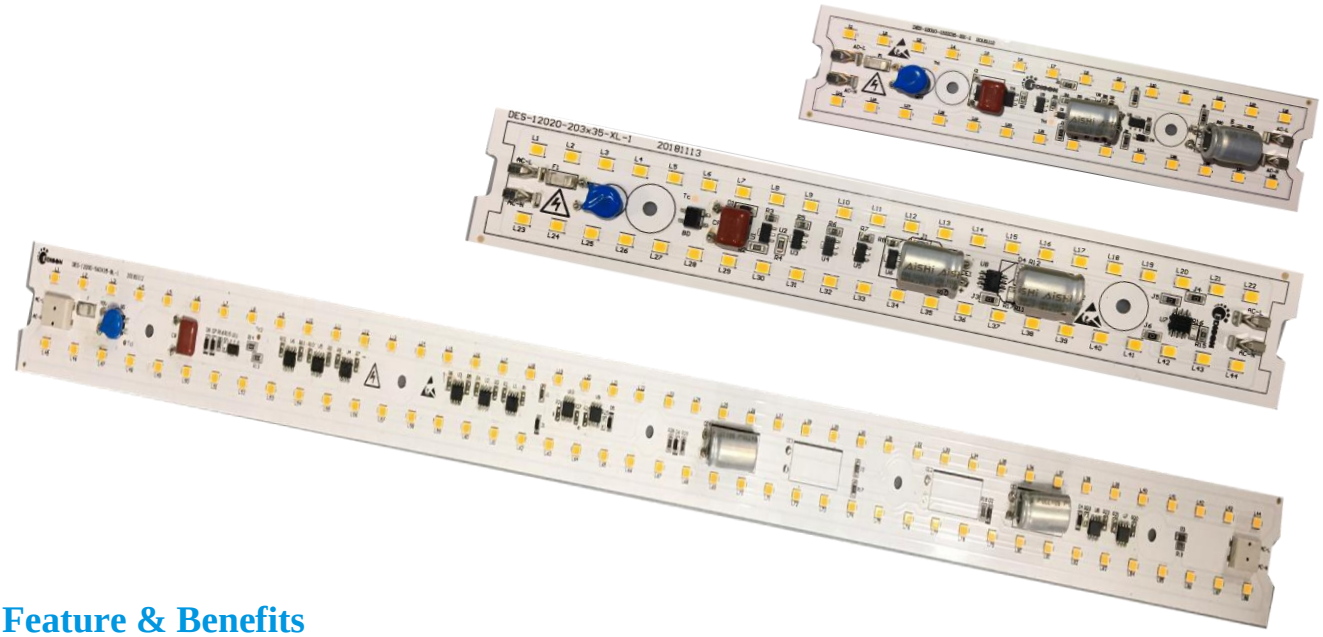
US Rectangular AC Module



Feature & Benefits

- Connects directly to AC line voltage
- Low Flicker T24 Compliant
- TRIAC Dimmable
- High Efficacy
- Wire push in connector

Applications

- Wall light
- Bathroom light

Table of Contents

Product Code Information

Part No.	Description
5ELALN2T12102712	AC548_2700K_10W_120V_CRI90_153X35
5ELALN2T12103012	AC548_3000K_10W_120V_CRI90_153X35
5ELALN2T12104012	AC548_4000K_10W_120V_CRI90_153X35
5ELALN2T12202712	AC549_2700K_20W_120V_CRI90_203X35
5ELALN2T12203012	AC549_3000K_20W_120V_CRI90_203X35
5ELALN2T12204012	AC549_4000K_20W_120V_CRI90_203X35
5ELALN2T12302712	AC550_2700K_30W_120V_CRI90_560X35
5ELALN2T12303012	AC550_3000K_30W_120V_CRI90_560X35
5ELALN2T12304012	AC550_4000K_30W_120V_CRI90_560X35

Electrical Characteristic

Parameter	Min	Typ	Max	Unit
Rated supply voltage AC	115	120	125	V
Input voltage, AC	108	120	132	V
Mains frequency		50/60		Hz
Typ Power factor		0.9		--
Percent Flicker			30	%
THD		30		%
Beam characteristic		120		°
Operating ambient temperature		-25~+55		℃
Tc point		85		
Hi-pot Test (AC input to Bottom)	1.24			KV

Absolute Ratings

Parameter	Min	Max	Unit
Input voltage	--	132	V
Surges protection(L/N)	--	0.5	KV
Case Temperature (Tc)	--	85	℃
Operating ambient temperature	-25	+55	℃
Storage ambient temperature	-40	+30	℃
Storage ambient humidity	--	45	%

Electro-Optical Characteristics (Vin=120V ; Tc=25℃)

5ELALN2T1210xx12

Part No.	Parameter	Min	Typ	Max	Unit
5ELALN2T12102712 5ELALN2T12103012 5ELALN2T12104012	Power consumption	9	10	11	W
	Lumen Flux at Tc=25℃ 2700K 3000K 4000K	--	940 970 1030	--	Lm
	Color rendering index (Ra)	90	--	--	--
	R9	50			

5ELALN2T1220xx12

Part No.	Parameter	Min	Typ	Max	Unit
5ELALN2T12202712 5ELALN2T12203012 5ELALN2T12204012	Power consumption	18	20	22	W
	Lumen Flux at Tc=25℃ 3000K 3000K 4000K	--	1840 1900 2010	--	Lm
	Color rendering index (Ra)	90	--	--	--
	R9	50			

5ELALN2T1230xx12

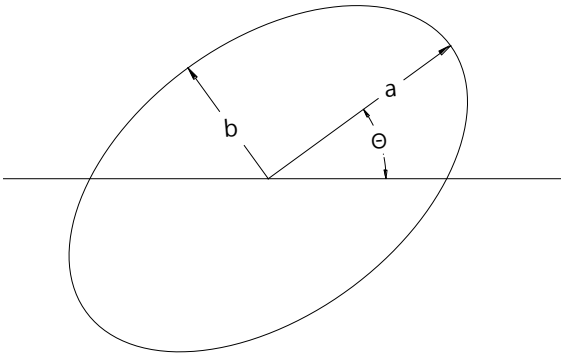
Part No.	Parameter	Min	Typ	Max	Unit
5ELALN2T12302712 5ELALN2T12303012 5ELALN2T12304012	Power consumption	27	30	33	W
	Lumen Flux at Tc=25℃ 3000K 3000K 4000K	--	2870 2960 3140	--	Lm
	Color rendering index (Ra)	90	--	--	--
	R9	50			

Note:

Measurement precision ± 10% for the flux data and ± 10% for the efficacy data.

Measurement precision for CRI ± 2 and for color temperature ±150K

Color Coordinate



CCT	Steps	Cx	Cy	a	b	theta
2700K	3	0.4578	0.4101	0.00810	0.00420	53.70
3000K	3	0.4338	0.4030	0.00834	0.00408	53.22
4000K	3	0.3818	0.3797	0.00939	0.00402	53.72

Mechanical Dimension

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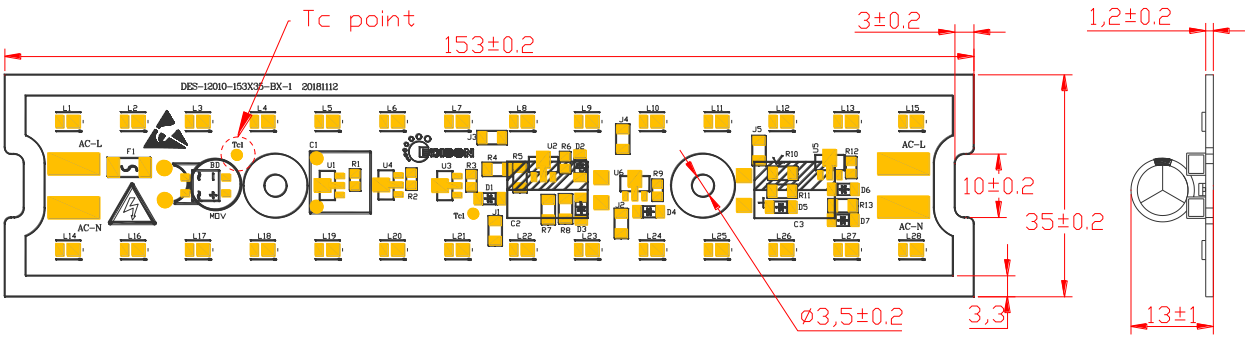

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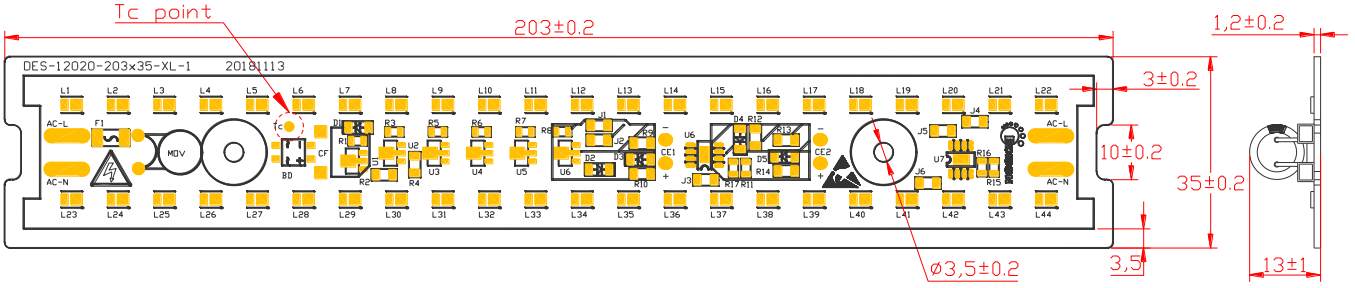

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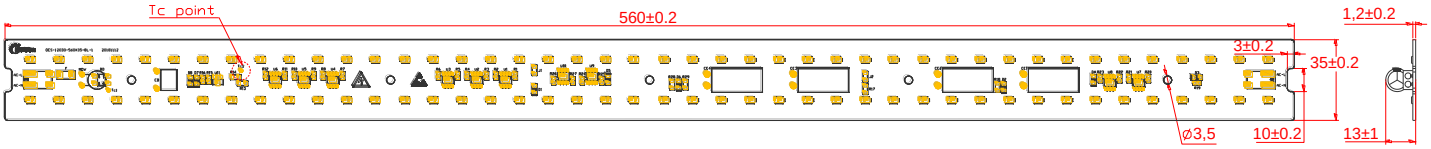


Note:

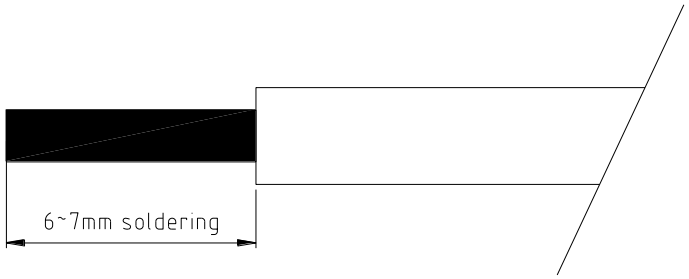
All dimension unit in mm

Certificate

Regulation	Remark
REACH	Hazardous Substance & Material
RoHS	Hazardous Substance & Material

Wire condition

The wiring should be solid cable with a cross section of 18AWG.
For the push-wire connection you have to strip the insulation (6-7mm)



Compatible Triac Dimmer List

a.) Compatibility depends on triac dimmer characteristics.

Even though dimmer is included in the below table, some dimmers may be in compatible according to installation condition.

b.) Compatible dimmer list.

Maker	Model	Maker	Model
Lutron	DVCL-153P	Lutron	S-600H-WH
Lutron	TGCL-153P	Leviton	6615-P
Lutron	LGCL-153P	Leviton	6674
Lutron	DVELV-300P	Leviton	DSE06
Lutron	NTELV-300	Leviton	IPL06
Lutron	N-600	Leviton	IPE04

Notes
*Do not guarantee the performance of dimmer which is not on the list above.

Precaution for Use

1. Please note that AC Module products are driven by high voltage, therefore when operating AC Modules should be very cautious.
2. DO NOT touch the circuit board, components or terminals with body or metal while the circuit is active.
3. DO NOT add or change wires while the circuit of AC Module is active.
4. Long time exposure to sunlight or UV should be avoided; otherwise, it may cause the discoloration of lens.
5. DO NOT use adhesives to attach the LED that outgas organic vapor.
6. DO NOT use the products with materials containing Sulfur.
7. DO NOT assemble in humid environment or the conditions of containing oxidizing gas such as Cl, H2S, NH3, SO2, NOX, etc.
8. DO NOT make any modifications on the products.
9. AC Module uses integrated circuit (IC) which can be damaged when exposed to static electricity. Please operate with antistatic device. Do not touch the product unless ESD protection is used. AC Module can't be installed in end product unless the ESD protection is used.
10. DO NOT press the product; even a slight pressure may damage the product.
    The environments such as high temperatures, high humidity or direct expose to sunlight should be avoided since the product is sensitive to these conditions.
11. Storage Precautions:
    (1) The devices should be stored in the anti-static bag.
    (2) If the anti-static bag has been opened, please make sure to reseal the bag to avoid air and moisture infiltrate in the bag.
12. It is strongly suggested to wear rubber insulated gloves and rubber bottom shoes while operating the AC Modules.
13. DO NOT wear any conductive accessories (such as jewelry) which could accidentally get an electric shock.
14. Faults, lightning, or fast switch may cause voltage surge which surpasses the normal value.
15. The failure of internal component may cause excessive voltages.
16. DO NOT directly make the HI-POT test over DC 1,750V on the module.
17. DO NOT separately connection L and N terminal when the power source turn on.

Environmental Compliance

AC module series are compliant to the Restriction of Hazardous Substances Directive or RoHS. The restricted materials including lead, mercury cadmium hexavalent chromium, polybrominated biphenyls (PBB) and polybrominated diphenyl ether (PBDE) are not used in AC module series to provide an environmentally friendly product to the customers.

Datasheet History

Versions	Modification	Date
1	Establish a Datasheet	2019/12/25

About Edison Opto

Edison Opto is a leading manufacturer of high power LED and a solution provider experienced in LDMS. LDMS is an integrated program derived from the four essential technologies in LED lighting applications- Thermal Management, Electrical Scheme, Mechanical Refinement, Optical Optimization, to provide customer with various LED components and modules. More Information about the company and our products can be found at www.edison-opto.com

www.edison-opto.com
For general assistance please contact:
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For technical assistance please contact: LED.Detective@edison-opto.com.tw