

EdiLex AC PAD Module 230V Series



Feature & Benefits

- Integrated AC power circuit on module
- Economic total solution
- High Power Efficiency & Factor
- Small color tolerance MacAdam 5 step

Applications

- Flood Light

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Product Code Information

Part No.	Description
5ELALN2T23102702	AC396_2700K_10W_230V_CRI80_82*65_PAD
5ELALN2T23104002	AC396_4000K_10W_230V_CRI80_82*65_PAD
5ELALN2T23105002	AC396_5000K_10W_230V_CRI80_82*65_PAD
5ELALN2T23105702	AC396_5700K_10W_230V_CRI80_82*65_PAD
5ELALN2T23302702	AC397_2700K_30W_230V_CRI80_120*73_PAD
5ELALN2T23304002	AC397_4000K_30W_230V_CRI80_120*73_PAD
5ELALN2T23305002	AC397_5000K_30W_230V_CRI80_120*73_PAD
5ELALN2T23505702	AC397_5700K_30W_230V_CRI80_120*73_PAD
5ELALN2T23452702	AC398_2700K_45W_230V_CRI80_168*100_PAD
5ELALN2T23454002	AC398_4000K_45W_230V_CRI80_168*100_PAD
5ELALN2T23455002	AC398_5000K_45W_230V_CRI80_168*100_PAD
5ELALN2T23455702	AC398_5700K_45W_230V_CRI80_168*100_PAD
5ELALN2T23502702	AC398_2700K_50W_230V_CRI80_168*100_PAD
5ELALN2T23504002	AC398_4000K_50W_230V_CRI80_168*100_PAD
5ELALN2T23505002	AC398_5000K_50W_230V_CRI80_168*100_PAD
5ELALN2T23505702	AC398_5700K_50W_230V_CRI80_168*100_PAD

Electrical Characteristic

Parameter	Min	Typ	Max	Unit
Rated supply voltage AC	220	230	240	V
Input voltage, AC	207	230	253	V
Mains frequency		50/60		Hz
Typ Power factor		0.95		--
Percent Flicker			30	%
THD		20		%
Beam characteristic		120		°
Operating ambient temperature		-25~+55		°C
Tc point		85		
Hi-pot Test (AC input to Bottom)	1.24			KV

Absolute Ratings

Parameter	Min	Max	Unit
Input voltage	--	253	V
Surges protection(L/N)	--	2	KV
Case Temperature (Tc)	--	95	°C
Operating ambient temperature	-25	+55	°C
Storage ambient temperature	-40	+30	°C
Storage ambient humidity	--	45	%

Electro-Optical Characteristics (Vin=230V ; Tc=25°C)

5ELALN2T2310xx02

Part No.	Parameter	Min	Typ	Max	Unit
	Power consumption	9	10	11	W
5ELALN2T23102702	Lumen Flux at Tc=25°C	--	2700K	900	Lm
5ELALN2T23104002			4000K	950	
5ELALN2T23105002			5000K	1000	
5ELALN2T23105702			5700K	1000	
	Color rendering index (Ra)	80	--	--	--

5ELALN2T2330xx02

Part No.	Parameter	Min	Typ	Max	Unit
	Power consumption	27	30	33	W
5ELALN2T23302702	Lumen Flux at Tc=25°C	--	2700K	2800	Lm
5ELALN2T23304002			4000K	2900	
5ELALN2T23305002			5000K	3000	
5ELALN2T23305702			5700K	3000	
	Color rendering index (Ra)	80	--	--	--

5ELALN2T2350xx02/5ELALN2T2345xx02

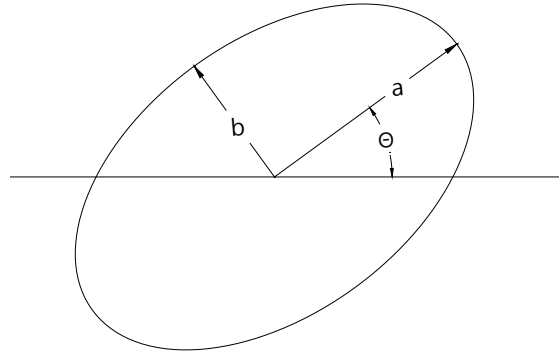
Part No.	Parameter	Min	Typ	Max	Unit
	Power consumption	45	50	55	W
5ELALN2T23502702	Lumen Flux at Tc=25°C	--	2700K	4500	Lm
5ELALN2T23504002			4000K	4750	
5ELALN2T23505002			5000K	5000	
5ELALN2T23505702			5700K	5000	
	Color rendering index (Ra)	80	--	--	--

Note:

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

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

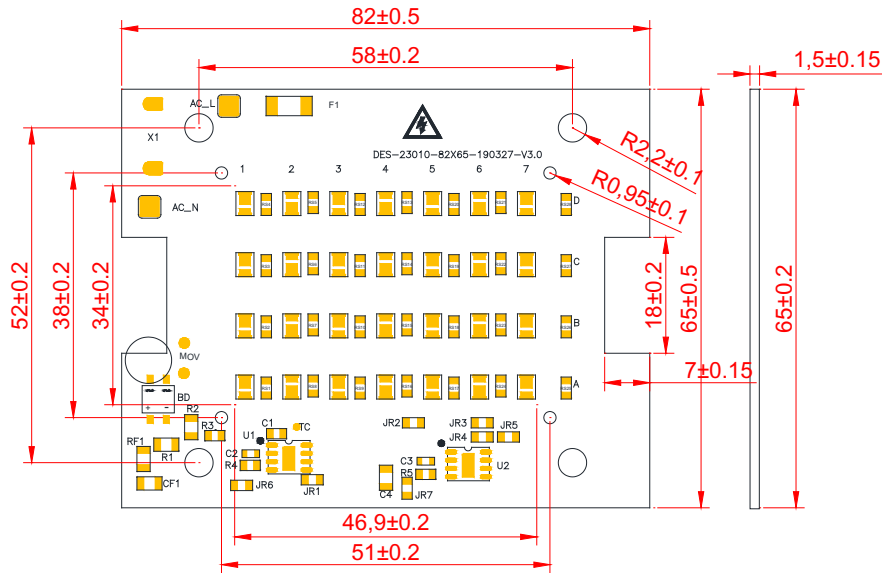
Color Coordinate



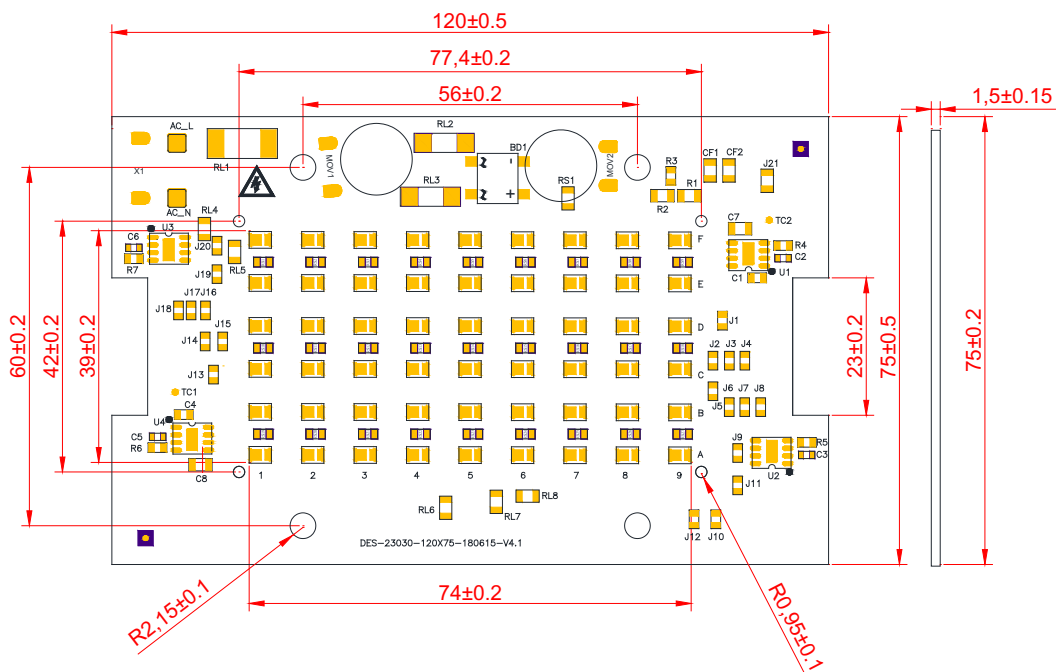
CCT	Steps	Cx	Cy	a	b	theta
2700K	5	0.4578	0.4101	0.0135	0.0070	53.7
3000K	5	0.4338	0.4030	0.0139	0.0068	53.22
4000K	5	0.3818	0.3797	0.00939	0.00402	53.72
5000K	5	0.3447	0.3553	0.00822	0.00354	59.62
5700K	5	0.3287	0.3417	0.00746	0.00320	59.09

Mechanical Dimension

5ELALN2T2310xx02

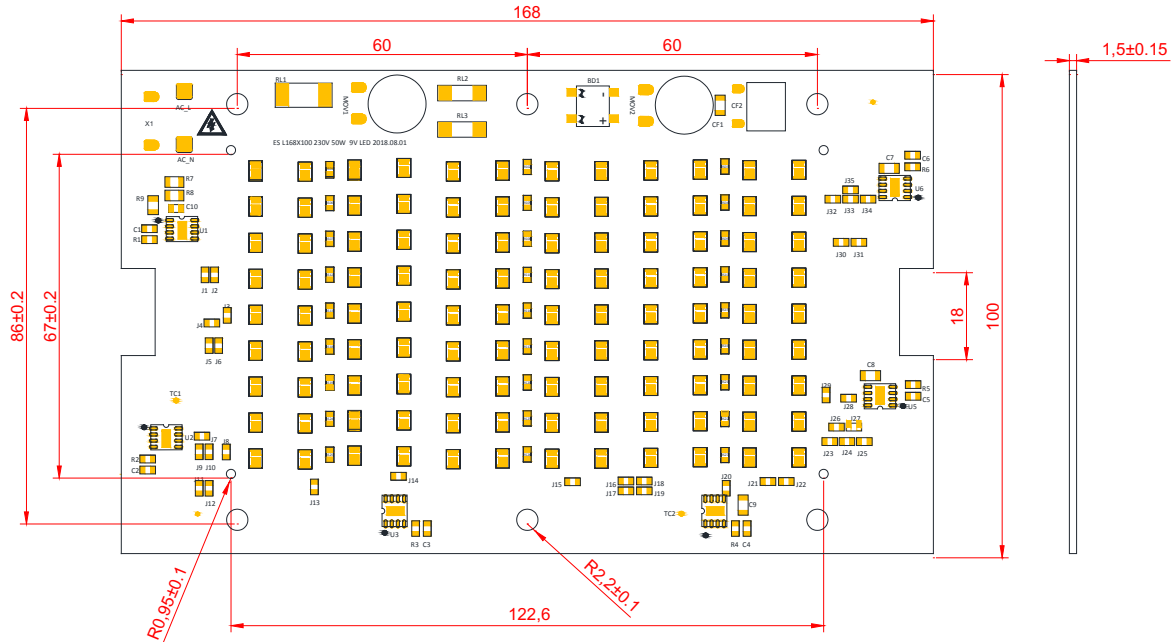


5ELALN2T2330xx02



Note:
All dimension unit in mm

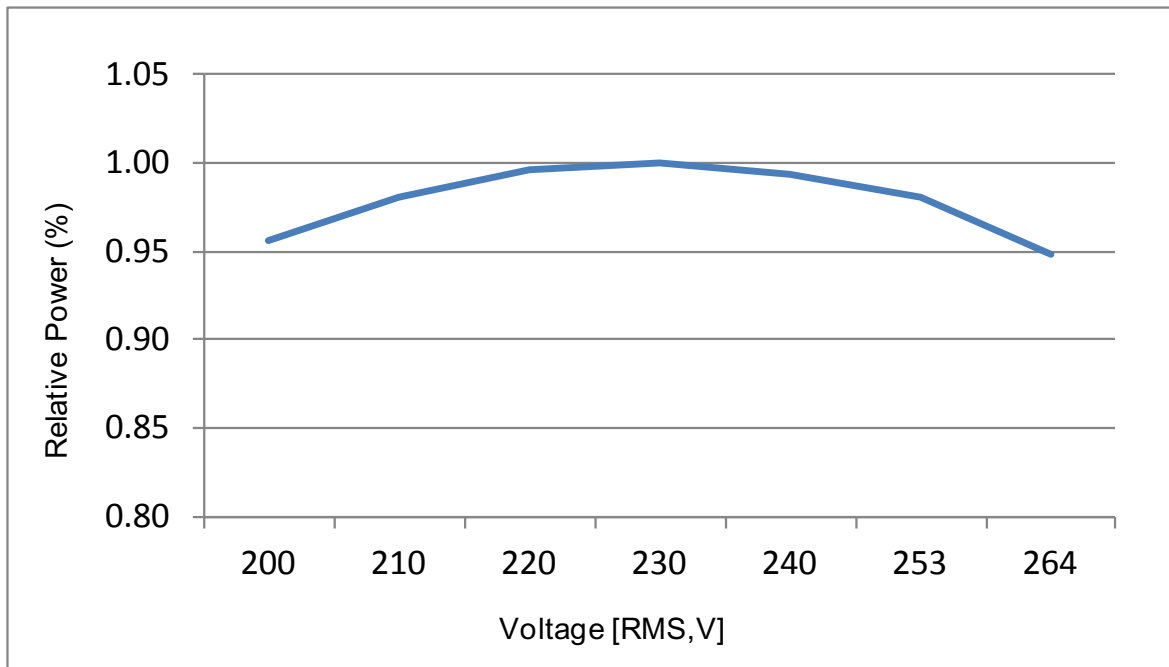
5ELALN2T2350xx02 / 5ELALN2T2345xx02



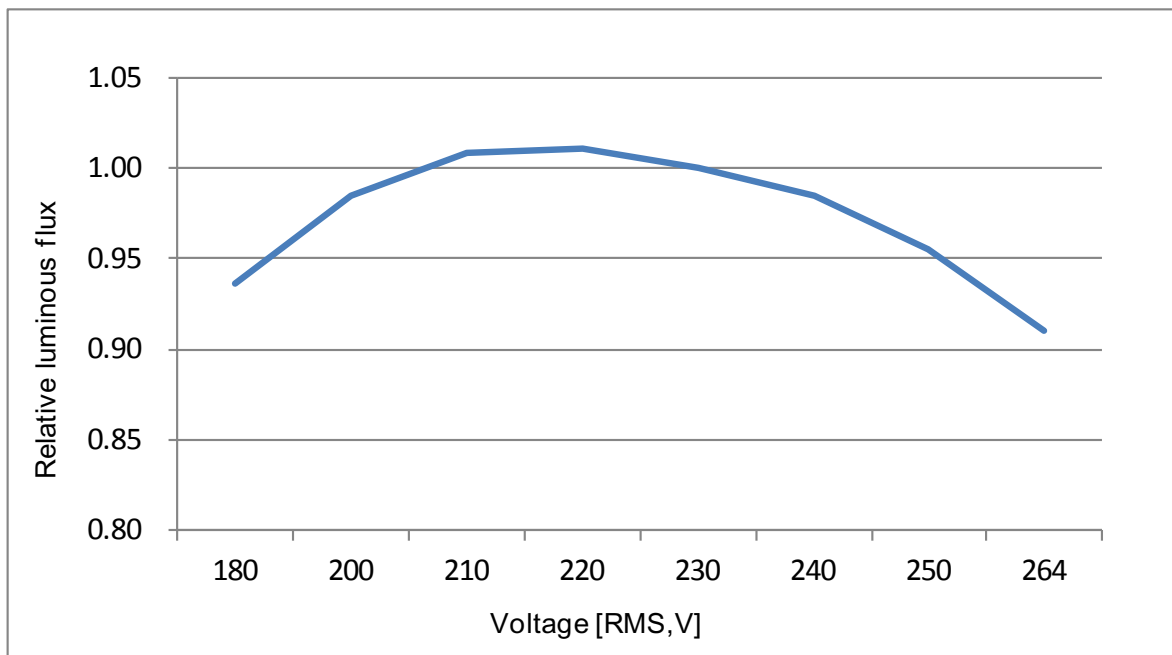
Note:
All dimension unit in mm

Characteristic curve

Relative Power Distribution vs. Voltage



Relative Luminous flux vs. Voltage

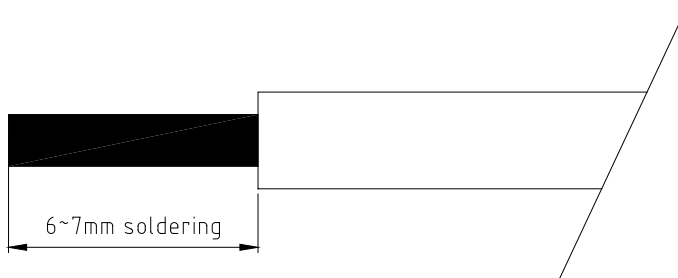


Certificate

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)



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 1700V 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 order code information	2017/07/11
2	Revise Mechanical Dimensions	2017/08/17
3	Update dimension	2019/05/17
4	Update 2700K information	2020/09/11

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

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