



EdiLex AC Dual Volt Flicker-Free Triac Series Datasheet



Customer Name _____

Document No _____

Product Description

- Working on different voltage(120V/230V) in Various Countries.
- Economic total solution
- Wire push in connector

Customer		
Direct Manager		
/ /	/ /	/ /
Edison		
Sales	RD	QA
/ /	/ /	/ /

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Product Nomenclature

<u>5</u> X1	<u>ELA</u> X2-X4	<u>C</u> X5	<u>N</u> X6	<u>2T</u> X7-X8	<u>D1</u> X9-X10	<u>17</u> X11-X12	<u>XX</u> X13-X14	<u>XX</u> X15-X16			
X1 Item	X2-X4 Module Application		X5 Dimensions		X6 IC	X7-X8 LED Item		X9-X10 Voltage			
5	Module	ELA	EdiLex AC	C	Circle	-	-	2T	PLCC	D1	120V/230V
X11-X12 Power Consumption		X13-X14 Emitting color		X15-X16 Serial Number							
17	17W	30	3000K	-	-						
		40	4000K								

Electro-Optical Characteristics (Ta=25°C)

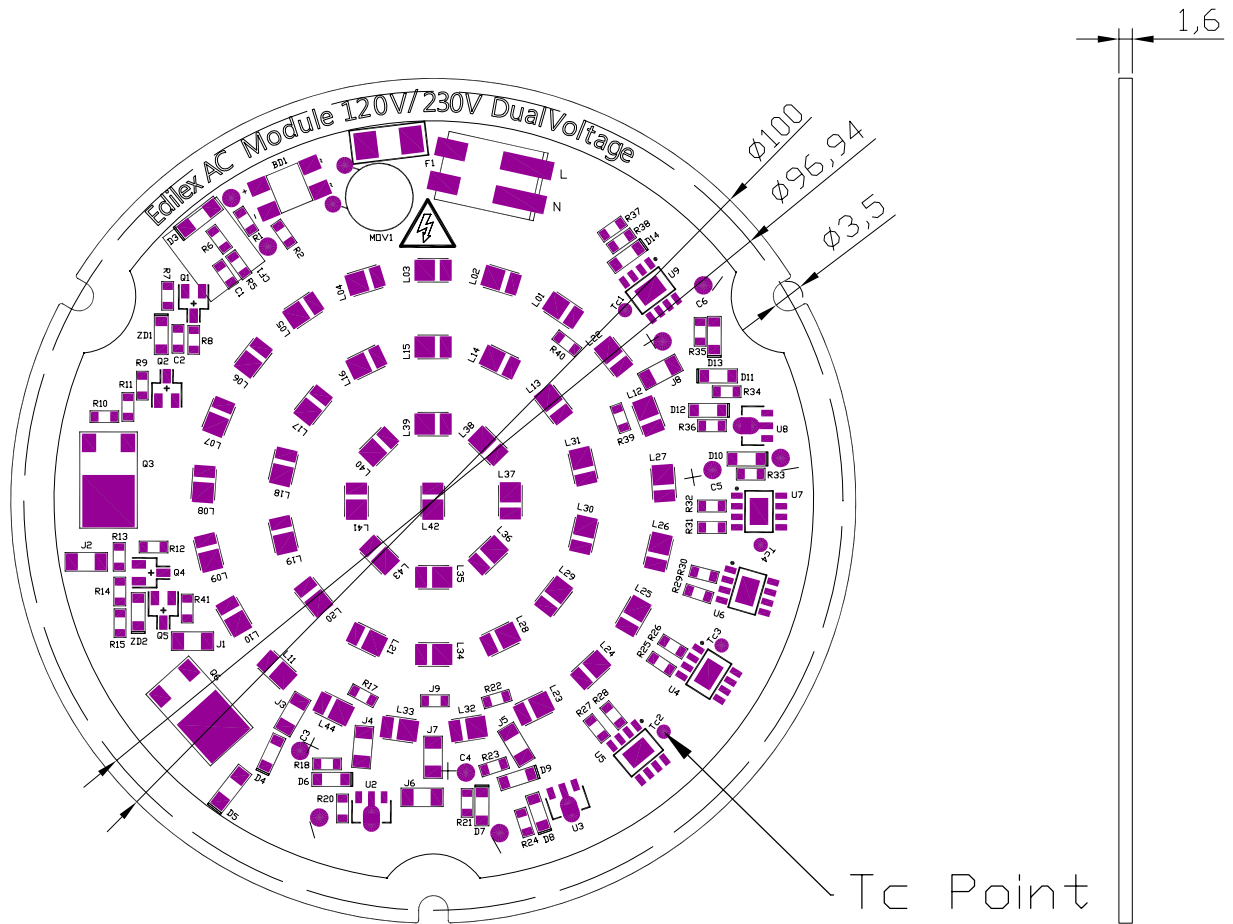
Parameter	Symbol	Min	Typ	Max	Unit
Input Voltage(Vac=120V)	V _{in}	108	120	132	Vac
Input Voltage(Vac=230V)	V _{in}	207	230	253	Vac
Operating Frequency	F	--	50/60	--	Hz
Typ Power Factor	PF	0.95	--	--	--
THD	THD	--	--	20	%
Percent Flicker	%	--	--	20	%
Viewing Angle	2θ _{1/2}	--	120	--	°
Combination Wave Surge	V _s	--	1	--	KV
Ring Wave Surge	V _s	--	2.5	--	KV

Typ. Power Consumption (W)	Color	Order Code	CCT (K)	Typ. Luminous Flux (lm)	Min. CRI	Number of LEDs
17	Warm White	5ELACN2TD1173002	3000	1700	80	44
	Neurtal White	5ELACN2TD1174002	4000	1800		
	Warm White	5ELACN2TD1173003	3000	1600	90	
	Neurtal White	5ELACN2TD1174003	4000	1700		

Notes:

- Luminous flux and power consumption are measured at Typ. Input Voltage, Tc=25°C
- Luminous flux has 10% tolerance.
- Power consumption has 10% tolerance.
- The hot-cold factor of Tc=25°C and Tc=65°C is more than 0.9.
- Surge Withstand in accordance With IEC61000-4-5.
- At 120 Vac, Seven Strikes, 100KHz 2.5KV in accordance With ANSI/IEEE C62.41.2-2002 Categorg A operation.

Mechanical Dimensions



Notes:

1. All dimensions are in millimeters.
2. Tolerance: $\pm 0.2\text{mm}$

Absolute Maximum Ratings

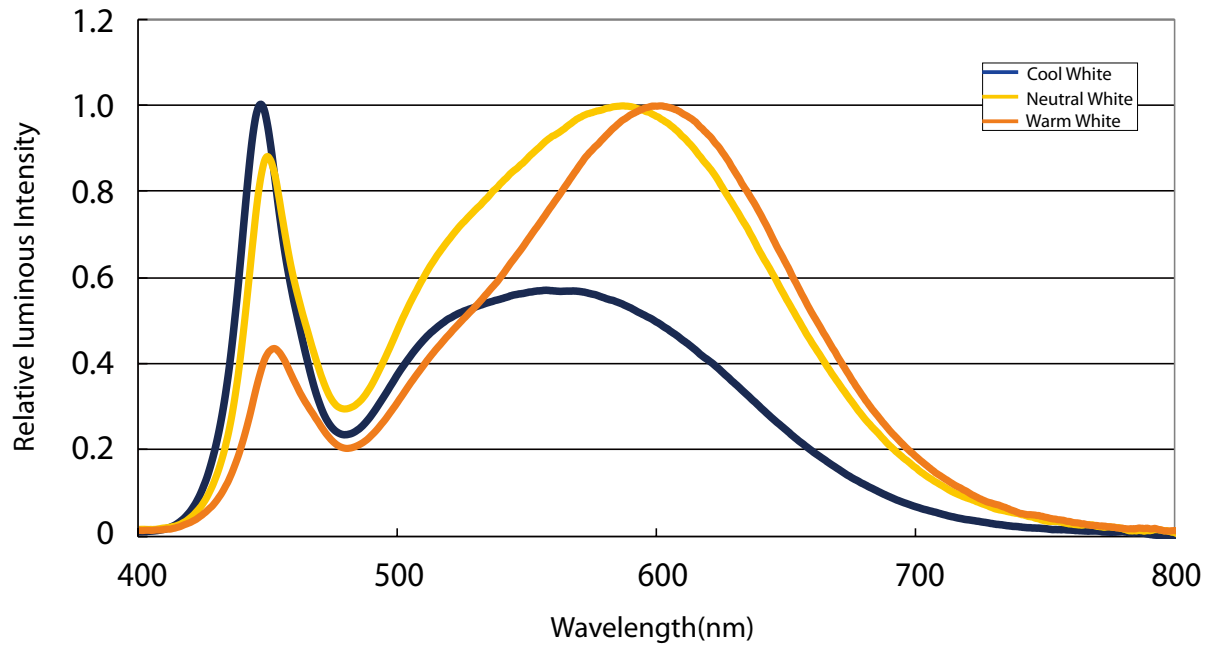
Parameter	Symbol	Value	Unit
Input Voltage(Vac=120V)	V_{in}	132	Vac
Input Voltage(Vac=230V)	V_{in}	253	Vac
Power Consumption	P	18.7	W
Storage Temperature	T_{stg}	-40 ~ 85	°C
Thermal Measurement Point	T_c	70	°C

Notes:

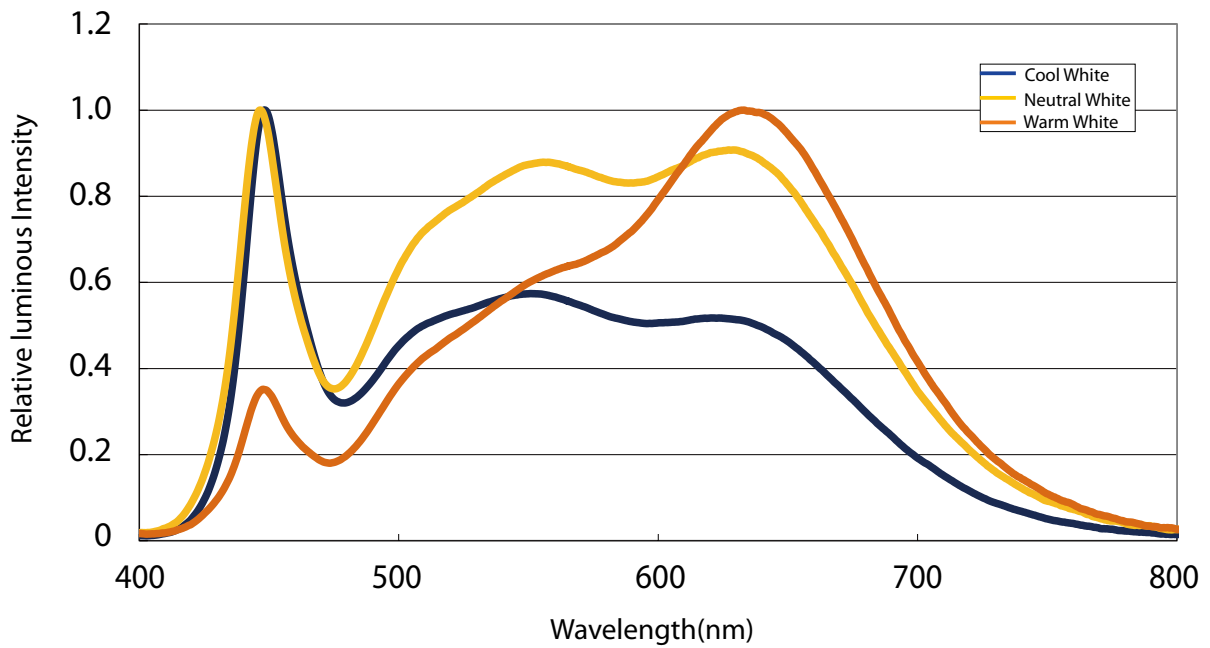
1. "Input Voltage" doesn't indicate the maximum voltage which customers use but means tolerable voltage according to each country's voltage variation rate. It is recommended that the thermal measurement point temperature(T_c) should be below 70°C.
2. The T_c recommended under 70°C while operating temperature is between -30°C~80°C.
3. When getting through voltage operation, the IC's temperature must be less than 100°C(<100°C). Otherwise, IC will start overtemperature protection, and make wattage decreased.
4. The operating temperature must below 70°C for life time 30,000 hrs L70B10.

Characteristic curve

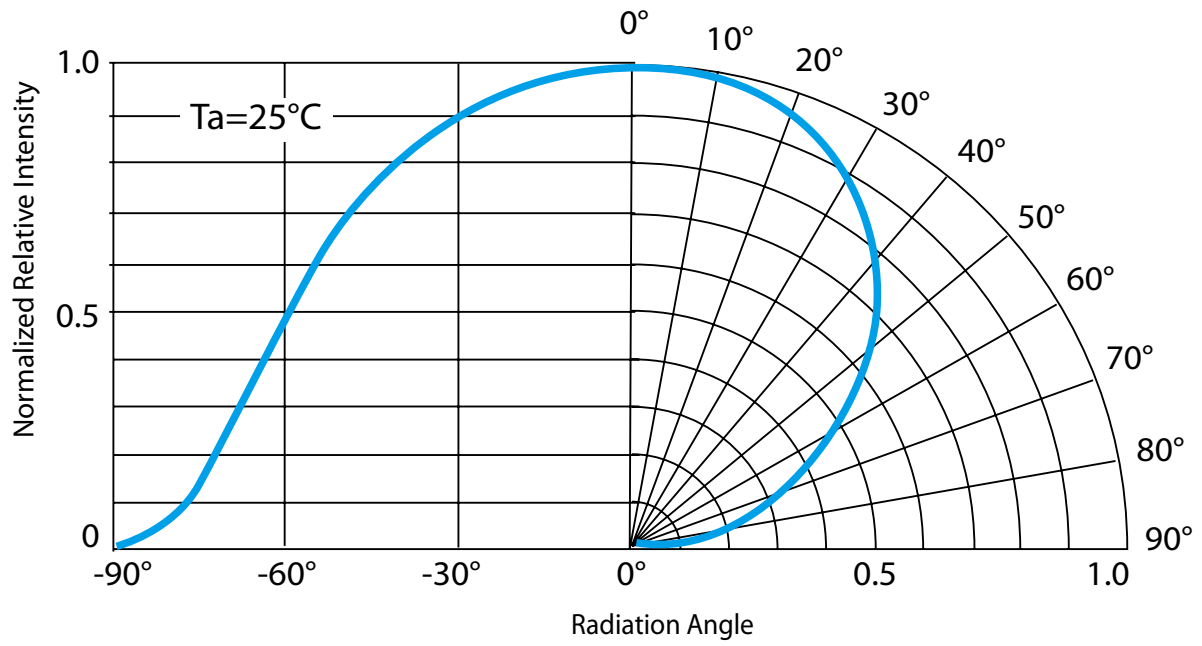
Color Spectrum (CRI80)



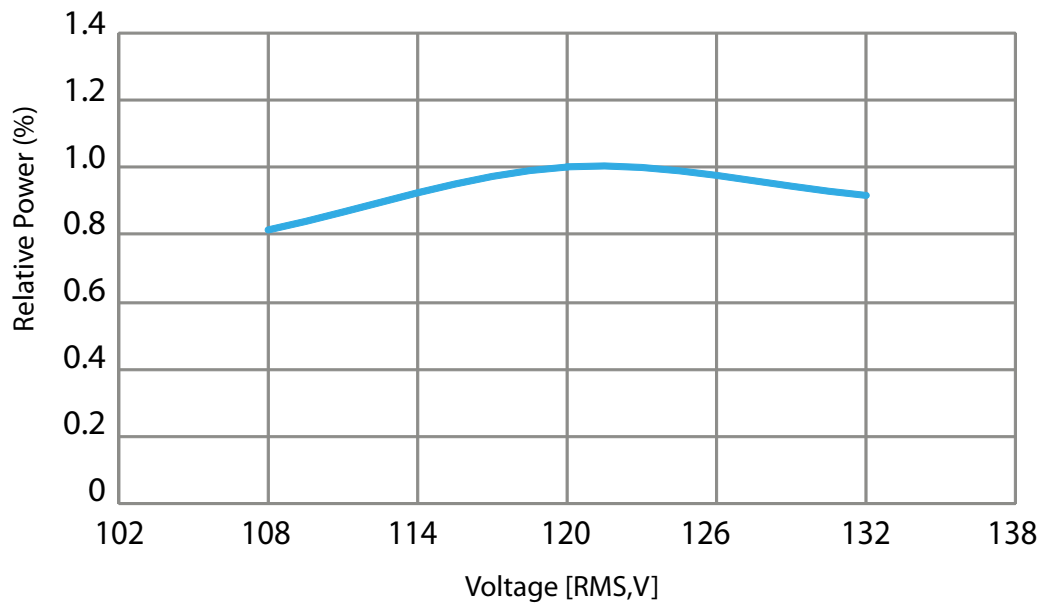
Color Spectrum (CRI90)



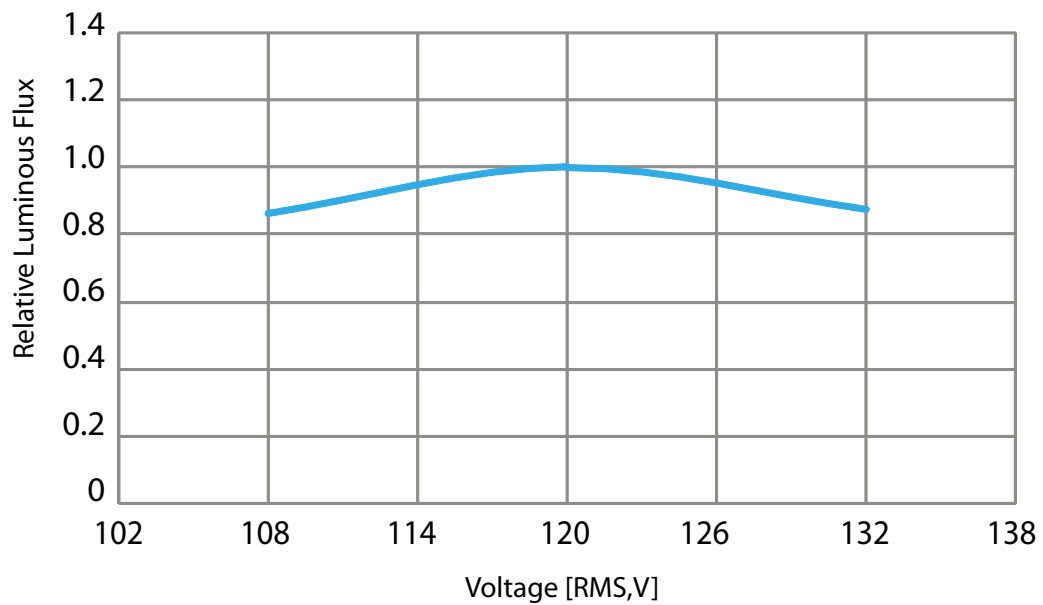
Beam Pattern



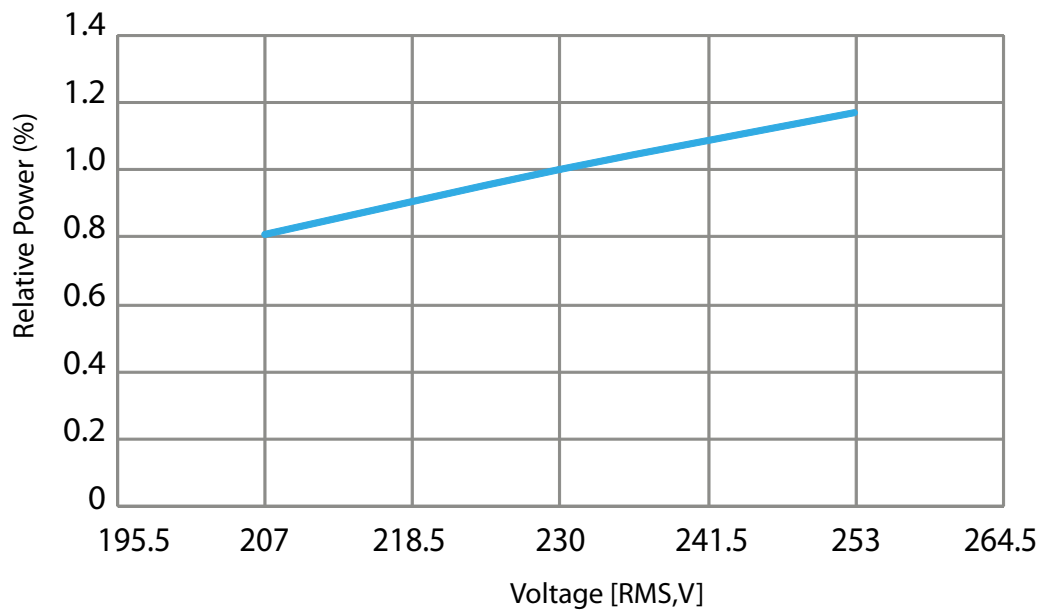
Relative Power Distribution vs. Voltage



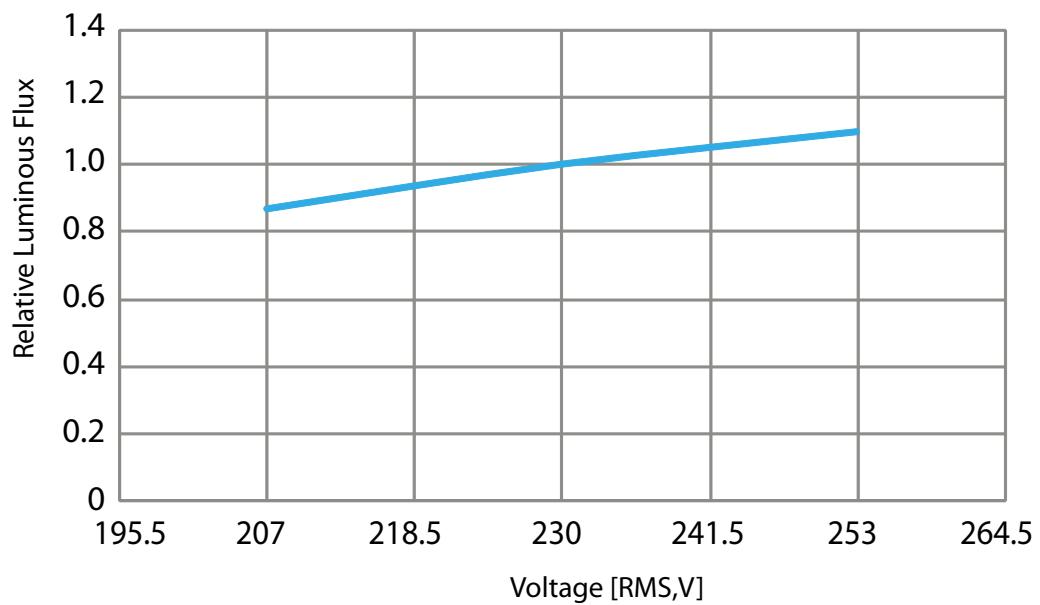
Relative Luminous flux vs. Voltage



Relative Power Distribution vs. Voltage



Relative Luminous flux vs. Voltage



Caution

1. Please note that EdiLex AC Module products are driven by high voltage, therefore when operating EdiLex 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. EdiLex 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. EdiLex 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 750V on the module.

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.

Revision History

Versions	Description	Release Date
1	Establish order code information	2017/12/15

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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