ITEM CODE : IL-611-108W

CONSTRUCTION

- Aluminum Body
- Glass diffuser
- DC 24V - SILVER FINISHING.
- IP67 Recessed type

TECHNICAL DETAILS

- PHILIPS SMD LED Chips
- DC 24V.
- Driver Meanwell
- CRI 80
- Efficacy - 90lm/W
- Power Factor 0.9
- Beam angle 15°
- DC 24V. 144W.
- Rated ambient temperature: -20°C to 35°C
- 5years Warranty

WW (2800-3000K) NW (4000-4500K) CW (6000-6500K)

APPLICATIONS

- Hotels
- Shopping malls
- Exhibition centers
- Residential projects

Model	Watts	Lumens	CCT	Dimensions(mm)
IL-611-144	144w	12960Lm	3000K	M66xH90xL2000
IL-611-100	108w	9000Lm	3000K	M66xH90xL1500
IL-613-36	36w	3240Lm	3000K	M66xH90xL1000

1 Hatton Street, London, United Kingdom, NW8 8PL, E-mail: sales@iliteuk.com, Website : www.iliteuk.com

Lumileds 2835R Series

Lumileds 2835R Series is a complementary portfolio with optimized performance and bin construction for the retrofit space. With an industry standard footprint, it provides the perfect balance between performance and cost efficiency for a variety of applications.

CHARACTERISTICS

- Flexible voltage configurations to comply with various different system solutions
- Industry standard footprint for drop-in replacement designs
- High maximum drive current to allow for reduction of LED count

Table of Contents

Part Number Nomenclature

Part numbers for the 2835R Series follow the convention below:

L 1 2 8 – **A A B B** R **C** 3 5 0 0 **D D D**

Where:

A A - designates nominal CCT (27=2700K, 30=3000K, 35=3500K, 40=4000K, 50=5000K, 57=5700K, 65=6500K)

B B - designates nominal CRI (70=70CRI, 75=75CRI, 80=80CRI and 90=90CRI)

C - designates voltage (A=3V, B=6V, C=9V, G=12V, D=18V, E=36V)

D D D - designates Lumileds internal code (0A1, 0B1, 0C1, etc.=shares the same base part)

Therefore, the following part number is used for a 2835R 3000K, 80CRI, 36V LED:

L 1 2 8 – **3 0 8 0** R **E** 3 5 0 0 **0 A 1**

Lumen Maintenance

Please contact your local Sales Representative or Lumileds Technical Solutions Manager for more information about the long- term performance of this product.

Environmental Compliance

Lumileds LLC is committed to providing environmentally friendly products to the solid-state lighting market. The 2835R Series is compliant to the European Union directives on the restriction of hazardous substances in electronic equipment, namely the RoHS Directive 2011/65/EU and REACH Regulation (EC) 1907/2006. Lumileds LLC will not intentionally add the following restricted materials to its products: lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB) or polybrominated diphenyl ethers (PBDE).

Mass Production List of 2835R Series

Product	Product Number	CCT	Ra	Φ(lm)	Φ(lm)	Φ(lm)	Test conditions
			Min	Min	Typ	Max	
2835R 6V	L128-2770RB35000L4	2700	70	142	146	-	25℃, IF=150mA
	L128-3070RB35000L4	3000	70	148	152	-	
	L128-3570RB35000L4	3500	70	155	160	-	
	L128-4070RB35000L4	4000	70	159	163	-	
	L128-4570RB35000L4	4500	70	159	163	-	
	L128-5070RB35000L4	5000	70	159	163	-	
	L128-5770RB35000L4	5700	70	159	163	-	
	L128-6570RB35000L4	6500	70	159	163	-	

Notes:

1.Tolerance of Color Rendering Inder: ±2.
2.Tolerance of Luminous flux: ±5%.

Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Value	Unit	Test Condition
Power dissipation	Pd	1320	mW	-
Forward current	IF	200	mA	-
Pulsed Forward Current	IPF	300	mA	Duty 1/10,pulse width 10ms
Operating temperature range	Top	-40~+105	℃	-
Storage temperature range	Tstg	-40~+105	℃	-
Heatresistance	Rth	15	℃/W	-
Junction temperature	Tj	125	℃	-
Electrostatic Discharge	ESD	2000	V	-

Electro-optical Characteristics (Ta=25°C)

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	Vf	5.8	-	6.6	V	IF=150mA
Luminous flux	Φ	142	-	-	lm	IF=150mA
Viewing Angle	2 θ 1/2	-	120	-	Deg	IF=150mA
Color Index	Ra	70	-	-	-	IF=150mA

NOTES：

* The measurement of forward voltage maintains a tolerance of ± 0.05V, flux maintains a tolerance of ± 5%.
* Ra measurement tolerance is ±2.
* Rth j-sp is the thermal resistance from LED junction to solder point on MCPCB with electrical power.
* the product is not designed to be used under reverse voltage.

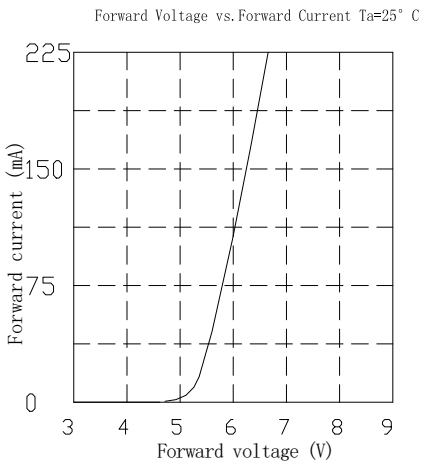
Reliability Test Items And Conditions

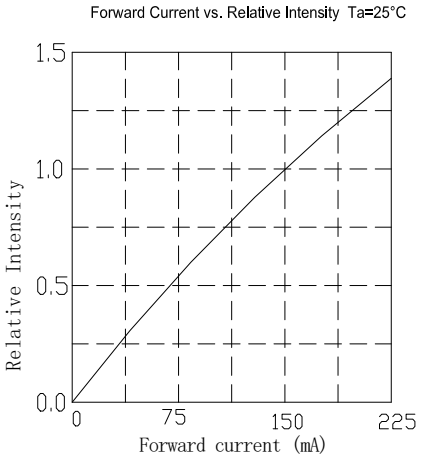
Test Items	Test condition	Time	Quantity	Ac/Re
Reflow Soldering	Temp. :260℃/10sec.	6Min.	22pcs	0/22
Thermal Shock	-40~125C, 15min dwell, 10sec transfer	100Cycles	22pcs	0/22
High Temperature High Humidity life Test	85℃,85%RH, IF=150mA	1000Hrs.	10pcs	0/10
Low Temperature Storage	Ta=-40℃	1000Hrs.	10pcs	0/10
High Temperature Storage	Ta=105℃	1000Hrs.	10pcs	0/10
High Temperature Operation Life Test	Ta=85℃, IF =150mA.	1000Hrs.	10pcs	0/10

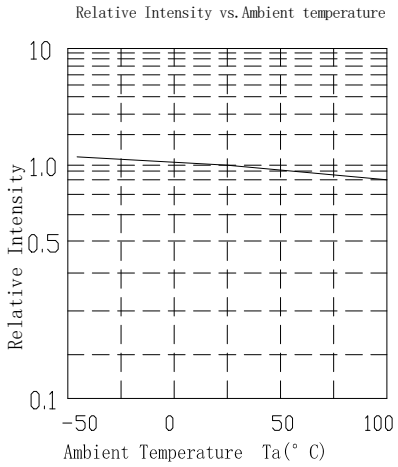
Failure Criteria

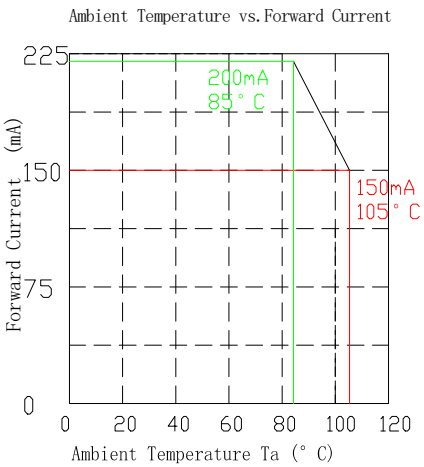
Item	Symbol	Failure Criteria
Luminous Flux	Lm	≧70%
Forward voltage	VF	±10%
Colour	CIE_X CIE_y	±0.01

Typical Optical Characteristics Curves

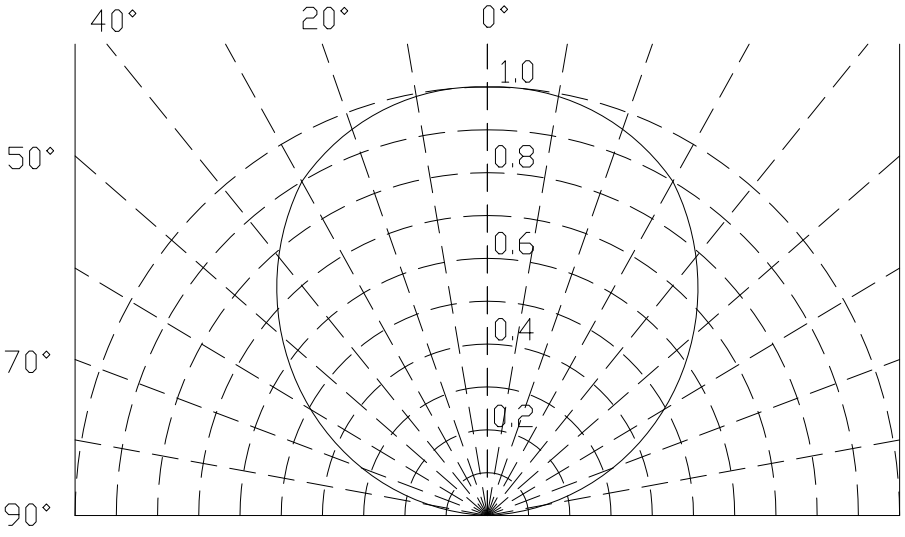






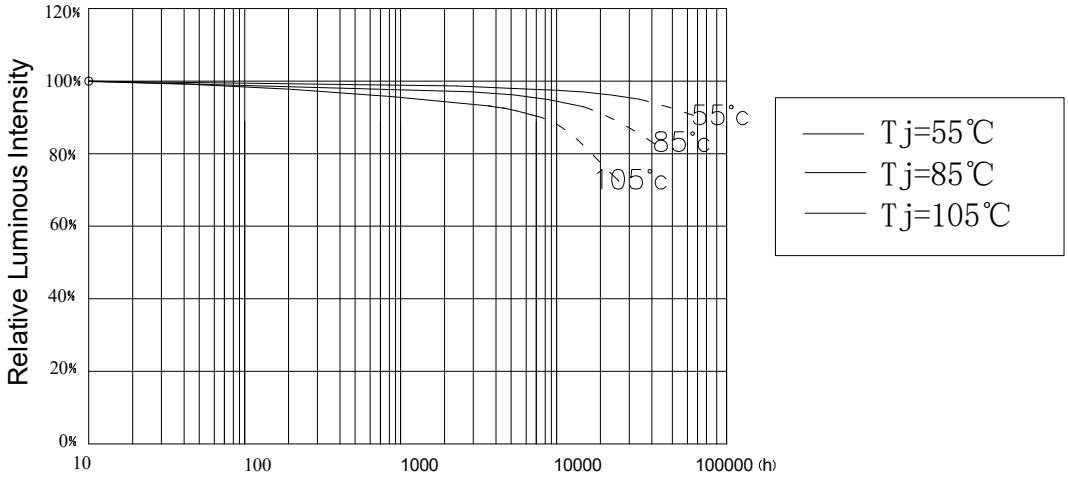


Curves of beam angle and relative brightness

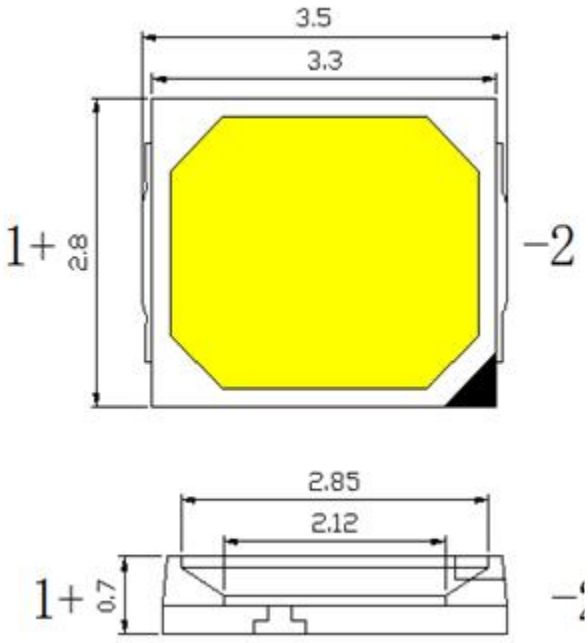


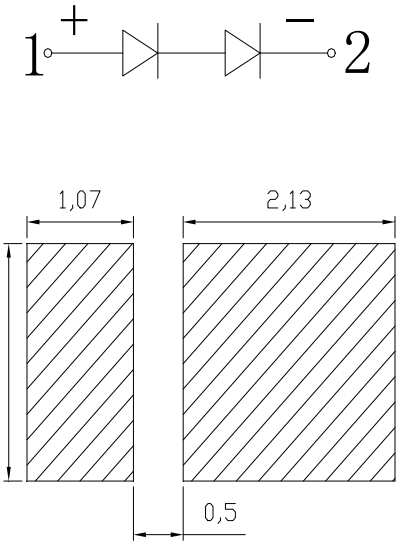
life test:

Affect of Tj on Luminous Maintenance
(If=150mA)
(Dot line: Expected Life)



Mechanical Dimensions





For reflow soldering

Product Bin and Labeling Definitions

Decoding Product Bin Labeling

In the manufacturing of semiconductor products, there are variations in performance around the average values given in the technical datasheet. For this reason, Lumileds bins LED components for luminous flux or radiometric power, color point, peak or dominant wavelength and forward voltage.

2835R Series LEDs are labeled using a 5-digit alphanumeric CAT code following the format below

Where:

A B C D E

A - designates luminous flux bin (example: B=95 to 100 lumens, G=140 to 150 lumens)

B C D - designates correlated color bin (example: A27, A30, A35, A40, A50, A57, A65)

E - designates forward voltage bin (example: B=34.5 to 35.0V, J=38.0 to 38.5V)

Therefore, a 2835R LED with a lumen range of 95 to 100, color bin of A35 and a forward voltage range of 38.0 to 38.5V has the following CAT code:

B A 3 5 J

Luminous Flux Bins

Luminous flux bin definitions for 2835R Series at rated current, Ta=25°C .

Product Number	Bin	Min	Max
L128-XX70RB35000L4	G	140	150
	H	150	160
	J	160	170
	K	170	180

Notes

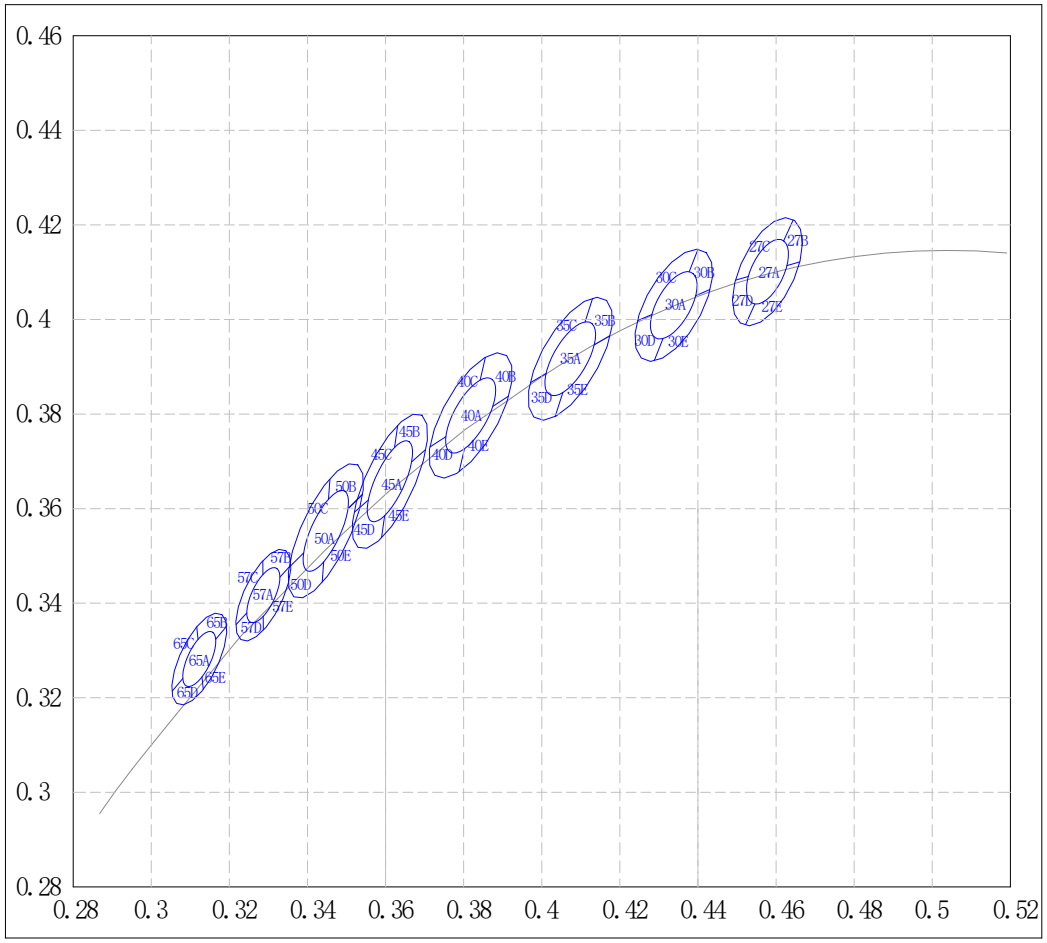
Lumileds Maintains a tolerance of ±5% on lumionous flux measurements

Forward Voltage Bins

Forward voltage bin definitions for 2835R Series at rated current, Ta=25°C .

Product Number	Bin	Min	Max
L128-XX70RB35000L4	B	5.8	6.0
	C	6.0	6.2
	D	6.2	6.4
	E	6.4	6.6

Color Bin Definition



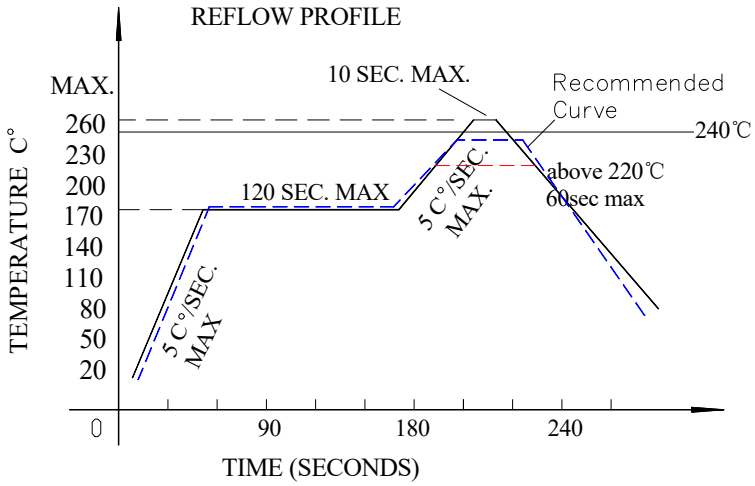
Correlated color temperature bin definitions for 2835R Series at rated current, Ta=25°C

CCT	Color space	Center X	Center Y	a	b	Rotation Angle
2700K	3-Step	0.4578	0.4101	0.007700	0.004000	57.28
	5-Step	0.4578	0.4101	0.012900	0.006700	57.28
3000K	3-Step	0.4338	0.403	0.008346	0.004098	53.16
	5-Step	0.4338	0.403	0.013910	0.006831	53.16
3500K	3-Step	0.4073	0.3917	0.009271	0.004139	52.96
	5-Step	0.4073	0.3917	0.015452	0.006899	52.96
4000K	3-Step	0.3818	0.3797	0.009386	0.004035	54
	5-Step	0.3818	0.3797	0.015644	0.006725	54
4500K	3-Step	0.3611	0.3658	0.009710	0.003600	59.62
	5-Step	0.3611	0.3658	0.016183	0.006000	59.62
5000K	3-Step	0.3447	0.3553	0.009710	0.003600	59.62
	5-Step	0.3447	0.3553	0.016183	0.006000	59.62
5700K	3-Step	0.3287	0.3417	0.006617	0.002855	58.38
	5-Step	0.3287	0.3417	0.011029	0.004758	58.38
6500K	3-Step	0.3123	0.3282	0.006617	0.002855	58.38
	5-Step	0.3123	0.3282	0.011029	0.004758	58.38

bin Colde	27A/B/C/D/E		30A/B/C/D/E		35A/B/C/D/E		40A/B/C/D/E	
CCT	2700K		3000K		3500K		4000K	
#	x	y	x	y	x	y	x	y
1	0.4813	0.4319	0.4562	0.426	0.4299	0.4165	0.4005	0.4044
2	0.4688	0.429	0.4431	0.4213	0.4148	0.409	0.3866	0.3955
3	0.4562	0.426	0.4299	0.4165	0.3996	0.4015	0.3726	0.3866
4	0.4468	0.4077	0.4223	0.399	0.3943	0.3853	0.3693	0.3719
5	0.4373	0.3893	0.4147	0.3814	0.3889	0.369	0.366	0.3572
6	0.4483	0.3919	0.426	0.3854	0.4018	0.3752	0.3779	0.3644
7	0.4593	0.3944	0.4373	0.3893	0.4147	0.3814	0.3897	0.3716
8	0.4703	0.4132	0.4468	0.4077	0.4223	0.399	0.3943	0.3853
bin Colde	45A/B/C/D/E		50A/B/C/D/E		57A/B/C/D/E		65A/B/C/D/E	
CCT	4500K		5000K		5700K		6500K	
#	x	y	x	y	x	y	x	y
1	0.3757	0.3893	0.3587	0.3792	0.3377	0.3617	0.3206	0.3482
2	0.3636	0.3804	0.346	0.3687	0.3285	0.3533	0.3112	0.3388
3	0.3515	0.3715	0.3333	0.3583	0.3194	0.345	0.3018	0.3294
4	0.3499	0.3577	0.3331	0.3458	0.3201	0.334	0.3038	0.3199
5	0.3483	0.3439	0.3329	0.3333	0.3208	0.3231	0.3059	0.3104
6	0.3585	0.3512	0.3435	0.3416	0.3287	0.33	0.3138	0.3181
7	0.3687	0.3585	0.3541	0.35	0.3367	0.337	0.3221	0.3261
8	0.3722	0.3739	0.3564	0.365	0.3372	0.3493	0.3213	0.3371

Notes
Tester tolerance: ±0.01 in x and y coordinates

Requirements for Application and Reflow Soldering



Reflow soldering curve

(Product is highest resistant to 260˚C reflow but suggested the highest temperature of 240˚C within)

■ **Notes for reflow soldering：**

1. No more than twice for reflow soldering.
2. To ensure the quality of our LEDs, we encapsulate them with silica gels. So please do not put pressure on the LEDs.
3. Please choose the right nozzle(try to learn from the plastic products parts) to avoid the damage to products due to the pressure.
4. Please put on the antistatic hand loop during the use. The worktable should be with antistatic finish. The equipments must be contacted with ground.

■ **Handwork soldering：**

1. During the soldering, the electronic soldering iron must be kept under the temperature of 300˚C and the soldering time must not be beyond 3 seconds. No touch between the electronic soldering iron and colloid.
2. Handwork soldering is only allowed once. We won't take responsibility for more than that.
3. Avoid using sharp objects to compress products Colloidal Part directly.
4. Please put on the antistatic hand loop during the use. The worktable should be with antistatic finish. The equipments must be contacted with ground.

About Lumileds

Companies developing automotive, mobile, IoT and illumination lighting applications need a partner who can collaborate with them to push the boundaries of light. With over 100 years of inventions and industry firsts, Lumileds is a global lighting solutions company that helps customers around the world deliver differentiated solutions to gain and maintain a competitive edge. As the inventor of Xenon technology, a pioneer in halogen lighting and the leader in high performance LEDs, Lumileds builds innovation, quality and reliability into its technology, products and every customer engagement. Together with its customers, Lumileds is making the world better, safer, more beautiful—with light.

To learn more about our lighting solutions, visit lumileds.com

Lumileds 2835R Product Datasheet

180~240W Constant Voltage + Constant Current LED Driver ELG-240 series

User's Manual

IS 15885(Part 2/Sec13)
R-41027766
(Please refer safety description)

(for DA-Type only) SELV IP65 IP67 Type HL

Features

- Constant Voltage + Constant Current mode output
- Metal housing design with functional Ground
- Built-in active PFC function
- No load / Standby power consumption <0.5W
- IP67 / IP65 rating for indoor or outdoor installations
- Function options: output adjustable via potentiometer; 3 in 1 dimming (dim-to-off); Smart timer dimming; DALI
- Typical lifetime>50000 hours
- 5 years warranty

Applications

- LED street lighting
- LED architectural lighting
- LED bay lighting
- LED floodlighting
- Type "HL" for use in Class I, Division 2 hazardous (Classified) location.

GTIN CODE

MW Search: https://www.meanwell.com/serviceGTIN.aspx

Description

ELG-240 series is a 240W AC/DC LED driver featuring the dual mode constant voltage and constant current output. ELG-240 operates from 100～305VAC and offers models with different rated voltage ranging between 24V and 54V. Thanks to the high efficiency up to 93%, with the fanless design, the entire series is able to operate for -40℃ ~ +90℃ case temperature under free air convection. The design of metal housing and IP67/IP65 ingress protection level allows this series to fit both indoor and outdoor applications. ELG-240 is equipped with various function options, such as dimming methodologies, so as to provide the optimal design flexibility for LED lighting system

Model Encoding

ELG - 240 - 24 A - □

- □ Input wiring type: Blank:2-wire input for standard model; 3Y:3-wire input for standard model
- A Function mode option
- 24 Rated output voltage(24/36/42/48/54V)
- 240 Rated wattage
- ELG Series name

Type	IP Level	Function	Note
Blank	IP67	Io and Vo fixed.	In Stock
A	IP65	Io and Vo adjustable through built-in potentiometer.	In Stock
B	IP67	3 in 1 dimming function (0~10Vdc, 10V PWM signal and resistance)	In Stock
AB	IP65	Io and Vo adjustable through built-in potentiometer & 3 in 1 dimming function (0~10Vdc, 10V PWM signal and resistance)	In Stock
DA	IP67	DALI control technology.	In Stock
Dx	IP67	Built-in Smart timer dimming function by user request.	By request
D2	IP67	Built-in Smart timer dimming and programmable function.	In Stock

SPECIFICATION

MODEL		ELG-240-24 ☐	ELG-240-36 ☐	ELG-240-42 ☐	ELG-240-48 ☐	ELG-240-54 ☐
OUTPUT	DC VOLTAGE	24V	36V	42V	48V	54V
	CONSTANT CURRENT REGION Note.2	12 ~ 24V	18 ~ 36V	21 ~ 42V	24 ~ 48V	27 ~ 54V
	RATED CURRENT	10A	6.66A	5.71A	5.0A	4.45A
	RATED POWER	200VAC ~ 305VAC				
		240W	239.76W	239.82W	240W	240.3W
		100VAC ~ 180VAC				
		180W	180W	179.76W	180W	180.36W
	RIPPLE & NOISE (max.) Note.3	200mVp-p	250mVp-p	250mVp-p	250mVp-p	350mVp-p
	VOLTAGE ADJ. RANGE	Adjustable for A/AB-Type only (via built-in potentiometer)				
		22.4 ~ 25.6V	33.5 ~ 38.5V	39 ~ 45V	44.8 ~ 51.2V	50 ~ 57V
	CURRENT ADJ. RANGE	Adjustable for A/AB-Type only (via built-in potentiometer)				
		5 ~ 10A	3.33 ~ 6.66A	2.86 ~ 5.71A	2.5 ~ 5A	2.23 ~ 4.45A
	VOLTAGE TOLERANCE Note.4	±2.0%	±2.0%	±2.0%	±2.0%	±2.0%
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	SETUP, RISE TIME Note.6	500ms, 100ms/230VAC, 1000ms, 100ms/115VAC				
	HOLD UP TIME (Typ.)	10ms/ 230VAC 10ms/ 115VAC				
INPUT	VOLTAGE RANGE Note.5	100 ~ 305VAC 142 ~ 431VDC (Please refer to "STATIC CHARACTERISTIC" section)				
	FREQUENCY RANGE	47 ~ 63Hz				
	POWER FACTOR	PF≧0.97/115VAC, PF≧0.95/230VAC, PF≧0.92/277VAC@full load (Please refer to "POWER FACTOR (PF) CHARACTERISTIC" section)				
	TOTAL HARMONIC DISTORTION	THD< 20%(@load≧50%/115VC,230VAC; @load≧75%/277VAC) (Please refer to "TOTAL HARMONIC DISTORTION(THD)" section)				
	EFFICIENCY (Typ.)	92%	92%	92.5%	93%	93%
	AC CURRENT	2.2A / 115VAC 1.5A / 230VAC 1.2A/277VAC				
	INRUSH CURRENT(Typ.)	COLD START 60A(twidth=510μs measured at 50% Ipeak) at 230VAC; Per NEMA 410				
	MAX. No. of PSUs on 16A CIRCUIT BREAKER	4 units (circuit breaker of type B) / 6 units (circuit breaker of type C) at 230VAC				
	LEAKAGE CURRENT	<0.75mA / 277VAC				
	NO LOAD / STANDBY POWER CONSUMPTION Note.7	No load power consumption <0.5W for Blank / A / Dx / D-Type Standby power consumption <0.5W for B / AB / DA-Type				
PROTECTION	OVER CURRENT	95 ~ 108%				
		Constant current limiting, recovers automatically after fault condition is removed				
	SHORT CIRCUIT	Hiccup mode, recovers automatically after fault condition is removed				
	OVER VOLTAGE	27 ~ 34V	42 ~ 49V	47 ~ 54V	54 ~ 63V	60 ~ 67V
		Shut down output voltage, re-power on to recover				
	OVER TEMPERATURE	Shut down output voltage, re-power on to recover				
ENVIRONMENT	WORKING TEMP.	Tcase=-40 ~ +90℃ (Please refer to " OUTPUT LOAD vs TEMPERATURE" section)				
	MAX. CASE TEMP.	Tcase=+90℃				
	WORKING HUMIDITY	20 ~ 95% RH non-condensing				
	STORAGE TEMP., HUMIDITY	-40 ~ +90℃, 10 ~ 95% RH				
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 60℃)				
	VIBRATION	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes				
SAFETY & EMC	SAFETY STANDARDS	UL8750(type"HL"), CSA C22.2 No. 250.13-12;IEC/BS EN/EN/AS/NZS 61347-1, IEC/BS EN/EN/AS/NZS 61347-2-13 independent, BS EN/EN62384; EAC TP TC 004;BIS IS15885(for 24/24A/24B/24DA/36/36A/36B/42/42A/42B/48/48A/48B/54/54A/54ADA/54B only); GB19510.14,GB19510.1; IP65 or IP67;KC61347-1,KC61347-2-13 approved				
	DALI STANDARDS	Compliance to IEC62386-101,102,(207 by request) for DA Type only				
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC I/P-FG:2.0KVAC O/P-FG:1.5KVAC				
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25℃/ 70% RH				
	EMC EMISSION	Compliance to BS EN/EN55015,BS EN/EN61000-3-2 Class C (@load≧50%) ; BS EN/EN61000-3-3; GB/T 17743, GB17625.1;EAC TP TC 020; KC KN15,KN61547				
	EMC IMMUNITY	Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11; BS EN/EN61547, light industry level (surge immunity Line-Earth 6KV, Line-Line 4KV);EAC TP TC 02; KC KN15,KN61547				
OTHERS	MTBF	2391.4K hrs min. Telcordia SR-332 (Bellcore) ; 190.7K hrs min. MIL-HDBK-217F (25℃)				
	DIMENSION	244*71*37.5mm (L*W*H)				
	PACKING	1.22Kg; 12pcs / 15.2Kg / 0.72CUFT				

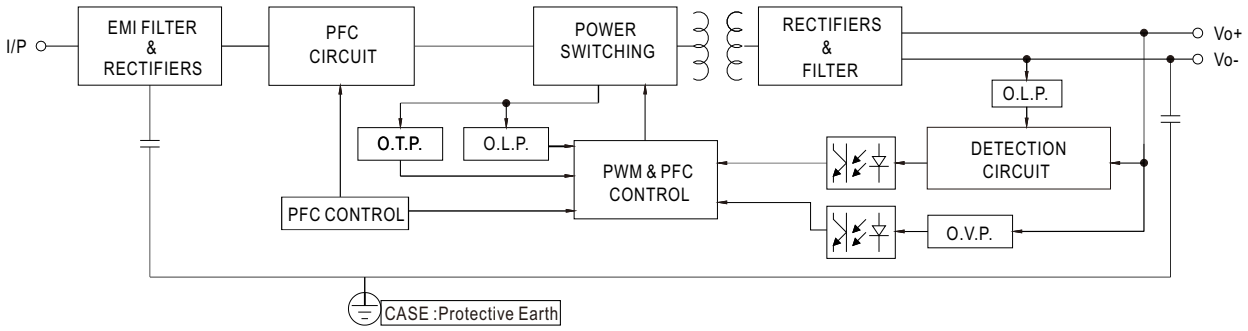
NOTE

1. All parameters NOT specially mentioned are measured at 230VAC input, rated current and 25℃ of ambient temperature.
2. Please refer to "DRIVING METHODS OF LED MODULE".
3. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
4. Tolerance : includes set up tolerance, line regulation and load regulation.
5. De-rating may be needed under low input voltages. Please refer to "STATIC CHARACTERISTIC" sections for details.
6. Length of set up time is measured at first cold start. Turning ON/OFF the driver may lead to increase of the set up time.
7. No load/standby power consumption is specified for 230VAC input.
8. The driver is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-qualify EMC Directive on the complete installation again. (as available on https://www.meanwell.com//Upload/PDF/EMI_statement_en.pdf)
9. This series meets the typical life expectancy of >50,000 hours of operation when Tcase, particularly (tc) point (or TMP, per DLC), is about 70℃ or less.
10. Please refer to the warranty statement on MEAN WELL's website at http://www.meanwell.com
11. The ambient temperature derating of 3.5℃/1000m with fanless models and of 5℃/1000m with fan models for operating altitude higher than 2000m(6500ft).
12. For any application note and IP water proof function installation caution, please refer our user manual before using. https://www.meanwell.com/Upload/PDF/LED_EN.pdf
13. To fulfill requirements of the latest ErP regulation for lighting fixtures, this LED power supply can only be used behind a switch without permanently connected to the mains.
14. For A/AB type need to consider build in using to comply with Type HL application.

※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx

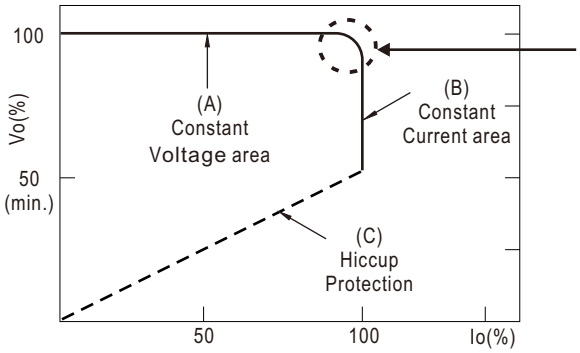
■ Block Diagram

PFC fosc : 50~120KHz
PWM fosc : 60~130KHz



■ DRIVING METHODS OF LED MODULE

※ This series is able to work in either Constant Current mode (a direct drive way) or Constant Voltage mode (usually through additional DC/DC driver) to drive the LEDs.

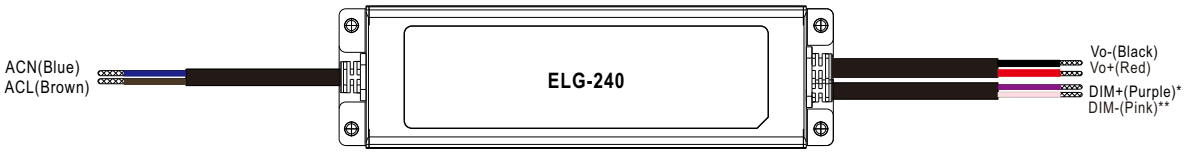


Typical output current normalized by rated current (%)

In the constant current region, the highest voltage at the output of the driver depends on the configuration of the end systems.

Should there be any compatibility issues, please contact MEAN WELL.

■ DIMMING OPERATION

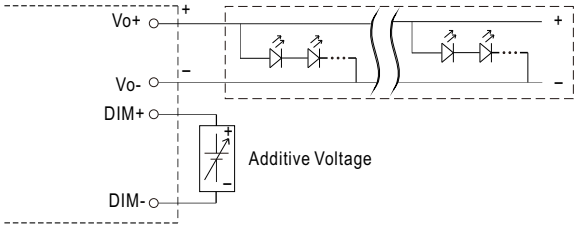


* DIM+ for B/AB-Type
DA+ for DA-Type
PROG+ for D2-Type
* *DIM- for B/AB-Type
DA- for DA-Type
PROG- for D2-Type

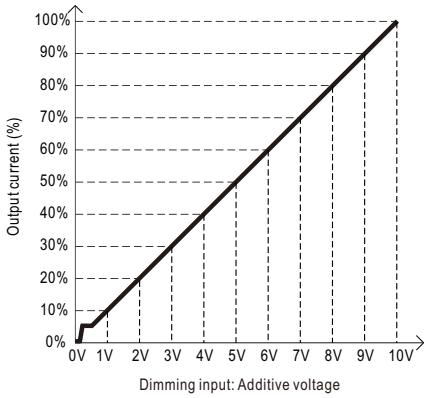
※ 3 in 1 dimming function (for B/AB-Type)

- Output constant current level can be adjusted by applying one of the three methodologies between DIM+ and DIM-: 0 ~ 10VDC, or 10V PWM signal or resistance.
- Direct connecting to LEDs is suggested. It is not suitable to be used with additional drivers.
- Dimming source current from power supply: 100μA (typ.)

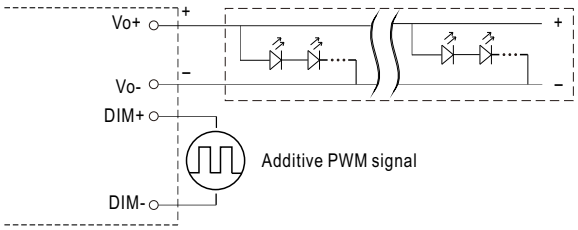
◎ Applying additive 0 ~ 10VDC



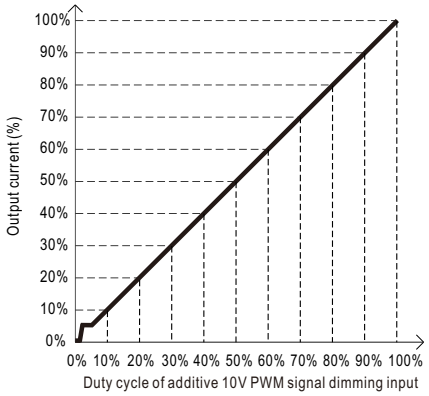
"DO NOT connect "DIM- to Vo-"



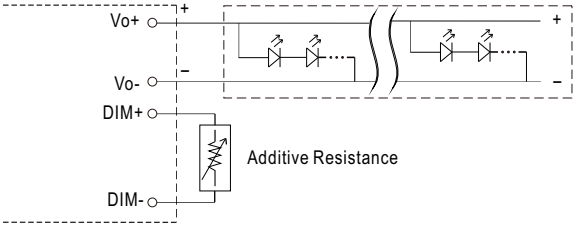
◎ Applying additive 10V PWM signal (frequency range 100Hz ~ 3KHz):



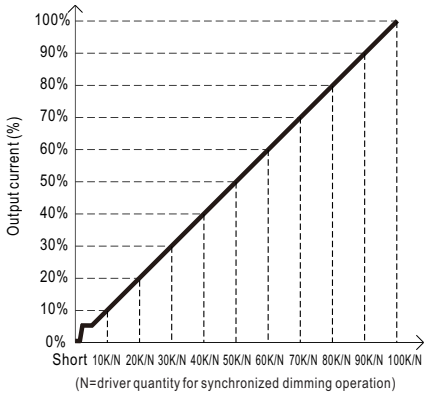
"DO NOT connect "DIM- to Vo-"



◎ Applying additive resistance:



"DO NOT connect "DIM- to Vo-"



Note : 1. Min. dimming level is about 8% and the output current is not defined when 0%< Iout<8%.
2. The output current could drop down to 0% when dimming input is about 0kΩ or 0Vdc, or 10V PWM signal with 0% duty cycle.

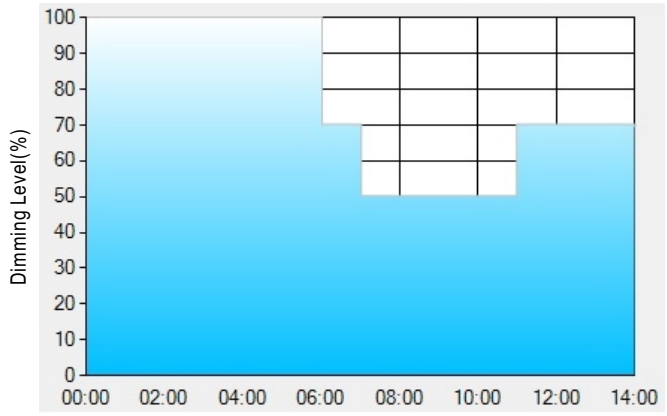
※ **DALI Interface (primary side; for DA-Type)**

- Apply DALI signal between DA+ and DA-.
- DALI protocol comprises 16 groups and 64 addresses.
- First step is fixed at 8% of output.

※ **Smart timer dimming function (for Dxx-Type by User definition)**

MEAN WELL Smart timer dimming primarily provides the adaptive proportion dimming profile for the output constant current level to perform up to 14 consecutive hours. 3 dimming profiles hereunder are defined accounting for the most frequently seen applications. If other options may be needed, please contact MEAN WELL for details.

Ex : ◎ D01-Type: the profile recommended for residential lighting



Set up for D01-Type in Smart timer dimming software program:

	T1	T2	T3	T4
TIME**	06:00	07:00	11:00	---
LEVEL**	100%	70%	50%	70%

**: TIME matches Operating Time in the diagram whereas LEVEL matches Dimming Level.

Example: If a residential lighting application adopts D01-Type, when turning on the power supply at 6:00pm, for instance:

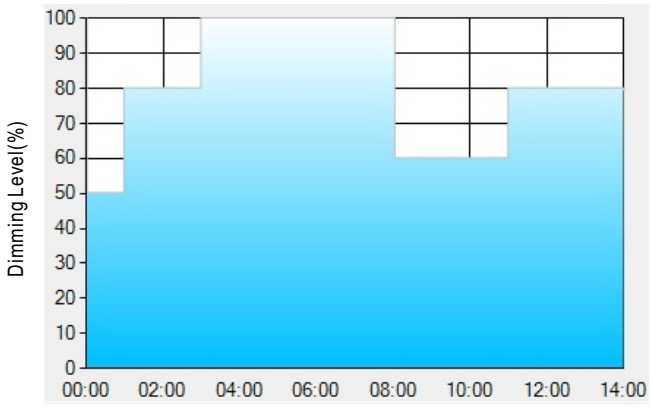
[1] The power supply will switch to the constant current level at 100% starting from 6:00pm.

[2] The power supply will switch to the constant current level at 70% in turn, starting from 0:00am, which is 06:00 after the power supply turns on.

[3] The power supply will switch to the constant current level at 50% in turn, starting from 1:00am, which is 07:00 after the power supply turns on.

[4] The power supply will switch to the constant current level at 70% in turn, starting from 5:00am, which is 11:00 after the power supply turns on. The constant current level remains till 8:00am, which is 14:00 after the power supply turns on.

Ex: ◎ D02-Type: the profile recommended for street lighting



Set up for D02-Type in Smart timer dimming software program:

	T1	T2	T3	T4	T5
TIME**	01:00	03:00	8:00	11:00	---
LEVEL**	50%	80%	100%	60%	80%

**: TIME matches Operating Time in the diagram whereas LEVEL matches Dimming Level.

Example: If a street lighting application adopts D02-Type, when turning on the power supply at 5:00pm, for instance:

[1] The power supply will switch to the constant current level at 50% starting from 5:00pm.

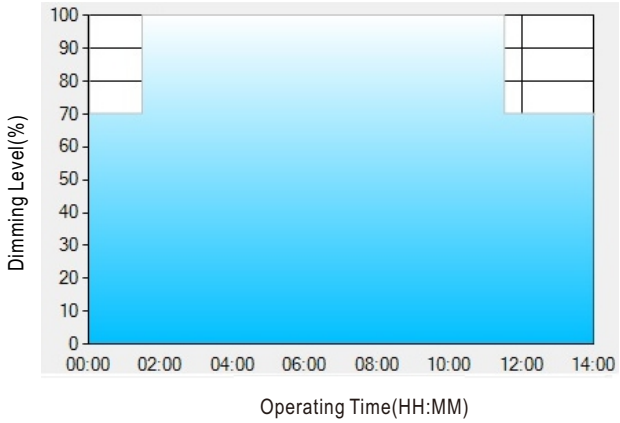
[2] The power supply will switch to the constant current level at 80% in turn, starting from 6:00pm, which is 01:00 after the power supply turns on.

[3] The power supply will switch to the constant current level at 100% in turn, starting from 8:00pm, which is 03:00 after the power supply turns on.

[4] The power supply will switch to the constant current level at 60% in turn, starting from 1:00am, which is 08:00 after the power supply turns on.

[5] The power supply will switch to the constant current level at 80% in turn, starting from 4:00am, which is 11:00 after the power supply turns on. The constant current level remains till 6:30am, which is 14:00 after the power supply turns on.

Ex: ◎ D03-Type: the profile recommended for tunnel lighting

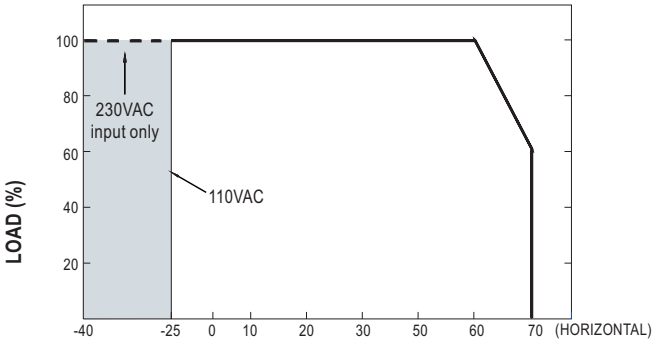


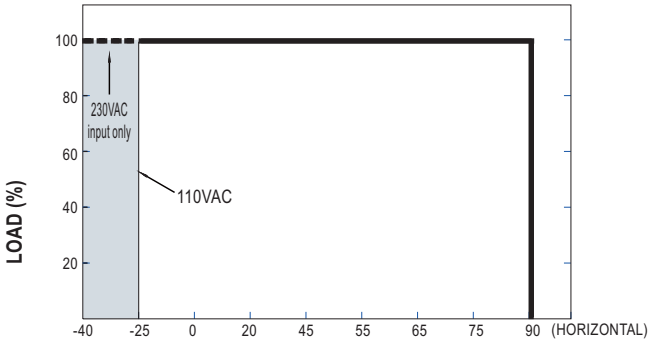
Set up for D03-Type in Smart timer dimming software program:

	T1	T2	T3
TIME**	01:30	11:00	---
LEVEL**	70%	100%	70%

**: TIME matches Operating Time in the diagram whereas LEVEL matches Dimming Level.
Example: If a tunnel lighting application adopts D03-Type, when turning on the power supply at 4:30pm, for instance:
[1] The power supply will switch to the constant current level at 70% starting from 4:30pm.
[2] The power supply will switch to the constant current level at 100% in turn, starting from 6:00pm, which is 01:30 after the power supply turns on.
[3] The power supply will switch to the constant current level at 70% in turn, starting from 5:00am, which is 11:00 after the power supply turns on.
The constant current level remains till 6:30am, which is 14:00 after the power supply turns on.

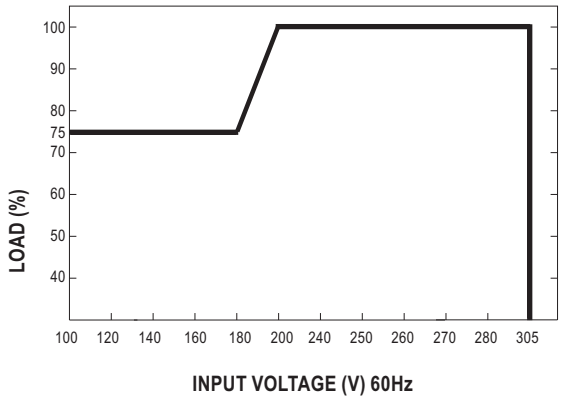
■ OUTPUT LOAD vs TEMPERATURE(Note.10)





◎ If ELG-240 operates in Constant Current mode with the rated current, the maximum workable Ta is 60℃.

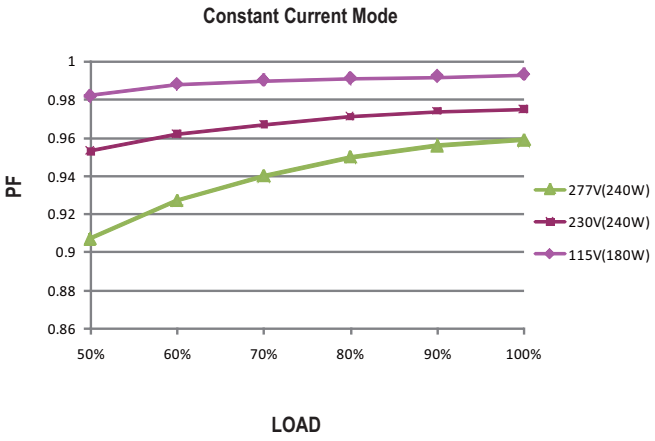
■ STATIC CHARACTERISTIC



※ De-rating is needed under low input voltage.

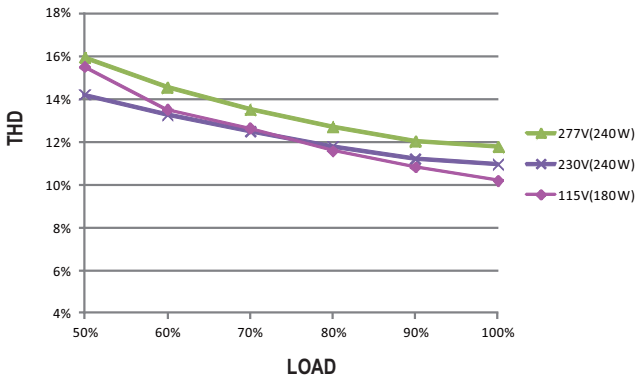
■ POWER FACTOR (PF) CHARACTERISTIC

※ Tcase at 80℃



■ TOTAL HARMONIC DISTORTION (THD)

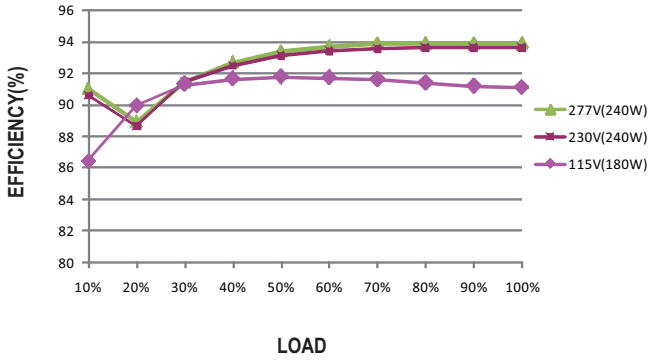
※ 48V Model, Tcase at 80℃



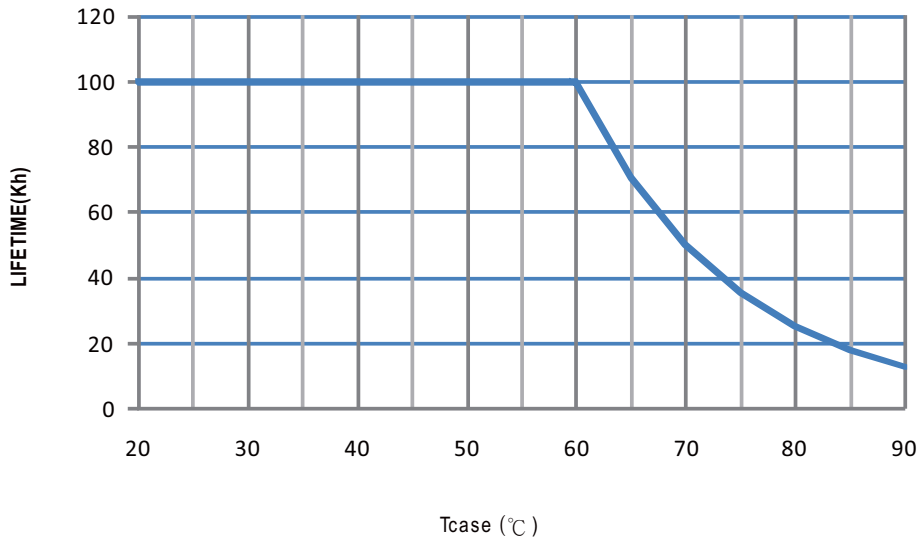
■ EFFICIENCY vs LOAD

ELG-240 series possess superior working efficiency that up to 93% can be reached in field applications.

※ 48V Model, Tcase at 80℃



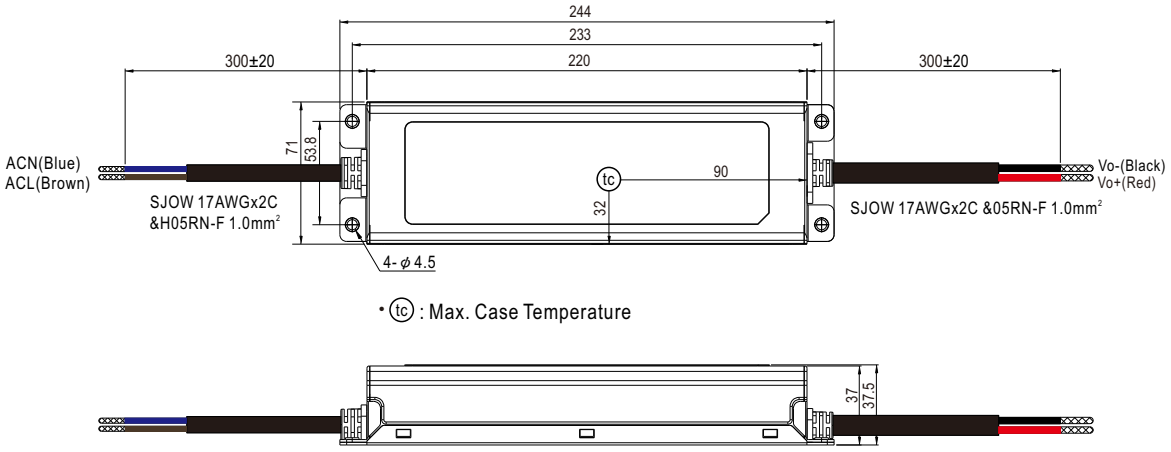
■ LIFE TIME



■ MECHANICAL SPECIFICATION

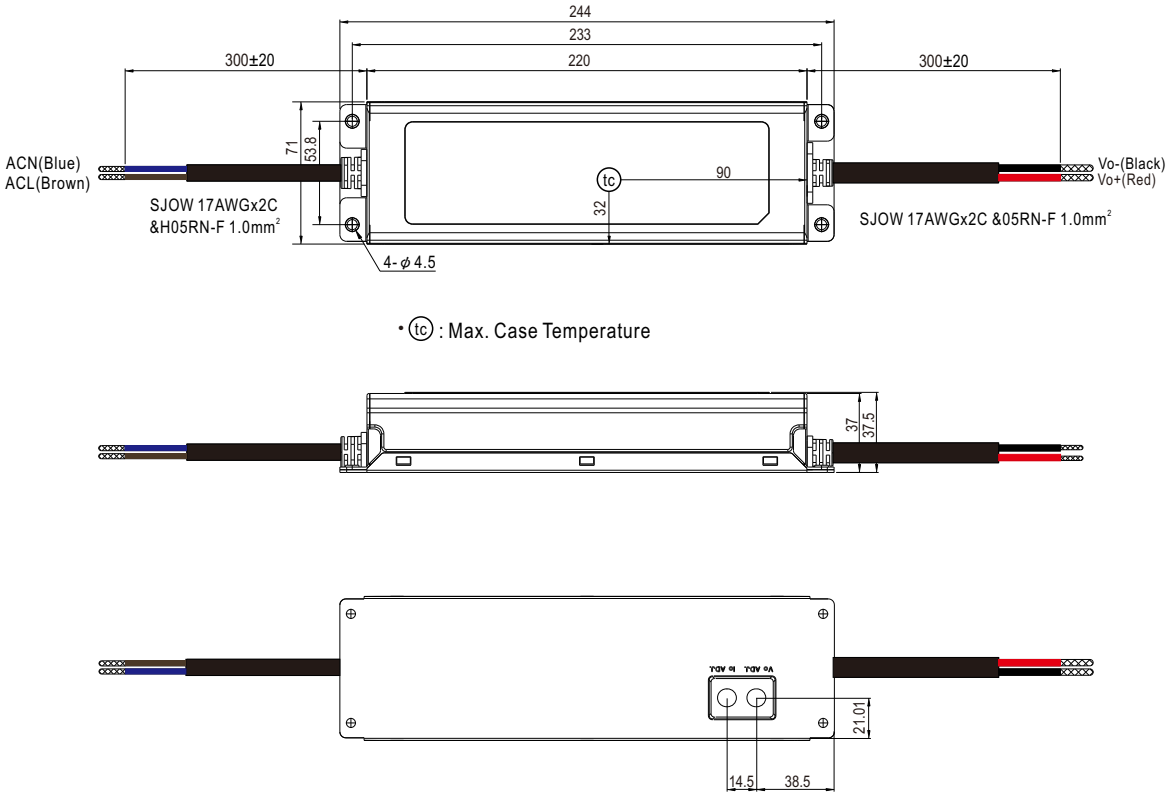
※ **Blank-Type**

CASE NO.: 262A Unit:mm Tolerance:±1



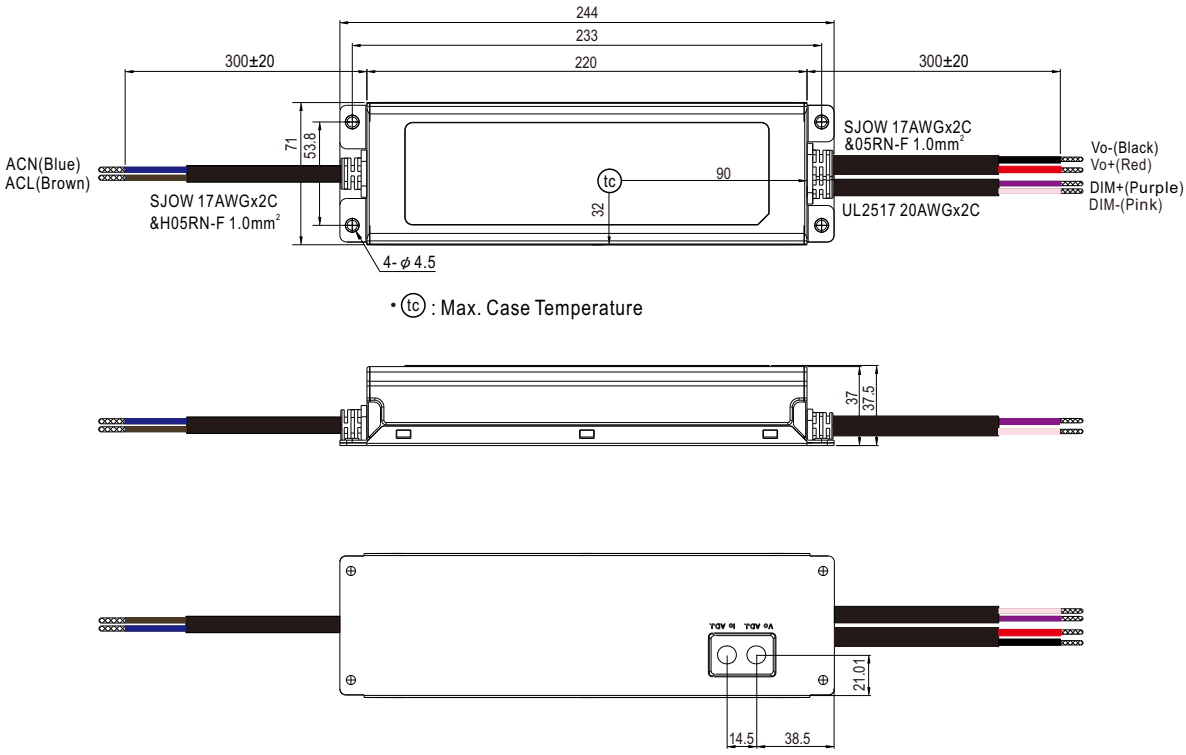
• ⓣc : Max. Case Temperature

※ **A-Type**



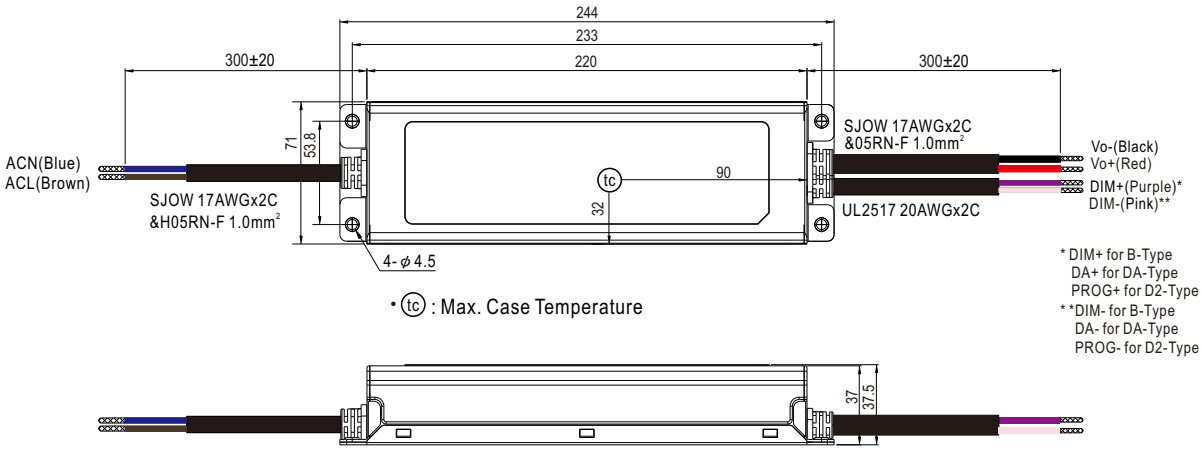
• ⓣc : Max. Case Temperature

※ **AB-Type**



• tc : Max. Case Temperature

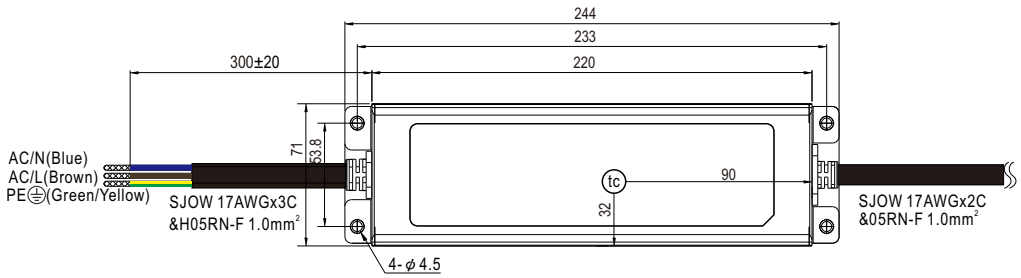
※ **B/DA/D2-Type**



• tc : Max. Case Temperature

* DIM+ for B-Type
DA+ for DA-Type
PROG+ for D2-Type
* *DIM- for B-Type
DA- for DA-Type
PROG- for D2-Type

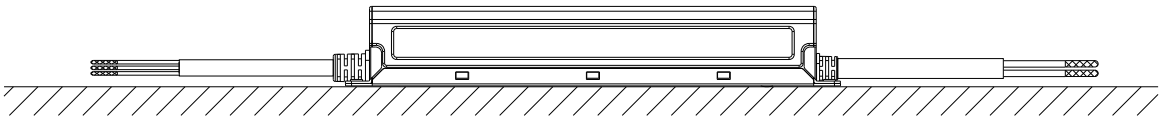
※ **3Y Model (3-wire input)**



• tc : Max. Case Temperature

◎ Note1: Please connect the case to PE for the complete EMC deliverance and safety use.
◎ Note2: Please contact MEAN WELL for input wiring option with PE.

■ Recommend Mounting Direction



■ INSTALLATION MANUAL

Please refer to:http://www.meanwell.com/manual.html