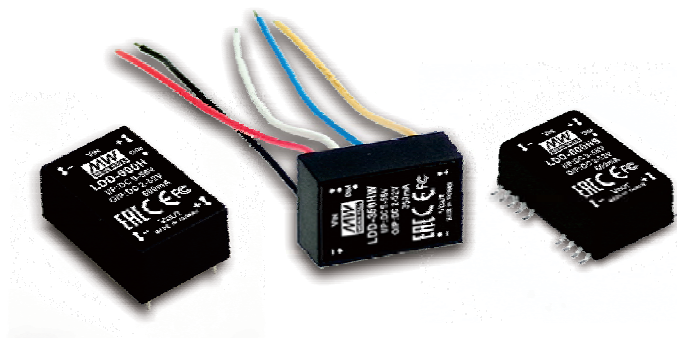




Наличие и актуальные цены на

**LDD-500HW**

<https://www.mean-well.ru/store/LDD-500HW/>



### ■ Features :

- DC/DC step-down converter
- Constant current output: 300mA to 1500mA
- Wide input voltage: 9 ~ 56VDC
- Wide output LED string voltage: 2 ~ 52VDC
- High efficiency up to 97%
- Built-in EMI filter, comply with BS EN/EN55015 and FCC part15 without additional input filter and capacitors
- Built-in PWM and remote ON/OFF control
- Protections: Short circuit / Over temperature
- Cooling by free air convection
- Fully encapsulated with IP67 level for pin and wire style
- Non-potted, optional conformal coating for SMD style (Order No.: LDD-~~350-1000~~HSC)
- Compact size
- Low cost, high reliability
- Suitable for driving illumination LED
- 3 years warranty

### ■ GTIN CODE

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



LDD-350H ☐ Blank : pin style  
W : wire style  
S : SMD style

LDD-1200H ☐ Blank : pin style  
W : wire style

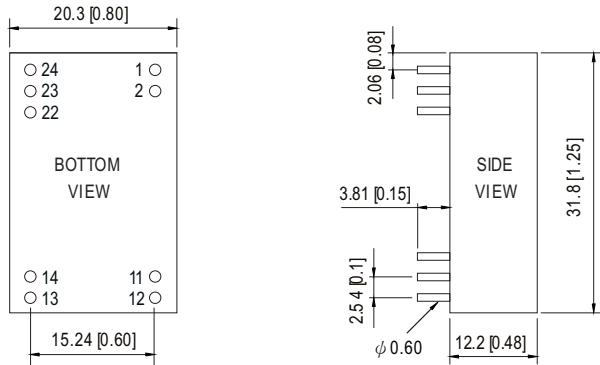
### SPECIFICATION

| ORDER NO.                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | LDD-300H                                                                                                                        | LDD-350H | LDD-500H | LDD-600H | LDD-700H | LDD-1000H | LDD-1200H | LDD-1500H |        |
|------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|----------|----------|----------|----------|-----------|-----------|-----------|--------|
| OUTPUT                                         | CURRENT RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 300mA                                                                                                                           | 350mA    | 500mA    | 600mA    | 700mA    | 1000mA    | 1200mA    | 1500mA    |        |
|                                                | VOLTAGE RANGE      Note.4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 2 ~ 52VDC                                                                                                                       |          |          |          |          |           |           | 2 ~ 46VDC |        |
|                                                | CURRENT ACCURACY (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | ±3% at 24VDC input ; ±4% at 48VDC input for LDD-H/HW ; ±5% for LDD-HS                                                           |          |          |          |          |           |           |           |        |
|                                                | RIPPLE & NOISE(max.)    Note.2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 150mVp-p                                                                                                                        | 150mVp-p | 150mVp-p | 200mVp-p | 200mVp-p | 350mVp-p  | 350mVp-p  | 350mVp-p  |        |
|                                                | SWITCHING FREQUENCY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 40KHz ~ 1000KHz                                                                                                                 |          |          |          |          |           |           |           |        |
| EXTERNAL CAPACITANCE LOAD (max.)               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2.2uF                                                                                                                           |          |          |          |          |           |           |           |        |
| INPUT                                          | VOLTAGE RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 9 ~ 56VDC                                                                                                                       |          |          |          |          |           |           | 9 ~ 52VDC |        |
|                                                | EFFICIENCY (max.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 97% at full load and 36VDC/48VDC input for LDD-H/HW ; 96% at full load and 36VDC/48VDC input for LDD-HS                         |          |          |          |          |           |           |           |        |
|                                                | DC CURRENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Full load    Note.3                                                                                                             | 270mA    | 320mA    | 450mA    | 550mA    | 650mA     | 900mA     | 1100mA    | 1360mA |
|                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | No load                                                                                                                         | 5mA      |          |          |          |           |           |           |        |
| FILTER                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Capacitor                                                                                                                       |          |          |          |          |           |           |           |        |
| PWM DIMMING & ON/OFF CONTROL                   | REMOTE ON/OFF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Leave open if not use                                                                                                           |          |          |          |          |           |           |           |        |
|                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Power ON with dimming: DIM ~ -Vin >2.5 ~ 6VDC or open circuit                                                                   |          |          |          |          |           |           |           |        |
|                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Power OFF : DIM ~ -Vin < 0.8VDC or short                                                                                        |          |          |          |          |           |           |           |        |
|                                                | PWM FREQUENCY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 100 ~ 1KHz                                                                                                                      |          |          |          |          |           |           |           |        |
| QUIESCENT INPUT CURRENT IN SHUTDOWN MODE(max.) | 1mA at PWM dimming OFF and 24VDC input                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                 |          |          |          |          |           |           |           |        |
| PROTECTION                                     | SHORT CIRCUIT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Regulated at rated output current<br>Protection type: Can be continued, recovers automatically after fault condition is removed |          |          |          |          |           |           |           |        |
|                                                | OVER TEMPERATURE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Tj 150℃ typically(IC1) detect on main control IC                                                                                |          |          |          |          |           |           |           |        |
|                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Protection type : Shut down, recovers automatically after temperature goes down                                                 |          |          |          |          |           |           |           |        |
| ENVIRONMENT                                    | WORKING TEMP.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | -40 ~ + 85℃ (Refer to derating curve)                                                                                           |          |          |          |          |           |           |           |        |
|                                                | WORKING HUMIDITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 20% ~ 90% RH    non-condensing for LDD-H/HW ; 20%~85% RH non-condensing for LDD-HS                                              |          |          |          |          |           |           |           |        |
|                                                | STORAGE TEMP., HUMIDITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | -55 ~ +125℃, 10 ~ 95% RH                                                                                                        |          |          |          |          |           |           |           |        |
|                                                | TEMP. COEFFICIENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | ±0.03% / °C                                                                                                                     |          |          |          |          |           |           |           |        |
|                                                | VIBRATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 10 ~ 500Hz, 2G 10min./1 cycle, period for 60min. each along X, Y, Z axes                                                        |          |          |          |          |           |           |           |        |
|                                                | OPERATING CASE TEMP. (max.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 100℃                                                                                                                            |          |          |          |          |           |           |           |        |
| EMC                                            | SAFETY STANDARDS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | EAC TP TC 020/2011 approved                                                                                                     |          |          |          |          |           |           |           |        |
|                                                | EMC EMISSION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Compliance to BS EN/EN55015, FCC part 15 class B, EAC TP TC 020                                                                 |          |          |          |          |           |           |           |        |
|                                                | EMC IMMUNITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Compliance to BS EN/EN61000-4-2,3,4,6,8, light industry level, criteria A, EAC TP TC 020                                        |          |          |          |          |           |           |           |        |
| OTHERS                                         | MTBF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 1000Khrs min.    MIL-HDBK-217F (25℃)                                                                                            |          |          |          |          |           |           |           |        |
|                                                | DIMENSION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 31.8*20.3*12.2mm or 1.25**0.8**0.48" inch (L*W*H) for LDD-H/HW ; 31.8*20.3*11.4mm or 1.25**0.8**0.45" inch (L*W*H) for LDD-HS   |          |          |          |          |           |           |           |        |
|                                                | WEIGHT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | LDD-H:15.6g ; LDD-HW:18g ; LDD-HS:12.8g                                                                                         |          |          |          |          |           |           |           |        |
|                                                | POTTING MATERIAL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Expoxy(UL94-V0) for LDD-H/HW ; without potted for LDD-HS                                                                        |          |          |          |          |           |           |           |        |
| NOTE                                           | 1.All parameters are specified at normal    input(48VDC), rated load, 25℃ 70% RH ambient.<br>2.Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uf capacitor.<br>3.Test condition: 48VDC input.<br>4.Output voltage will always step down by 3 volts from input DC voltage.<br>5.The output of LDD-H should not be connected to the input of the same unit or output from other sources.<br>※ Product Liability Disclaimer :    For detailed information, please refer to <a href="https://www.meanwell.com/serviceDisclaimer.aspx">https://www.meanwell.com/serviceDisclaimer.aspx</a> |                                                                                                                                 |          |          |          |          |           |           |           |        |

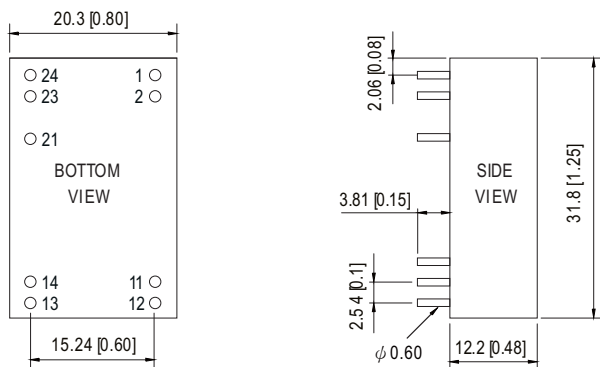
## Mechanical Specification

### Blank type(LDD- 300~1000H):

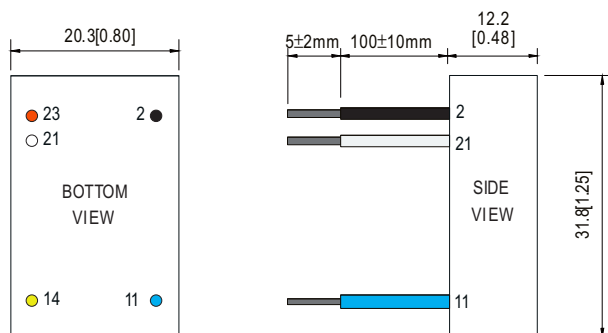
Unit: mm (inch)


NOTE: Pin tolerance  $\pm 0.05$ mm

### Blank type(LDD- 1200~1500H):


NOTE: Pin tolerance  $\pm 0.05$ mm

### W type(LDD- 300~1500HW):



NOTE: All wires UL3385 22AWG

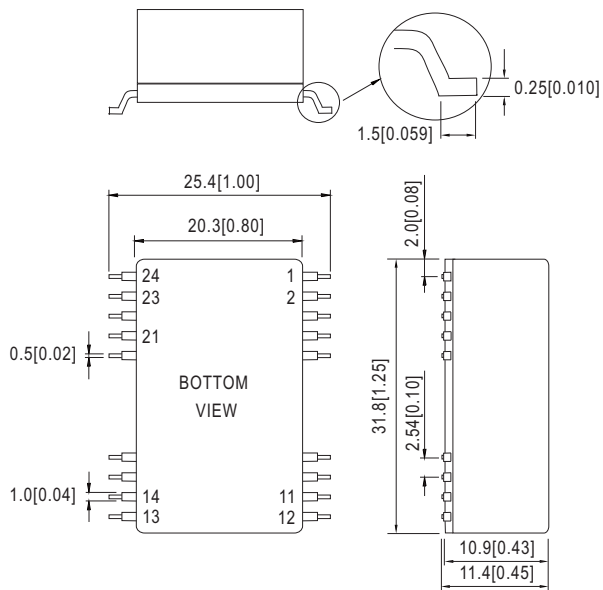
## Pin Configuration

| Pin No. |         | Comment                                         |
|---------|---------|-------------------------------------------------|
| 1,2     | -Vin    | Don't connect to -Vout                          |
| 11,12   | -Vout   | LED - Connection                                |
| 13,14   | +Vout   | LED + Connection                                |
| 22      | PWM DIM | ON/OFF and PWM Dimming (Leave open if not used) |
| 23,24   | +Vin    | DC Supply                                       |
| others  | N.C     | No connection                                   |

| Pin No. |         | Comment                                         |
|---------|---------|-------------------------------------------------|
| 1,2     | -Vin    | Don't connect to -Vout                          |
| 11,12   | -Vout   | LED - Connection                                |
| 13,14   | +Vout   | LED + Connection                                |
| 21      | PWM DIM | ON/OFF and PWM Dimming (Leave open if not used) |
| 23,24   | +Vin    | DC Supply                                       |
| others  | N.C     | No connection                                   |

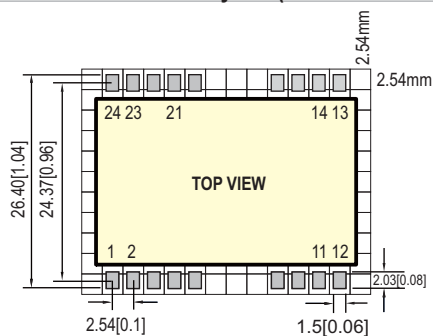
| Pin No. |                 | Comment                                         |
|---------|-----------------|-------------------------------------------------|
| 2       | -Vin (Black)    | Don't connect to -Vout                          |
| 11      | -Vout (Blue)    | LED - Connection                                |
| 14      | +Vout (Yellow)  | LED + Connection                                |
| 21      | PWM DIM (White) | ON/OFF and PWM Dimming (Leave open if not used) |
| 23      | +Vin (Red)      | DC Supply                                       |
| others  | N.C             | No connection                                   |

## ◎S type(LDD – 300~1000HS):

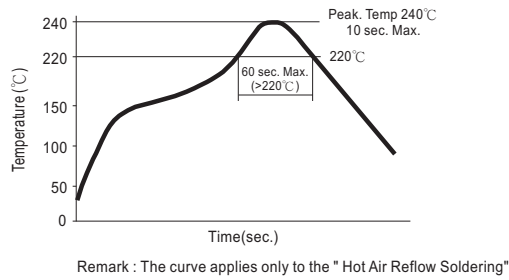


| Pin No. |         | Comment                                         |
|---------|---------|-------------------------------------------------|
| 1,2     | -Vin    | Don't connect to -Vout                          |
| 11,12   | -Vout   | LED - Connection                                |
| 13,14   | +Vout   | LED + Connection                                |
| 21      | PWM DIM | ON/OFF and PWM Dimming (Leave open if not used) |
| 23,24   | +Vin    | DC Supply                                       |
| others  | N.C     | No connection                                   |

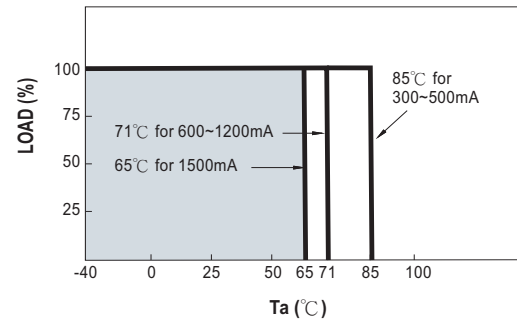
## ■ Recommended PCB layout (for LDD-300~1000HS)



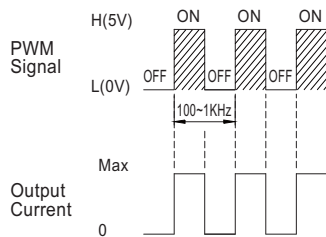
## Reflow Soldering Curve (for LDD-300~1000HS)



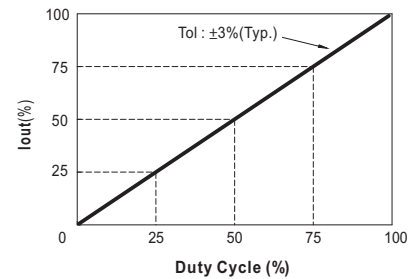
## Derating Curve



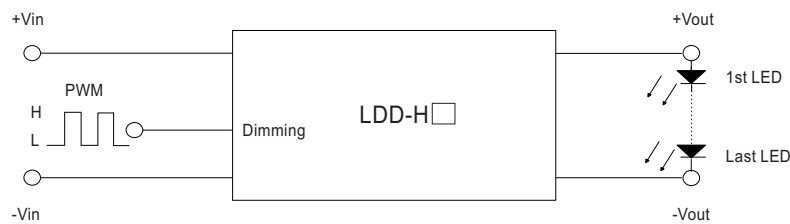
## PWM Dimming Control



⊙ During PWM dimming operation, the output current will change to PWM style.



## Standard Application



H: >2.5~6VDC or open circuit

L: <0.8VDC or short

## Efficiency VS Output Voltage (Number of LEDs)

Fig-1 12VDC input, 1~3 LEDs (Vf=3V)

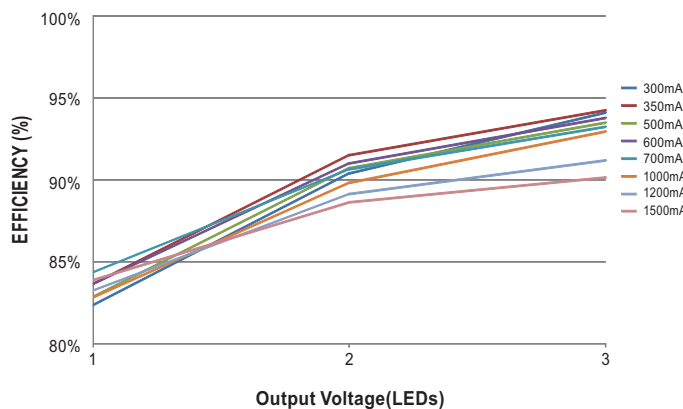


Fig-2 24VDC input, 1~7 LEDs (Vf=3V)

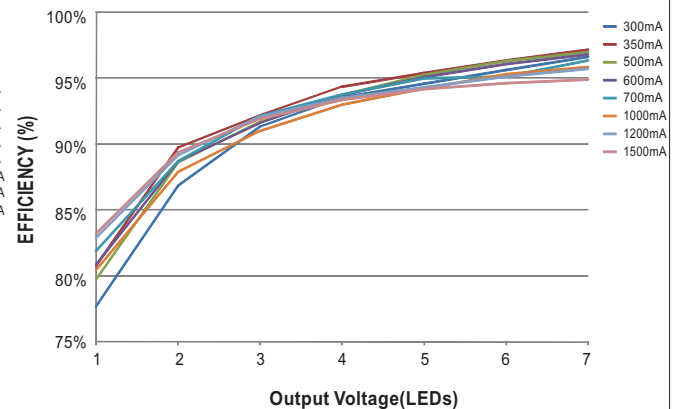


Fig-3 36VDC input, 1~10 LEDs (Vf=3V)

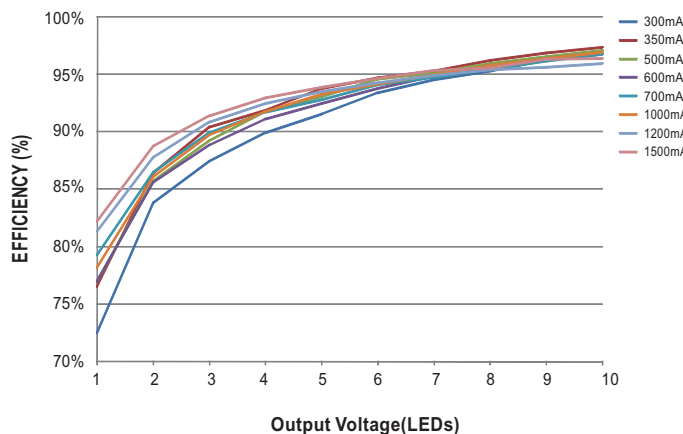
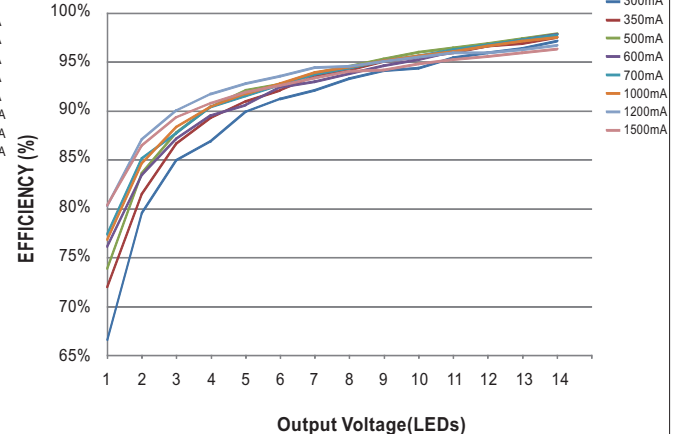
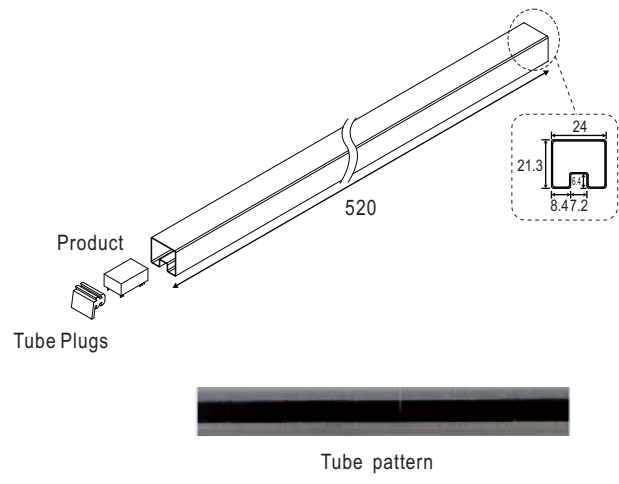
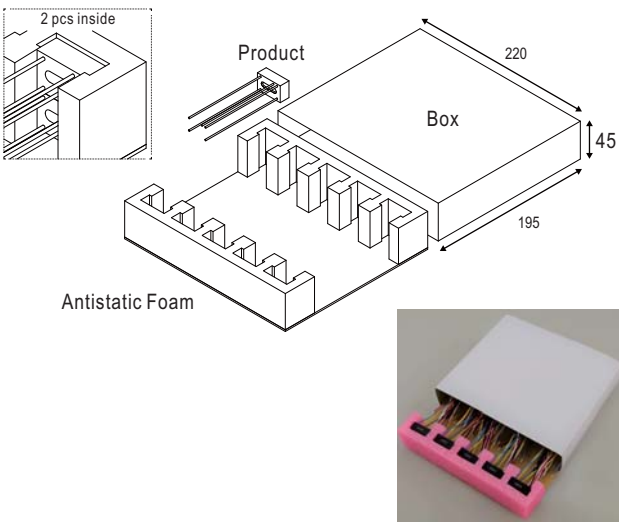
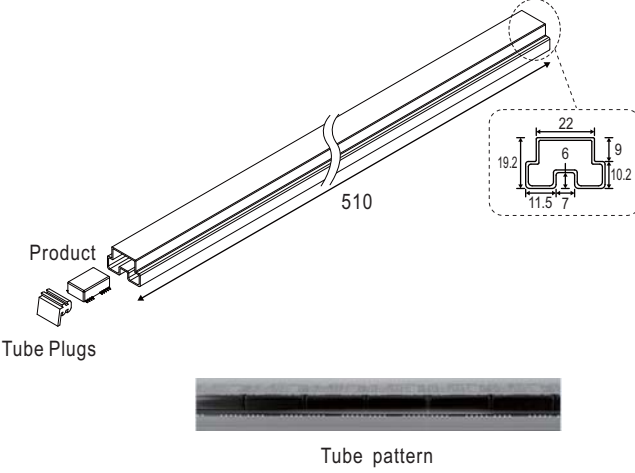


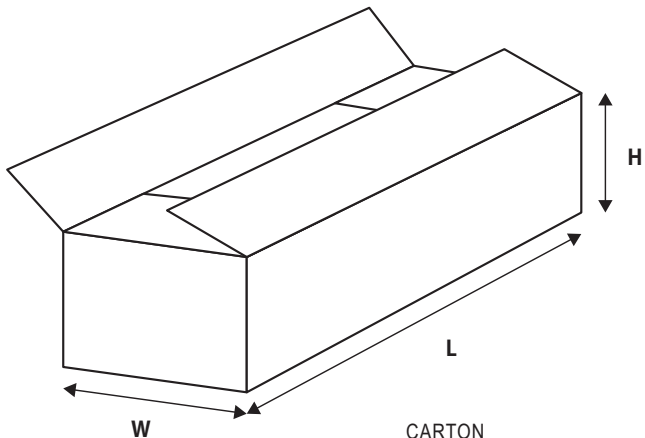
Fig-4 48VDC input, 1~14 LEDs (Vf=3V)



**Packing**

| Standard Tube Packing                                                                                | LDD-H                    |                  |                           |                    |
|------------------------------------------------------------------------------------------------------|--------------------------|------------------|---------------------------|--------------------|
|                                                                                                      | MPQ<br>Per Tube<br>(PCS) | One Tube<br>G.W. | Max. Q'TY/<br>Carton(PCS) | One Carton<br>G.W. |
| <p>Unit : mm</p>   | 15                       | 260g             | 750                       | 13.8Kg             |
| LDD-HW                                                                                               | LDD-HW                   |                  |                           |                    |
|                                                                                                      | MPQ<br>(Box)             | One Box<br>G.W.  | Max. Q'TY/<br>Carton(PCS) | One Carton<br>G.W. |
| <p>Unit : mm</p>  | 20                       | 440g             | 240                       | 6.08Kg             |

| Standard Tube Packing                                                                                                                        | LDD-HS                   |                  |                           |                    |
|----------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|------------------|---------------------------|--------------------|
|                                                                                                                                              | MPQ<br>Per Tube<br>(PCS) | One Tube<br>G.W. | Max. Q'TY/<br>Carton(PCS) | One Carton<br>G.W. |
| Unit : mm<br><br><br>Product<br>Tube Plugs<br>Tube pattern | 15                       | 250g             | 600                       | 10.8Kg             |

| Standard Tube Packing                                                                                                                 |
|---------------------------------------------------------------------------------------------------------------------------------------|
| Unit : mm<br><br><br>CARTON<br>L600 x W230 x H220 |

### ■ Installation Manual

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