AA2, H11AA3, H11AA4, 4N29, 4N30, 4N31, 4N32, 4N33, H11B1, H11B2, H11B3, H11B255, H11L1, H11L2, H11L3, MOC119, MOC8020, MOC8021, MOC8030, MOC8050, MOC8080, TIL113.</p> <p>Double Protection Optical Isolators, Models EL280, EL281, EL2801, EL3H4, EL3H4U, EL3H7, EL3H7H, EL3H7L, EL3H7U, EL3H71, EV3H4U, and EV3H7U.</p> <p>Double Protection Optical Isolators, Models EL205, EL206, EL207, EL208, EL211, EL212, EL213, EL215, EL216, EL217, ELD205, ELD206, ELD207, ELD208, ELD211, ELD213, and ELD217.</p> <p>Double Protection Optical Isolators, Models ELD3H4, ELD3H5, ELD3H6, ELD3H7, ELQ3H4, ELQ3H5, ELQ3H7.</p> <p>All Models may be followed by any letters or numbers.</p>	1	2001-02-27	US, CN

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Model Numbers	Section	Date	Requirements Evaluated to (US and/or CN)
Double Protection Optical Isolator, Models 4N5, 6N135, 6N136, 6N137, 6N138, 6N139, CNY64, CNY65, EL050L, EL060L, EL061A, EL061N, EL0200, EL0201, EL0202, EL01210, EL0211, EL0212, EL0452, EL0453, EL0454, EL0500, EL0501, EL0600, EL0601, EL0611, EL070L, EL071L, EL0700, EL0701, EL250L, EL253L, EL260L, EL261A, EL261N, EL263A, EL263L, EL263N, EL371, EL725, EL851, EL852, EL2200, EL2201, EL2202, EL2219, EL2211, EL2212, EL2231, EL2232, EL2502, EL2503, EL2530, EL2531, EL2601, EL2611, EL2630, EL2631, EL2730, EL2731, EL4502, EL4503, EL4504, EL4534, EL4661, ELD851, ELD852, ELL200 , ELL300, ELW135, ELW136, ELW137, ELW138, ELW139, ELW250L, ELW260L, ELW2200, ELW2201, ELW2202, ELW2211, ELW2212, ELW2219, ELW2601, ELW2611, ELW3120, ELW3140, ELW3150, ELW3180, ELW3184, ELW4502, ELW4503, ELW4504, H11D, H11G1, H11G2, H11G3. Models may be followed by any suffix.	2	2008-08-12	US, CN
Double Protection, Optical Isolator, Models EL351, EL352, EL451, EL452, EL053L, EL0530, EL0531, EL0533, EL0551, EL063A, EL063L, EL063N, EL083L, EL086L, EL0630, EL0631, EL0661, EL0730, EL0731, ELM60U, ELM61L , ELM61U, ELM80L, ELM81L, ELM314, ELM452, ELM452L, ELM453, ELM453H , ELM453L, ELM454, ELM456 , ELM511 , ELM600, ELM600L, ELM601, ELM601L, ELM611, ELM611H , ELM611L, ELM680 , ELM3010, ELM3011, ELM3012, ELM3013, ELM3014, ELM3020, ELM3021, ELM3022, ELM3023, ELM3024, ELM3030, ELM3031, ELM3032, ELM3033, ELM3034, EL3040, ELM3041, ELM3042, ELM3043, ELM3044, ELM3050, ELM3051, ELM3052, ELM3053, ELM3054, ELM3060, ELM3061, ELM3062, ELM3063, ELM3064, ELM3070, ELM3071, ELM3072, ELM3073, ELM3074, ELM3080, ELM3081, ELM3082, ELM3083, ELM3084. All models may be followed by any letters or numbers.	3	2010-08-26	US, CN

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Model Numbers	Section	Date	Requirements Evaluated to (US and/or CN)
<p>Double Protection Optical Isolator, Models ELR0213, ELR0223, ELR0313, ELR0323, ELR1213, ELR1223, ELR1313, ELR1323, ELR2213, ELR2223, ELR2313, ELR2323, ELR3202, ELR3203, ELR3212, ELR3213, ELR3222, ELR3223, ELR3232, ELR3233, ELR3313, ELR3323, ELR3502, ELR3503, ELR3512, ELR3513, ELR3522, ELR3523, ELR3532, ELR3533, ELR3702, ELR3703, ELR3712, ELR3713, ELR3722, ELR3723, ELR3732, ELR3733.</p> <p>Double Protection Optical Isolator, Models ELR3402, ELR3403, ELR3412, ELR3413, ELR3422, ELR3423, ELR3432, ELR3433, ELR3602, ELR3603, ELR3612, ELR3613, ELR3622, ELR3623, ELR3632, ELR3633, ELR3802, ELR3803, ELR3812, ELR3813, ELR3822, ELR3823, ELR3832, ELR3833.</p> <p>All Models may be followed by any letters or numbers.</p>	4	2010-09-17	US, CN
<p>Double Protection Optical Isolator, ELT3010, ELT3011, ELT3012, ELT3013, ELT3014, ELT3020, ELT3021, ELT3022, ELT3023, ELT3024, ELT3030, ELT3040, ELT3050, ELT3051, ELT3052, ELT3053, ELT3054, ELT3031, ELT3032, ELT3033, ELT3034, ELT3041, ELT3042, ELT3043, ELT3060, ELT3044, ELT3061, ELT3062, ELT3063, ELT3064, ELT3070, ELT3071, ELT3072, ELT3073, ELT3074, ELT3080, ELT3081, ELT3082, ELT3083, and ELT3084, may be followed by any letters or numbers.</p>	5	2011-09-02	US, CN

<p>Single Protection Optical Isolator, Models ELM640A, ELM660A, ELM840A, and ELM860A. All models may be followed by any letters or numbers.</p> <p>Double Protection Optical Isolator, Models EL3120, EL3140, EL3150, EL3180, EL3184, EL406X, EL410X, EL420X, EL425X, EL435X, EL440X, EL460X, EL606X, EL610X, EL620X, EL625X, EL635X, EL640X, EL660X, EL806A, EL810A, EL820A, EL825A, EL835A, EL840A, EL860A, ELM406A, ELM440A, ELM460A, ELS500, ELS050L, ELS051L, ELS052L, ELS060L, ELS061L, ELS062L, ELS60U, ELS61U, ELS62U, ELS270, ELS271, ELS272, ELS501, ELS511, ELS600, ELS601, ELS611, ELS680, ELS3120, ELS3140, ELS3150, ELS3180, ELS3184, where X may be A or B. All models may be followed by any letters or numbers, except A or B.</p>	6	2012-02-22	US, CN
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File E214129
Project 00CA06189

February 27, 2001

REPORT

ON

COMPONENT - OPTICAL ISOLATORS

Everlight Electronics Co., Ltd.
Tucheng, Taipei, Taiwan

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DESCRIPTION

PRODUCT COVERED:

USR, CNR Component - Double Protection Optical Isolators, Models 817, CNY75, CQY80, EL10XX, **EL101**, EL101L, EL101U, EL101XH, EL111, EL121, EL121N, EL124, EL124N, EL151, EL161, EL354, EL354L, EL354N, EL354NU, EL355, EL355L, EL356, EL356N, EL357, EL357L, EL357N, EL357NH, EL357NL, EL357NU, EL3571N, EL359, EL610, EL617, EL7X7, EL8X4, EL8X5, EL8X6, EL8X7, EL8X9, EL844, EL845, EL847, EL2501, EL2514, EL2561, EL2701, EL2701N, EL2705, EL2705N, EL817H, EL817L, EL8171, EL9001, EV101U, EV354NU, EV357NH, EV357NU, HS817, K233, K817P, TCDT110, TCDT111, TCDT112, TCET110, TCET111, TCET120, VO610A, and, VO615A. "X" may be 0 to 9.

USR, CNR Component - Double Protection Optical Isolators, Models 4N, MCT2, CNY17, MOC811, H11A, MOC810, TIL11, CNX3 and SL55.

USR, CNR Component - Double Protection Optical Isolators, Models EL3010, EL3011, EL3012, EL3013, EL3014, EL3020, EL3021, EL3022, EL3023, EL3024, EL3050, EL3051, EL3052, EL3053, EL3054, EL3030, EL3031, EL3032, EL3033, EL3034, EL3040, EL3041, EL3042, EL3043, EL3044, EL3060, EL3061, EL3062, EL3063, EL3064, EL3070, EL3071, EL3072, EL3073, EL3074, EL3080, EL3081, EL3082, EL3083, EL3084, EL3161, EL3162, EL3163, ELM4, ELM6, H11AA1, H11AA2, H11AA3, H11AA4, 4N29, 4N30, 4N31, 4N32, 4N33, H11B1, H11B2, H11B3, H11B255, H11L1, H11L2, H11L3, MOC119, MOC8020, MOC8021, MOC8030, MOC8050, MOC8080, TIL113.

USR, CNR Component - Double Protection Optical Isolators, Models EL280, EL281, EL2801, EL3H4, EL3H4U, EL3H7, EL3H7H, EL3H7L, EL3H7U, EL3H71, EV3H4U, and EV3H7U.

USR, CNR Component - Double Protection Optical Isolators, Models EL205, EL206, EL207, EL208, EL211, EL212, EL213, EL215, EL216, EL217, ELD205, ELD206, ELD207, ELD208, ELD211, ELD213, and ELD217.

USR, CNR Component - Double Protection Optical Isolators, Models ELD3H4, ELD3H5, ELD3H6, ELD3H7, ELQ3H4, ELQ3H5, ELQ3H7.

All Models may be followed by any letters or numbers.

GENERAL:

These devices are photocoupled isolators consisting of a gallium arsenide light emitting diode, optically coupled to a silicone phototransistor. They are intended to be used in applications where the suitability of the combination has been determined by Underwriters Laboratories Inc. Only the insulating function, for the rated dielectric insulation voltage, between the input and output of the device has been investigated.

MAXIMUM RATINGS CONTINUED (at nominal operating temperature) Cont'd:

Model	Current (mA)		Power (mW)		Isolation Voltage	Max Operating Temp (°C)	Max Junction Temp (°C)	Max Storage Temp (°C)
	Emitter	Sensor	Emitter	Sensor				
EL10XX	60	50	100	150	5000	110	125	125
EL101	60	50	100	150	5000	110	125	125
EL101L	60	50	100	150	5000	110	125	125
EL101U, EV101U	50	50	70	150	3750	125	150	150
EL101XH	60	50	100	150	5000	125	130	150
EL111	60	50	100	150	5000	110	125	125
EL121, EL121N	50	50	70	150	3750	110	125	125
EL124, EL124N	50	50	70	150	3750	110	125	125
EL205	60	150	90	150	3750	110	125	150
EL151	60	100	100	150	5000	110	125	125
EL161	60	50	100	150	5000	110	125	125
ELD205	60	150	90	150	3750	110	125	150
EL206	60	150	90	150	3750	110	125	150
ELD206	60	150	90	150	3750	110	125	150
EL207	60	150	90	150	3750	110	125	150
ELD207	60	150	90	150	3750	110	125	150
EL208	60	150	90	150	3750	110	125	150
ELD208	60	150	90	150	3750	110	125	150
EL211	60	150	90	150	3750	110	125	150
ELD211	60	150	90	150	3750	110	125	150
EL212	60	150	90	150	3750	110	125	150
EL213	60	150	90	150	3750	110	125	150
ELD213	60	150	90	150	3750	110	125	150
EL215	60	150	90	150	3750	110	125	150
EL216	60	150	90	150	3750	110	125	150
EL217	60	150	90	150	3750	110	125	150
ELD217	60	150	90	150	3750	110	125	150
EL3H4	50	50	70	150	3750	110	125	125
EL3H4U, EV3H4U	50	50	70	150	3750	125	150	150
EL3H7	50	50	70	150	3750	110	125	125
EL3H7H	50	50	70	150	3750	125	130	150
EL3H7L	50	50	70	150	3750	110	125	125
EL3H7U, EV3H7U	50	50	70	150	3750	125	130	150
EL3H71	50	50	70	150	3750	110	125	125
EL280	50	50	70	150	3750	110	125	125
EL281	50	50	70	150	3750	110	125	125
EL354, EL354N	50	50	70	150	3750	110	125	125
EL354L	60	50	100	150	5000	110	125	125
EL354NU, EV354NU	50	50	70	150	3750	125	150	150
EL355	50	80	70	150	3750	110	125	125
EL355L	60	100	100	150	5000	110	125	125
EL356, EL356N	50	50	70	150	3750	110	125	125
EL357, EL357N	50	50	70	150	3750	110	125	125
EL357L	60	50	100	150	5000	110	125	125
EL357NH, EV357NH	50	50	70	150	3750	125	130	150
EL357NL	50	50	70	150	3750	110	125	125
EL357NU, EV357NU	50	50	70	150	3750	125	150	150
EL3571N	50	50	70	150	3750	110	125	125
EL359	50	50	70	150	3750	110	125	125
EL610	60	50	100	150	5000	110	125	125
EL617	60	50	100	150	5000	110	125	125
EL7X7	60	50	100	150	5000	110	125	125
4N	60	50	100	150	5000	110	125	125
MCT2	60	50	100	150	5000	110	125	125
CNY17	60	50	100	150	5000	110	125	125
MOC811	60	50	100	150	5000	110	125	125
H11A	60	50	100	150	5000	110	125	125
MOC810	60	50	100	150	5000	110	125	125
TIL11	60	50	100	150	5000	110	125	125
CNX3	60	50	100	150	5000	110	125	125
SL55	60	50	100	150	5000	110	125	125
EL8X4	60	50	100	150	5000	110	125	125
EL8X5	60	80	100	150	5000	110	125	125
EL8X6	60	50	100	150	5000	110	125	125
EL8X7, EL2501, EL2514, EL2561, 817	60	50	100	150	5000	110	125	125
EL817H	60	50	100	150	5000	125	130	150
EL817L	60	50	100	150	5000	110	125	125
EL8X9	60	50	100	150	5000	110	125	125
EL2701, EL2701N	50	50	70	150	3750	110	125	125
EL2705, EL2705N	50	50	70	150	3750	110	125	125

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MAXIMUM RATINGS CONTINUED (at nominal operating temperature) Cont'd:

Model	Current (mA)		Power (mW)		Isolation Voltage	Max Operating Temp (°C)	Max Junction Temp (°C)	Max Storage Temp (°C)
	Emitter	Sensor	Emitter	Sensor				
EL2801	50	50	70	150	3750	110	125	125
EL8171	60	50	100	150	5000	110	125	125
EL9001	60	50	100	150	5000	110	125	125
H11AA1, H11AA2, H11AA3, H11AA4	60	50	120	150	5000	100	125	125
4N29, 4N30, 4N31, 4N32, 4N33, H11B1, H11B2, H11B3, H11B255, TIL113, MOC119, MOC8020, MOC8021, MOC8030, MOC8050, MOC8080	60	150	120	150	5000	100	125	125
EL3010, EL3011, EL3012, EL3013, EL3014, EL3021, EL3022, EL3020, EL3023, EL3024, EL3050, EL3051, EL3052, EL3053, EL3054, EL3070, EL3071, EL3072, EL3073, EL3074	60	100	100	300	5000	100	125	125
EL3030, EL3031, EL3032, EL3033, EL3034, EL3040, EL3041, EL3042, EL3043, EL3044, EL3061, EL3062, EL3063, EL3060, EL3161, EL3064, EL3162, EL3163, EL3080, EL3081, EL3082, EL3083, EL3084, ELM4, ELM6	60	100	100	300	5000	100	125	125
H11L1, H11L2, H11L3	60	50	120	150	5000	100	125	125
HS817, K817P, TCET110, TCET111, TCET120, VO610A, VO615A	60	50	100	150	5000	110	125	125
CNY75, CQY80, K233, TCDT110, TCDT111, TCDT112	60	50	100	150	5000	110	125	125
ELD3H4, ELD3H6, ELD3H7,	60	50	100	150	3750	110	125	125
ELD3H5	60	100	100	150	3750	110	125	125
ELQ3H4, ELQ3H7	60	50	100	150	3750	110	125	125
ELQ3H5	60	100	100	150	3750	110	125	125
EL844	60	50	100	150	5000	110	125	125
EL845	60	100	100	150	5000	110	125	125
EL847	60	50	100	150	5000	110	125	125

- See ILL. 3 for the Derating Curves of representative models.

File E214129
Project 08CA17258

August 12, 2008

REPORT

ON

COMPONENT - OPTICAL ISOLATORS

Everlight Electronics Co Ltd
TUCHENG, TAIPEI, TAIWAN

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Model	Current (mA)		Power (mW)		Isolation Voltage	Max Operating (Ambient) Temp (°C)	Max Junction Temp (°C)	Max Storage Temp (°C)
	Emitter	Sensor	Emitter	Sensor				
EL250L	25	8	45 @ 1 Mbps	100 @ 1 Mbps	5000	100	125	125
EL2502	25	8	45 @ 1 Mbps	100 @ 1 Mbps	5000	100	125	125
EL2503	25	8	45 @ 1 Mbps	100 @ 1 Mbps	5000	100	125	125
EL253L	25	8	45 @ 1 Mbps	35 @ 1 Mbps	5000	100	125	125
EL2530	25	8	45 @ 1 Mbps	35 @ 1 Mbps	5000	100	125	125
EL2531	25	8	45 @ 1 Mbps	35 @ 1 Mbps	5000	100	125	125
EL260L	20	50	40 @10 Mbps	85 @10 Mbps	5000	100	125	125
EL2601	20	50	40 @10 Mbps	85 @10 Mbps	5000	100	125	125
EL2611	20	50	40 @10 Mbps	85 @10 Mbps	5000	100	125	125
EL2630	20	50	40 @10 Mbps	60 @10 Mbps	5000	100	125	125
EL2631	20	50	40 @10 Mbps	60 @10 Mbps	5000	100	125	125
EL2730	20	60	35	100	5000	100	125	125
EL2731	20	60	35	100	5000	100	125	125
EL261A	20	50	40 @10 Mbps	85 @10 Mbps	5000	100	125	125
EL261N	20	50	40 @10 Mbps	85 @10 Mbps	5000	100	125	125
EL2611	20	50	40 @10 Mbps	85 @10 Mbps	5000	100	125	125
EL263A	20	50	40 @10 Mbps	60 @10 Mbps	5000	100	125	125
EL263L	20	50	40 @10 Mbps	60 @10 Mbps	5000	100	125	125
EL263N	20	50	40 @10 Mbps	60 @10 Mbps	5000	100	125	125
EL2630	20	50	40 @10 Mbps	60 @10 Mbps	5000	100	125	125
EL2631	20	50	40 @10 Mbps	60 @10 Mbps	5000	100	125	125
EL2730	20	60	35	100	5000	100	125	125
EL2731	20	60	35	100	5000	100	125	125
EL4502	25	8	45	100	5000	100	125	125
EL4503	25	8	45	100	5000	100	125	125
EL4504	25	8	45	100	5000	100	125	125
EL4534	25	8	45	35	5000	100	125	125
EL4661	20	50	40	60	5000	100	125	125
ELL200	60	1	160	50	5000	110	125	150
H11D	80	100	150	300	5300	100	125	150
H11G1	60	150	100	200	5000	100	125	125
H11G2	60	150	100	200	5000	100	125	125
H11G3	60	150	100	200	5000	100	125	125

Model	Current (mA)		Power (mW)		Isolation Voltage	Max Operating (Ambient) Temp (°C)	Max Junction Temp (°C)	Max Storage Temp (°C)
	Emitter	Sensor	Emitter	Sensor				
*								
EL0200	20	50	40	85	3750	100	125	125
EL0201	20	50	40	85	3750	100	125	125
EL0202	20	50	40	85	3750	100	125	125
EL0210	20	50	40	85	3750	100	125	125
EL0211	20	50	40	85	3750	100	125	125
EL0212	20	50	40	85	3750	100	125	125
EL050L	25	8	45	100	3750	100	125	125
EL0500	25	8	45	100	3750	100	125	125
EL0501	25	8	45	100	3750	100	125	125
EL0452	25	8	45	100	3750	100	125	125
EL0453	25	8	45	100	3750	100	125	125
EL0454	25	8	45	100	3750	100	125	125
EL060L	20	50	40	85	3750	100	125	125
EL0600	20	50	40	85	3750	100	125	125
EL0601	20	50	40	85	3750	100	125	125
EL061A	20	50	40	85	3750	100	125	125
EL061N	20	50	40	85	3750	100	125	125
EL0611	20	50	40	85	3750	100	125	125
EL070L	20	50	40	85	3750	100	125	125
EL071L	20	50	40	85	3750	100	125	125
EL0700	20	60	35	100	3750	100	125	125
EL0701	20	60	35	100	3750	100	125	125
ELD851	80	100	150	300	5300	100	125	150
ELD852	60	150	100	300	5000	100	125	125
ELL300	60	300	100	550	5000	110	125	125
ELW135	40	16	80	100	5000	100	125	125
ELW136	40	16	80	100	5000	100	125	125
ELW137	40	50	80	85	5000	100	125	125
ELW138	40	60	80	100	5000	100	125	125
ELW139	40	60	80	100	5000	100	125	125
ELW250L	40	16	80	100	5000	100	125	125
ELW260L	40	50	80	85	5000	100	125	125
ELW2200	20	25	40	150	5000	100	125	125
ELW2201	20	25	40	150	5000	100	125	125
ELW2202	20	25	40	150	5000	100	125	125
ELW2211	20	25	40	150	5000	100	125	125
ELW2212	20	25	40	150	5000	100	125	125
ELW2219	20	25	40	150	5000	100	125	125
ELW2601	40	50	80	85	5000	100	125	125
ELW2611	40	50	80	85	5000	100	125	125
ELW3120	50	300	100	300	5000	110	125	125
ELW3140	50	300	100	300	5000	110	125	125
ELW3150	50	300	100	300	5000	110	125	125
ELW3180	50	300	100	300	5000	110	125	125
ELW3184	50	300	100	300	5000	110	125	125
ELW4502	40	16	80	100	5000	100	125	125
ELW4503	40	16	80	100	5000	100	125	125
ELW4504	40	16	80	100	5000	100	125	125

File E214129
Project 09CA63111

August 26, 2010

Revised: July 14, 2011
REPORT

on

*COMPONENT - OPTICAL ISOLATORS

Everlight Electronics Co Ltd
TAIPEI, TAIWAN

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DESCRIPTION

PRODUCT COVERED:

USR, CNR - Double Protection, Optical Isolator, Models EL351, EL352, EL451, EL452, EL053L, EL0530, EL0531, EL0533, EL0551, EL063A, EL063L, EL063N, EL083L, EL086L, EL0630, EL0631, EL0661, EL0730, EL0731, ELM60U, **ELM61L**, ELM61U, ELM80L, ELM81L, ELM314, ELM452, ELM452L, ELM453, **ELM453H**, ELM453L, ELM454, **ELM456**, **ELM511**, ELM600, ELM600L, ELM601, ELM601L, ELM611, **ELM611H**, ELM611L, **ELM680**, ELM3010, ELM3011, ELM3012, ELM3013, ELM3014, ELM3020, ELM3021, ELM3022, ELM3023, ELM3024, ELM3030, ELM3031, ELM3032, ELM3033, ELM3034, EL3040, ELM3041, ELM3042, ELM3043, ELM3044, ELM3050, ELM3051, ELM3052, ELM3053, ELM3054, ELM3060, ELM3061, ELM3062, ELM3063, ELM3064, ELM3070, ELM3071, ELM3072, ELM3073, ELM3074, ELM3080, ELM3081, ELM3082, ELM3083, ELM3084.

All models may be followed by any letters or numbers.

MAXIMUM RATINGS (at nominal operating temperature):

Model	Current (mA)		Power (mW)		Isolation Voltage	Max Operating (Ambient) Temp (°C)	Max Junction Temp (°C)	Max Storage Temp (°C)
	Emitter	Sensor	Emitter	Sensor				
EL351	80	100	150	300	3750	110	125	150
EL352	60	150	100	300	3750	110	125	150
EL451	80	100	150	300	3750	110	125	150
EL452	60	150	100	300	3750	110	125	150
ELM456 , ELM511	50	16	45	100	3750	100	125	125
EL0551	25	8	45	100	3750	100	125	125
EL053L	25	8	45	100	3750	100	125	125
EL0530	25	8	45	100	3750	100	125	125
EL0531	25	8	45	100	3750	100	125	125
EL0533	25	8	45	100	3750	100	125	125
EL063A	20	50	40	85	3750	100	125	125
EL063L	20	50	40	85	3750	100	125	125
EL063N	20	50	40	85	3750	100	125	125
EL083L	20	50	40	85	3750	100	125	125
EL086L	20	50	40	85	3750	100	125	125
EL0630	20	50	40	85	3750	100	125	125
EL0631	20	50	40	85	3750	100	125	125
EL0730	20	60	35	100	3750	100	125	125
EL0731	20	60	35	100	3750	100	125	125
ELM3010	60	100	100	300	3750	110	125	150
ELM3011	60	100	100	300	3750	110	125	150
ELM3012	60	100	100	300	3750	110	125	150
ELM3013	60	100	100	300	3750	110	125	150
ELM3014	60	100	100	300	3750	110	125	150
ELM3020	60	100	100	300	3750	110	125	150
ELM3021	60	100	100	300	3750	110	125	150
ELM3022	60	100	100	300	3750	110	125	150
ELM3023	60	100	100	300	3750	110	125	150
ELM3024	60	100	100	300	3750	110	125	150
ELM3050	60	100	100	300	3750	110	125	150
ELM3051	60	100	100	300	3750	110	125	150

Model	Current (mA)		Power (mW)		Isolation Voltage	Max Operating (Ambient) Temp (°C)	Max Junction Temp (°C)	Max Storage Temp (°C)
	Emitter	Sensor	Emitter	Sensor				
ELM3052	60	100	100	300	3750	110	125	150
ELM3053	60	100	100	300	3750	110	125	150
ELM3054	60	100	100	300	3750	110	125	150
ELM3030	60	100	100	300	3750	110	125	150
ELM3031	60	100	100	300	3750	110	125	150
ELM3032	60	100	100	300	3750	110	125	150
ELM3033	60	100	100	300	3750	110	125	150
ELM3034	60	100	100	300	3750	110	125	150
ELM3040	60	100	100	300	3750	110	125	150
ELM3041	60	100	100	300	3750	110	125	150
ELM3042	60	100	100	300	3750	110	125	150
ELM3043	60	100	100	300	3750	110	125	150
ELM3044	60	100	100	300	3750	110	125	150
ELM3060	60	100	100	300	3750	110	125	150
ELM3061	60	100	100	300	3750	110	125	150
ELM3062	60	100	100	300	3750	110	125	150
ELM3063	60	100	100	300	3750	110	125	150
ELM3064	60	100	100	300	3750	110	125	150
ELM3070	60	100	100	300	3750	110	125	150
ELM3071	60	100	100	300	3750	110	125	150
ELM3072	60	100	100	300	3750	110	125	150
ELM3073	60	100	100	300	3750	110	125	150
ELM3074	60	100	100	300	3750	110	125	150
ELM3080	60	100	100	300	3750	110	125	150
ELM3081	60	100	100	300	3750	110	125	150
ELM3082	60	100	100	300	3750	110	125	150
ELM3083	60	100	100	300	3750	110	125	150
ELM3084	60	100	100	300	3750	110	125	150
*								
ELM314	60	100	100	300	3750	110	125	150
ELM452, ELM452L, ELM453, ELM453L	50	16	45	100	3750	100	125	125
ELM453H	50	16	45	100	3750	125	125	150
ELM454	50	16	45	100	3750	100	125	125
ELM60U	50	50	100	85	3750	100	125	125
ELM61L , ELM61U	50	50	100	85	3750	100	125	125
ELM600, ELM600L, ELM601, ELM601L, ELM611, ELM611L, ELM680	50	50	100	85	3750	100	125	125
ELM611H	50	50	100	85	3750	125	125	150
ELM80L	50	50	100	85	3750	100	125	125
ELM81L	50	50	100	85	3750	100	125	125

GENERAL:

These devices are photocoupled isolators consisting of a photo-emitter such as a light emitting diode, optically coupled to a photo-sensor, such as a transistor. The emitter and sensor are separated by an insulating window. Internal "chips" are connected to lead frames that are molded into the enclosure.

ENGINEERING CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):

Use - For use only in products where the acceptability of the combination is determined by Underwriters Laboratories Inc.

*USR indicates this product was investigated under the UL Standard for Safety for Optical Isolators, UL 1577, **Fifth** Edition.

CNR indicates this product was investigated under the Canadian Certification Notice, CSA Component Acceptance Service No. 5A.

File E214129
Project 10CA27658

September 17, 2010

REPORT

On

COMPONENT - OPTICAL ISOLATORS - COMPONENT

Everlight Electronics Co Ltd
Taipei, Taiwan

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DESCRIPTION

PRODUCT COVERED:

USR, CNR - Double Protection Optical Isolator, Models **ELR0213**, ELR0223, **ELR0313**, **ELR0323**, **ELR1213**, ELR1223, **ELR1313**, **ELR1323**, **ELR2213**, ELR2223, **ELR2313**, **ELR2323**, ELR3202, ELR3203, ELR3212, ELR3213, ELR3222, ELR3223, ELR3232, ELR3233, **ELR3313**, **ELR3323**, ELR3502, ELR3503, ELR3512, ELR3513, ELR3522, ELR3523, ELR3532, ELR3533, ELR3702, ELR3703, ELR3712, ELR3713, ELR3722, ELR3723, ELR3732, ELR3733.

USR, CNR - Double Protection Optical Isolator, Models ELR3402, ELR3403, ELR3412, ELR3413, ELR3422, ELR3423, ELR3432, ELR3433, ELR3602, ELR3603, ELR3612, ELR3613, ELR3622, ELR3623, ELR3632, ELR3633, ELR3802, ELR3803, ELR3812, ELR3813, ELR3822, ELR3823, ELR3832, ELR3833.

All Models may be followed by any letters or numbers.

MAXIMUM RATINGS (at nominal operating temperature):

Model	Current (mA)		Power (mW)		Isolation Voltage (Vac)	Max Operating (Ambient) Temp (°C)	Max Junction Temp (°C)	Max Storage Temp (°C)
	Emitter	Sensor	Emitter	Sensor				
ELR0223	60	300	100	2000	5000	100	125	125
ELR0213, ELR0313, ELR0323	60	300	100	2000	5000	85	125	125
ELR1213, ELR1313, ELR1323	60	600	100	2000	5000	85	125	125
ELR1223	60	600	100	2000	5000	100	125	125
ELR2213, ELR2313, ELR2323	60	900	100	2000	5000	85	125	125
ELR2223	60	900	100	2000	5000	100	125	125
ELR3313, ELR3323	60	1200	100	2000	5000	85	125	125
ELR3202, ELR3203, ELR3212, ELR3213, ELR3222, ELR3223, ELR3232, ELR3233, ELR3502, ELR3503, ELR3512, ELR3513, ELR3522, ELR3523, ELR3532, ELR3533, ELR3702, ELR3703, ELR3712, ELR3713, ELR3722, ELR3723, ELR3732, ELR3733	60	1200	100	2000	5000	100	125	125
ELR3402, ELR3403, ELR3412, ELR3413, ELR3422, ELR3423, ELR3432, ELR3433, ELR3602, ELR3603, ELR3612, ELR3613, ELR3622, ELR3623, ELR3632, ELR3633, ELR3802, ELR3803, ELR3812, ELR3813, ELR3822, ELR3823, ELR3832, ELR3833	60	1200	100	2000	5000	100	125	125

File E214129
Project 11CA21212

September 02, 2011

REPORT

On

COMPONENT - OPTICAL ISOLATORS

Everlight Electronics Co Ltd
Taipei, Taiwan

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File E214129
Project 11CA38812

February 22, 2012

REPORT

ON

COMPONENT - OPTICAL ISOLATORS

Everlight Electronics Co Ltd
TUCHENG, TAIPEI, TAIWAN

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DESCRIPTION

PRODUCT COVERED:

USR, CNR - Single Protection Optical Isolator, Models ELM640A, ELM660A, ELM840A, and ELM860A. All models may be followed by any letters or numbers.

USR, CNR - Double Protection Optical Isolator, Models EL3120, EL3140, EL3150, EL3180, EL3184, EL406X, EL410X, EL420X, EL425X, EL435X, EL440X, EL460X, EL606X, EL610X, EL620X, EL625X, EL635X, EL640X, EL660X, EL806A, EL810A, EL820A, EL825A, EL835A, EL840A, EL860A, ELM406A, ELM440A, ELM460A, ELS500, ELS050L, ELS051L, ELS052L, ELS060L, ELS061L, ELS062L, ELS60U, ELS61U, ELS62U, ELS270, ELS271, ELS272, ELS501, ELS511, ELS600, ELS601, ELS611, **ELS680**, ELS3120, ELS3140, ELS3150, ELS3180, ELS3184, where X may be A or B. All models may be followed by any letters or numbers, except A or B.

MAXIMUM RATINGS (per channel at room temperature):

Model	Current (mA)		Power (mW)		Isolation Voltage (Vrms)	Max Operating (Ambient) Temp (°C)	Max Junction Temp (°C)	Max Storage Temp (°C)
	Emitter	Sensor	Emitter	Sensor				
EL3120	50	3000#	100	300	5000	110	125	125
EL3140	50	3000#	100	300	5000	110	125	125
EL3150	50	3000#	100	300	5000	110	125	125
EL3180	50	3000#	100	300	5000	110	125	125
EL3184	50	3000#	100	300	5000	110	125	125
EL406X	50	550	75	500	5000	85	125	125
EL410X	50	320	75	500	5000	85	125	125
EL420X	50	180	75	500	5000	85	125	125
EL425X	50	150	75	500	5000	85	125	125
EL435X	50	130	75	500	5000	85	125	125
EL440X	50	120	75	500	5000	85	125	125
EL460X	50	50	75	500	5000	85	125	125
EL606X	50	550	75	500	5000	85	125	125
EL610X	50	320	75	500	5000	85	125	125
EL620X	50	180	75	500	5000	85	125	125
EL625X	50	150	75	500	5000	85	125	125
EL635X	50	130	75	500	5000	85	125	125
EL640X	50	120	75	500	5000	85	125	125
EL660X	50	50	75	500	5000	85	125	125
EL806A	50	550	75	500	5000	85	125	125
EL810A	50	320	75	500	5000	85	125	125
EL820A	50	180	75	500	5000	85	125	125
EL825A	50	150	75	500	5000	85	125	125
EL835A	50	130	75	500	5000	85	125	125

Model	Current (mA)		Power (mW)		Isolation Voltage (Vrms)	Max Operating (Ambient) Temp (°C)	Max Junction Temp (°C)	Max Storage Temp (°C)
	Emitter	Sensor	Emitter	Sensor				
EL840A	50	120	75	500	5000	125	150	150
EL860A	50	50	75	500	5000	125	150	150
ELM406A	50	550	75	750	3750	125	130	150
ELM440A	50	120	75	500	3750	125	130	150
ELM460A	50	50	75	500	3750	125	130	150
ELM640A	50	120	75	500	3750	100	125	125
ELM660A	50	50	75	500	3750	100	125	125
ELM840A	50	120	75	800	3750	100	125	125
ELM860A	50	50	75	800	3750	100	125	125
ELS050L	50	8	100	100	5000	100	125	125
ELS051L	50	8	100	100	5000	100	125	125
ELS052L	50	8	100	100	5000	100	125	125
ELS060L	50	50	100	100	5000	100	125	125
ELS061L	50	50	100	100	5000	100	125	125
ELS062L	50	50	100	100	5000	100	125	125
ELS60U	50	50	100	100	5000	100	125	125
ELS61U	50	50	100	100	5000	100	125	125
ELS62U	50	50	100	100	5000	100	125	125
ELS270	50	50	100	100	5000	100	125	125
ELS271	50	50	100	100	5000	100	125	125
ELS272	50	50	100	100	5000	100	125	125
ELS500	50	8	100	100	5000	100	125	125
ELS501	50	8	100	100	5000	100	125	125
ELS511	50	8	100	100	5000	100	125	125
ELS600	50	50	100	100	5000	100	125	125
ELS601	50	50	100	100	5000	100	125	125
ELS611	50	50	100	100	5000	100	125	125
ELS680	50	50	100	100	5000	100	125	125
ELS3120	50	3000#	100	300	5000	100	125	125
ELS3140	50	3000#	100	300	5000	100	125	125
ELS3150	50	3000#	100	300	5000	100	125	125
ELS3180	50	3000#	100	300	5000	100	125	125
ELS3184	50	3000#	100	300	5000	100	125	125

Note: This is the client's declared peak value of the output current at a maximum pulse width of 10 μ s with maximum duty cycle of 1.1%.