



Flickerless Power supply

SLB400N701N1A
PSNH400701*



- Model Name : SLB400N701N1A
- Model Code : PSNH400701A
PSNH400701B
PSNH400701C (for SAMSUNG)
PSNH400701D (for SAMSUNG)

- Features :
 - Class II
 - Flickerless
 - Full-protection provided: OCP/OVP/OTP/SCP/OLP
 - Low Power Dissipation @ No Load : <0.5W
 - Wide Vout : 23 ~ 50Vdc
 - Meets safety requirements for lighting
 - Constant Current Type

한국표준협회



제 16-0428호
(KS C 7655)



SU11315-17002
MSIP-REI-SLU-SLB450N801N1A



SOLUM CO., LTD

357 Yongin Techno Valley Building A, Guseong-ro, Giheung-gu, Yongin-si, Gyeonggi-do, 16914, Korea

TEL: +82-1588-0502, www.solu-m.com

■ Electrical specification

No.	Item	Min	Typ	Max	Unit	Remark	
1	Nominal Input Voltage	200	220	250	Vac		
2	Wide Input Voltage	180	-	275	Vac		
3	Maximum Input Current	-	-	0.45	Arms		
4	Nominal Input Frequency	50	-	60	Hz		
5	Wide Input Frequency	47	-	63	Hz		
6	Power Factor (PF)	90	95	-	%	1)	
7	Total Harmonic Distortion (THD)	-	10	15	%	1)	
8	Inrush Current	-	-	30	Arms	Duration 500 μ s , 9) Meets NEMA 410	
9	Output Voltage	23	36	50	Vdc		
10	Output Current	646	680	714	mA	@50Vdc Load	
		665	700	735	mA	@36Vdc Load	
		684	720	756	mA	@23Vdc Load	
11	Ripple Current	-	35	70	mA	20MHz Bandwidth, 2)	
12	Turn-on Delay	-	300	500	ms	@Cold Start, 3)	
13	Electrical Efficiency	88	89	-	%	2)	
14	No Load Power Dissipation	-	-	0.5	W	@ LED OPEN	
15	Output Open LED Protection	-	-	59	Vdc	Auto-recovery	
16	Output Short Circuit Protection	-	-	-		Auto-recovery	
17	Over-temperature Protection	-	-	-	°C	Auto-recovery	
18	Case Temperature (Tc)	-	-	85	°C		
19	Storage Temperature	-20	-	80	°C		
20	Operating Temperature	-20	-	50	°C		
21	Humidity	20	-	85	%		
22	Insulation Resistance	10	-	-	M Ω	500Vdc between Input & Output	
23	Differential Mode (Line to Line)	2.5	5	-	kV	4)	
24	Common Mode (Line to Ground)	8	-	-	kV	4) 5)	
25	Contact Discharge Test Voltage	4	-	-	kV	6)	
26	Air Discharge Test Voltage	8	-	-	kV	6) 7)	
27	Dielectric Withstand Voltage	Input to Output	3,750	-	-	Vac	Apply for 1 minute 8)
28		Input to Case	1,000	-	-	Vac	
29		Output to Case	500	-	-	Vdc	

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Application Notes

- 1) Test Condition: 200/250Vac 50/60Hz Input, Typical LED Load, Ambient Temperature 25°C, Measure at the cable-end
- 2) Test Condition: 220Vac 60Hz Input, LED Max. Load, 30min Aging, Ambient Temperature 25°C
- 3) At least, Turn-On Time should be continued for 0.5sec.
- 4) Surge Specification above is higher than IEC/EN 61000-4-5 (Differential 1kV, Common 2kV)
- 5) The metal case of the LED driver must be connected with F.G
- 6) ESD Specification above meets IEC/EN 61000-4-2 Requirements (Contact 4kV, Air 8kV)
- 7) The metal case of the driver should be grounded.
- 8) Determined by Paragraph 34.1.2, UL1310 or Paragraph 8.4.2, UL8750, EN61347-1, EN61347-2-13
- 9) NEMA 410 peak current requirement

Complied $I^2t(A^2sec)$ @ peak $\leq 2ms$

Steady State Current (A)	Peak Current (A) 120 Vac	Pulse Width 120 Vac (ms)	$I^2t (A^2 sec)$ 120 Vac	Peak Current (A) 277 Vac	Pulse Width 277 Vac (ms)	$I^2t (A^2 sec)$ 277 Vac
0.5	75	0.34	11	77	0.07	11
1	107	0.48	24	131	0.71	27
2	144	0.70	41	205	0.85	76
3	166	0.89	51	258	0.98	111
5	192	1.20	74	320	1.20	205
8	221	1.25	98	370	1.25	274
10	230	1.50	106	430	1.50	370

Safety Standards

Including safety requirements above, the LED driver complies with the following safety standards:

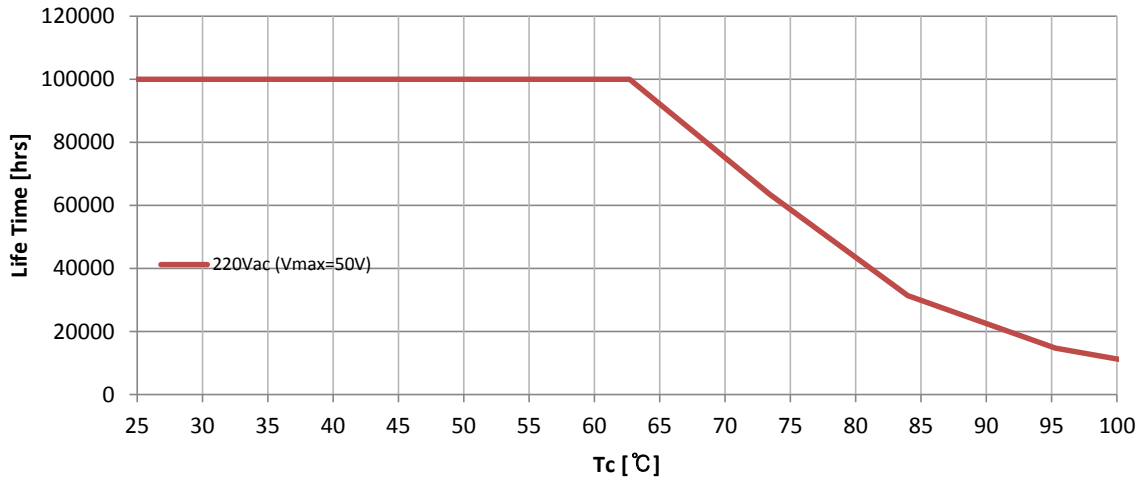
No.	Item	Description
1	UL8750, UL1310	UL Safety Standards (Class 2, Dry and Damp Location)
2	FCC Part 15, Class B	Conducted and Radiated Emission Test
3	IEC/EN 61347-1, IEC/EN 61347-2-13	IEC/EN Safety Standards
4	IEC/EN 55015	Conducted and Radiated Emission Test
5	IEC/EN 61000-3-2	Harmonic current emissions: Class C
6	IEC/EN 61000-3-3	Voltage Fluctuations and Flicker
7	IEC/EN 61000-4-2	Electrostatic Discharge (ESD): Contact 4kV, Air 8kV
8	IEC/EN 61000-4-3	Radio-frequency Electromagnetic Fields
9	IEC/EN 61000-4-4	Electrical Fast Transients (EFT)
10	IEC/EN 61000-4-5	Surges: Differential 1kV, Common 2kV
11	IEC/EN 61000-4-6	Injected Currents
12	IEC/EN 61000-4-8	Power Frequency Magnetic Fields
13	IEC/EN 61000-4-11	Voltage Dips and Short Interruptions
14	KS C 7655	Electronic control gear for LED modules-Safety and performance requirements

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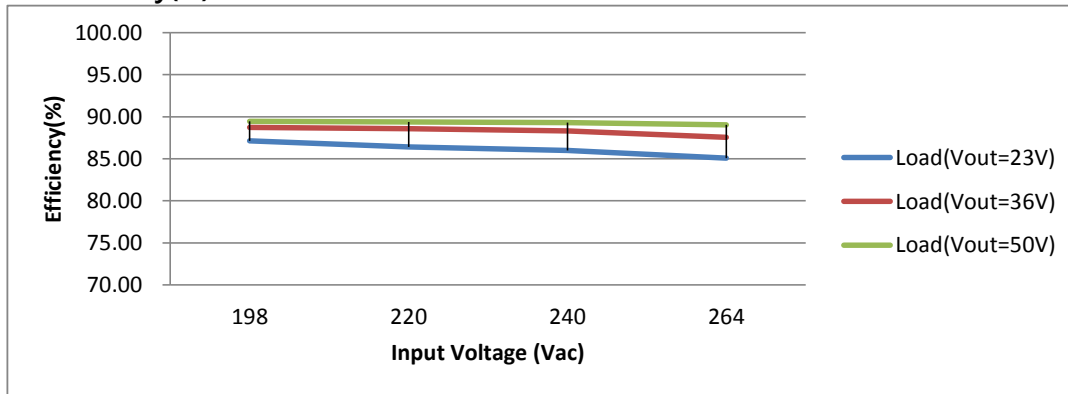
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Life Time vs Tcase



Remark) LED Driver has a rated lifetime of 50,000 hours @ Tc≤65°C

Efficiency(%)

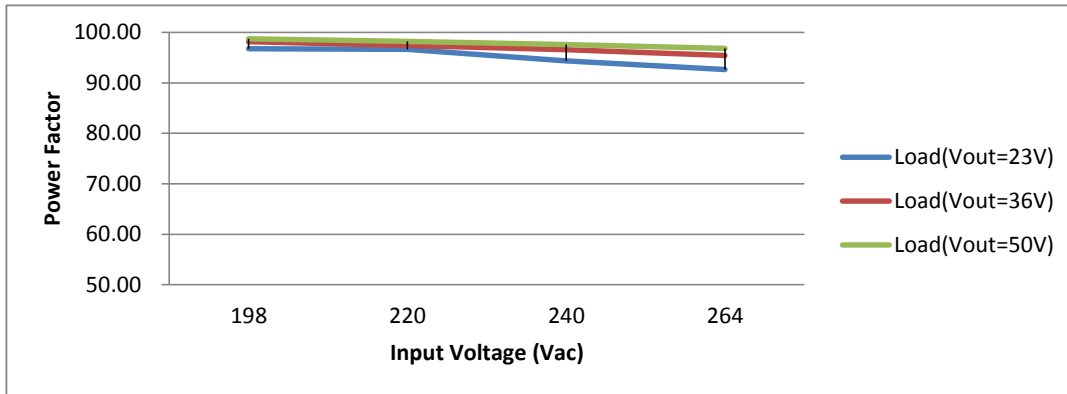


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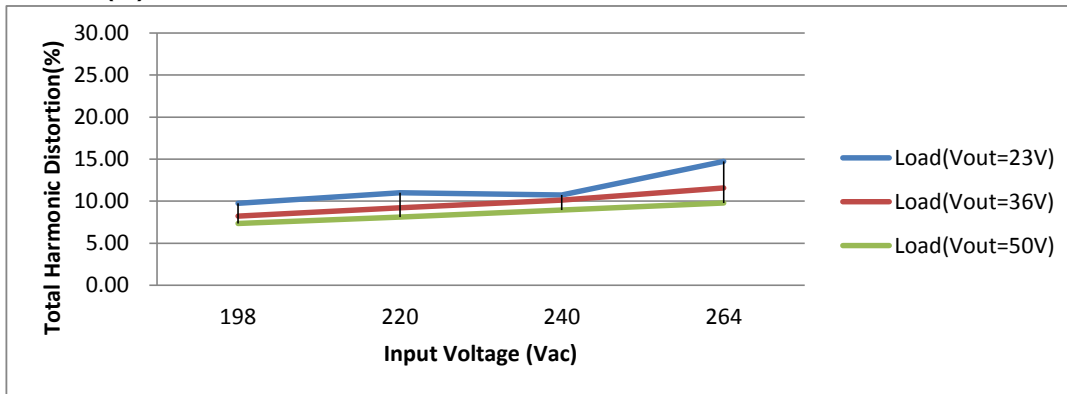
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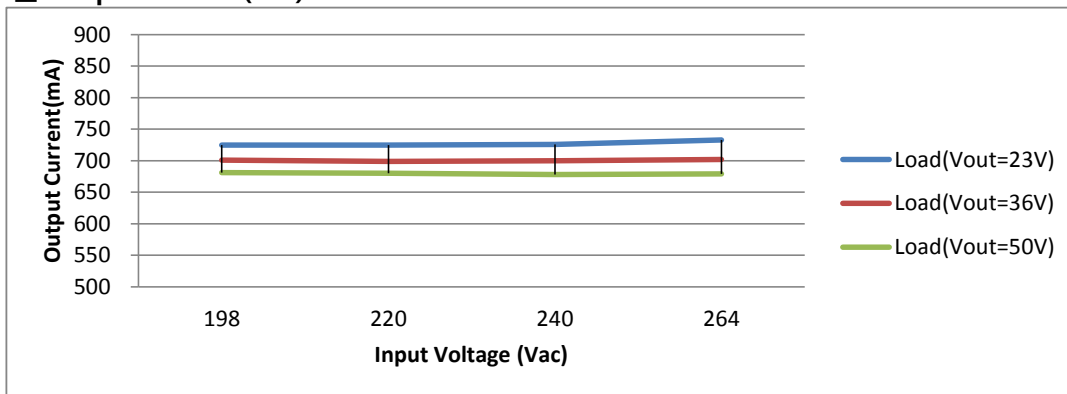
■ Power Factor



■ THD(%)



■ Output Current(mA)

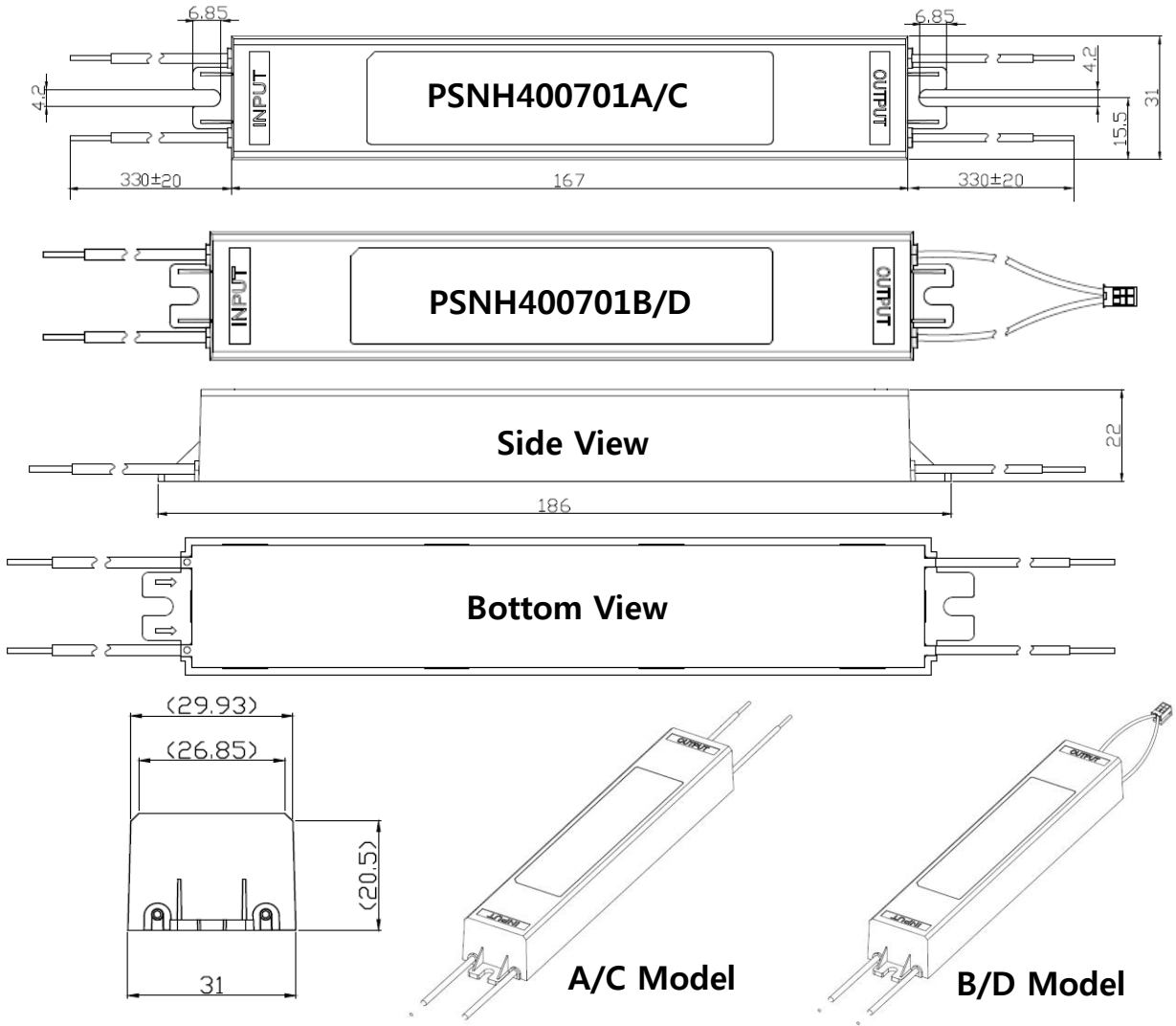


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■ Mechanical Specification



■ Enclosure Size

Unit	Width	Length	Height	Mount Length	Overall Length
mm	31.0	167.0	22.0	186.0	186.0
inch	1.22	6.57	0.87	7.32	7.32

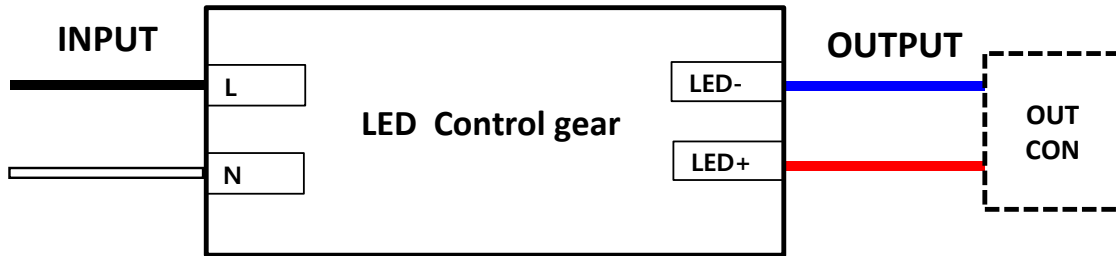
■ Case Material : PC

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■ Wiring Diagram



※ Caution

- 1) Do not detach input and output wires after complete installation
- 2) Use wires certified by KC, CB
- 3) Wires should be less than 1m when installed in final equipment

■ Different by type













Code	Logo	Cable end	Opposite side	Remark
PSNH400701A	SOLUM	N.A	-	SMH200-02 
PSNH400701B		SMH200-02	SMW200-02	
PSNH400701C	SAMSUNG	N.A	-	
PSNH400701D		SMH200-02	SMW200-02	

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Rating Label Drawing

<h4>PSNH400701A</h4>			
<p>L LIVE (흑색, Black) N Neutral (백색, White)</p> <p>PRI 정격입력 U_{in} : 200-250V~ 50 / 60Hz I_{in} : MAX 0.45A 0.181A...220Vac,60Hz P_{in} : 42W λ 역률 : 0.9 tc : 85 °C</p>	<p>SOLUM</p> <p>Caution (주의사항) Constant current out Use for LED Module only Do not open the case Suitable for dry and damp location 내장형</p> <p>www.solu-m.com AS: +82-1588-0502 MADE IN VIETNAM SOLUM VINA COMPANY LIMITED Hillsite Am Kronberger Hang 8, 65824 Schwalbach Ts. Germany.</p>	<p>LED CONVERTER 조명기구용 컨버터 (LED 램프용) Constant Current (정전류 방식) Flickerless / Class2 Output Model/모델 : SLB400N701N1A Name/기종 : PSNH400701A</p> <p>SELV   </p> <p>SU11315-17002 MSIP-REI-SLU-SLB450N801N1A</p>	<p>LED - (Blue,청색) L LED + (Red, 적색) L</p> <p>SEC 정격출력 P_{out} : 35W I_{out} : 0.7A V_{out} : 23 - 50V_{DC} U_{out} : 59V_{DC} (Open Lamp, 무부하) ■ tc</p>
<h4>PSNH400701B</h4>			
<p>L LIVE (흑색, Black) N Neutral (백색, White)</p> <p>PRI 정격입력 U_{in} : 200-250V~ 50 / 60Hz I_{in} : MAX 0.45A 0.181A...220Vac,60Hz P_{in} : 42W λ 역률 : 0.9 tc : 85 °C</p>	<p>SOLUM</p> <p>Caution (주의사항) Constant current out Use for LED Module only Do not open the case Suitable for dry and damp location 내장형</p> <p>www.solu-m.com AS: +82-1588-0502 MADE IN VIETNAM SOLUM VINA COMPANY LIMITED Hillsite Am Kronberger Hang 8, 65824 Schwalbach Ts. Germany.</p>	<p>LED CONVERTER 조명기구용 컨버터 (LED 램프용) Constant Current (정전류 방식) Flickerless / Class2 Output Model/모델 : SLB400N701N1A Name/기종 : PSNH400701B</p> <p>SELV   </p> <p>SU11315-17002 MSIP-REI-SLU-SLB450N801N1A</p>	<p>LED - (Blue,청색) L LED + (Red, 적색) L</p> <p>SEC 정격출력 P_{out} : 35W I_{out} : 0.7A V_{out} : 23 - 50V_{DC} U_{out} : 59V_{DC} (Open Lamp, 무부하) ■ tc</p>
<h4>PSNH400701C</h4>			
<p>L LIVE (흑색, Black) N Neutral (백색, White)</p> <p>PRI 정격입력 U_{in} : 200-250V~ 50 / 60Hz I_{in} : MAX 0.45A 0.181A...220Vac,60Hz P_{in} : 42W λ 역률 : 0.9 tc : 85 °C</p>	<p>SAMSUNG</p> <p>Caution (주의사항) Constant current out Use for LED Module only Do not open the case Suitable for dry and damp location 내장형</p> <p>www.solu-m.com AS: +82-1588-0502 MADE IN VIETNAM SOLUM VINA COMPANY LIMITED Hillsite Am Kronberger Hang 8, 65824 Schwalbach Ts. Germany.</p>	<p>LED CONVERTER 조명기구용 컨버터 (LED 램프용) Constant Current (정전류 방식) Flickerless / Class2 Output Model/모델 : SLB400N701N1A Name/기종 : PSNH400701C</p> <p>SELV   </p> <p>SU11315-17002 MSIP-REI-SLU-SLB450N801N1A</p>	<p>LED - (Blue,청색) L LED + (Red, 적색) L</p> <p>SEC 정격출력 P_{out} : 35W I_{out} : 0.7A V_{out} : 23 - 50V_{DC} U_{out} : 59V_{DC} (Open Lamp, 무부하) ■ tc</p>
<h4>PSNH400701D</h4>			
<p>L LIVE (흑색, Black) N Neutral (백색, White)</p> <p>PRI 정격입력 U_{in} : 200-250V~ 50 / 60Hz I_{in} : MAX 0.45A 0.181A...220Vac,60Hz P_{in} : 42W λ 역률 : 0.9 tc : 85 °C</p>	<p>SAMSUNG</p> <p>Caution (주의사항) Constant current out Use for LED Module only Do not open the case Suitable for dry and damp location 내장형</p> <p>www.solu-m.com AS: +82-1588-0502 MADE IN VIETNAM SOLUM VINA COMPANY LIMITED Hillsite Am Kronberger Hang 8, 65824 Schwalbach Ts. Germany.</p>	<p>LED CONVERTER 조명기구용 컨버터 (LED 램프용) Constant Current (정전류 방식) Flickerless / Class2 Output Model/모델 : SLB400N701N1A Name/기종 : PSNH400701D</p> <p>SELV   </p> <p>SU11315-17002 MSIP-REI-SLU-SLB450N801N1A</p>	<p>LED - (Blue,청색) L LED + (Red, 적색) L</p> <p>SEC 정격출력 P_{out} : 35W I_{out} : 0.7A V_{out} : 23 - 50V_{DC} U_{out} : 59V_{DC} (Open Lamp, 무부하) ■ tc</p>

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Barcode Label



DATE
BARCODE
LOT NO

- 7 DEVELOPMENT Rev X01~99
- MP Rev A01~99
- 6 SERIAL No _4 Digit
- 5 MODEL CODE _3 Digit
- 4 PRODUCTION DATE _2 Digit
- 3 PRODUCTION MONTH _1 Digit
- 2 PRODUCTION YEAR _2 Digit
- 1 PRODUCTION COUNTRY _2 Digit

Mean	1.PLANT	2. YEAR	3. MONTH	4. DATE	5. CODE	6. SERIAL	7. Revision No
Digit	2	2	1	2	3	4	
EX.	C1 : DGSM C2 : Solytech K1 : Korea H1 : SOLUM VINA	00~99	1...9,A,B	01~31	PSNH400701A : 311 PSNH400701B : 312 PSNH400701C : 313 PSNH400701D : 314	0001.. 9999	X01~99 : DEVELOPMENT A01~99: MP

Box Label

Material Code	SLB400N701N1A		USER Model Code
ITEM	PSNH400701* REV. A**		SOLUM Model Code
LOT No	*****	MAKER	SOLUM LOT NO & Quantity of Products
Quantity [PCS]	80	SOLUM	
EXP. Date	20**.**.* ~ 20**.**.*		Product Date ~ After 5 years
	*****		USER Barcode

Year	Month	Date	Factory	Fixed
1	2	3	4	5
Q	0	1	1	1
P→2016	01~12月	01~31日	D : SoluM	7 8 9
Q→2017			A : Aptech	
R→2018			H : Soumvina	

Digit	Quantity Per BOX									BOX Size	Serial No.			Blank	Vender Code				Blank	Year	Month	Date	Factory	Fixed						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
	0	0	0	0	0	0	0	8	0	B	0	0	1		E	6	0	1				Q	0	1	1	1	D	0	0	1
	A : Pallet B : BOX										001-999									P→2016	01~12月	01~31日	D : SoluM							
																				Q→2017				A : Aptech						
																				R→2018				H : Soumvina						

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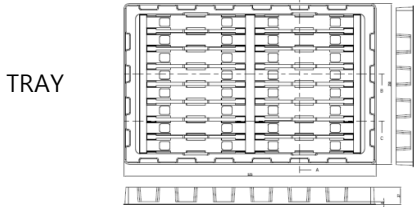
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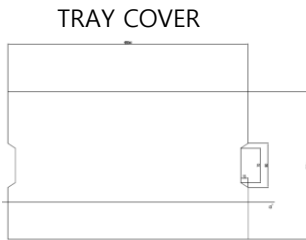
■ Packing Drawing

1. Out Box

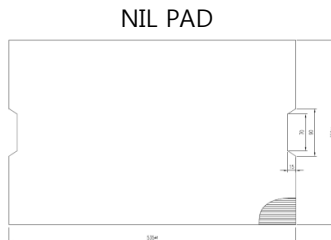
Dimension	540(L) 355(W) 170(H) [mm]
Weight	< 10Kg
Quantity	80EA / 1Box



TRAY

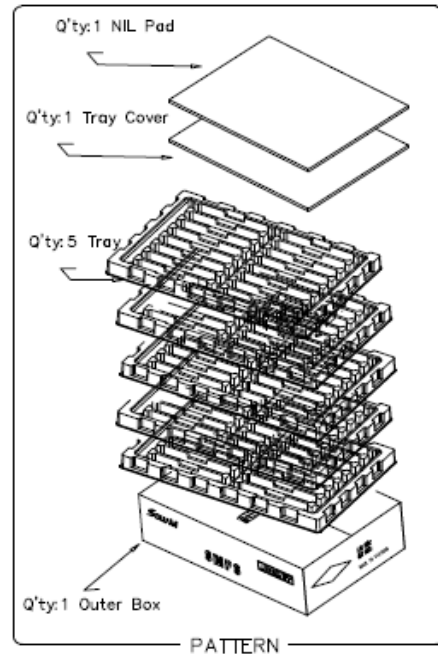
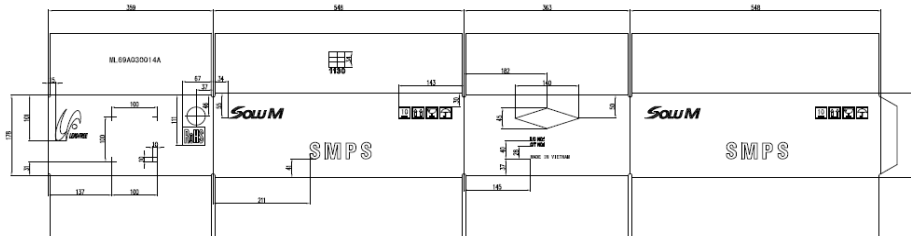


TRAY COVER



NIL PAD

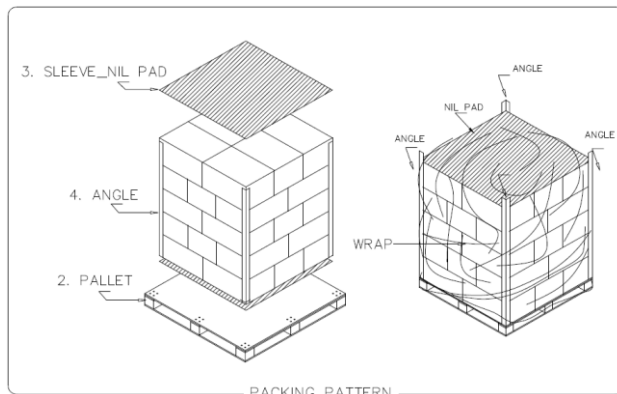
OUT BOX



PATTERN

2. Pallet

Weight	< 310Kg
Quantity	30BOX / 1Pallet



PACKING PATTERN

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