



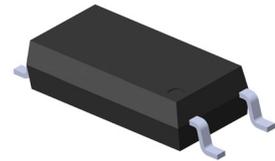
LIGHTING FOREVER

# 4 PIN LONG CREEPAGE SOP PHOTOTRANSISTOR PHOTOCOUPLER

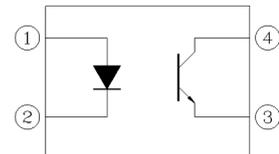
## EL101X-G Series

### Features:

- Free halogens compliant
- Current transfer ratio  
(CTR: 50~600% at  $I_F = 5\text{mA}$ ,  $V_{CE} = 5\text{V}$ )  
(CTR: 63~320% at  $I_F = 10\text{mA}$ ,  $V_{CE} = 5\text{V}$ )
- High isolation voltage between input and output (Viso=5000 V rms )
- Compact 4 Pin SOP with a 2.0 mm profile
- 8mm long creepage distance
- Pb free and RoHS compliant.
- CUL approved (No. E214129)
- VDE approved (No. 40028391)
- SEMKO approved
- NEMKO approved
- DEMKO approved
- FIMKO approved



### Schematic



### Pin Configuration

1. Anode
2. Cathode
3. Emitter
4. Collector

### Description

The EL101X-G series devices consist of an infrared emitting diode, optically coupled to a phototransistor detector. Compound use free halogens and  $\text{Sb}_2\text{O}_3$ . They are packaged in a 4-pin SOP package.

### Applications

- Programmable controllers
- System appliances, measuring instruments
- Telecommunication equipments
- Home appliances, such as fan heaters, etc.
- Signal transmission between circuits of different potentials and impedances



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## EL101X-G Series

### Absolute Maximum Ratings ( $T_a=25^{\circ}\text{C}$ )

Parameter		Symbol	Rating	Unit
Input	Forward current	$I_F$	60	mA
	Peak forward current (1us, pulse)	$I_{FP}$	1.5	A
	Reverse voltage	$V_R$	6	V
	Power dissipation	$P_D$	100	mW
Output	Power dissipation	$P_C$	150	mW
	Collector current	$I_C$	50	mA
	Collector-Emitter voltage	$V_{CEO}$	80	V
	Emitter-Collector voltage	$V_{ECO}$	7	V
Total power dissipation		$P_{TOT}$	250	mW
Isolation voltage <sup>*1</sup>		$V_{ISO}$	5000	V rms
Operating temperature		$T_{OPR}$	-55 ~ +110	$^{\circ}\text{C}$
Storage temperature		$T_{STG}$	-55 ~ +125	$^{\circ}\text{C}$
Soldering temperature <sup>*2</sup>		$T_{SOL}$	260	$^{\circ}\text{C}$

#### Notes

\*1 AC for 1 minute, R.H.= 40 ~ 60% R.H. In this test, pins 1 & 2 are shorted together, and pins 3 & 4 are shorted together.

\*2 For 10 seconds.