



DC-DC Constant Current Step-Down LED driver with DALI

LDD-H-DA series



■ Features :

- DC/DC step-down converter
- Constant current output: 350mA to 1400mA
- Wide input voltage: 6 ~ 50VDC
Wide output LED string voltage: 3 ~ 45VDC
- High efficiency up to 95%
- Built-in EMI filter, comply with BS EN/EN55015 without additional input filter and capacitors
- Built-in PWM and remote ON/OFF control(pin style only, wire style optional)
- Protections: Short circuit
- Cooling by free air convection
- Fully encapsulated with IP65 level
- Compact size
- Suitable for driving illumination LED
- 3 years warranty



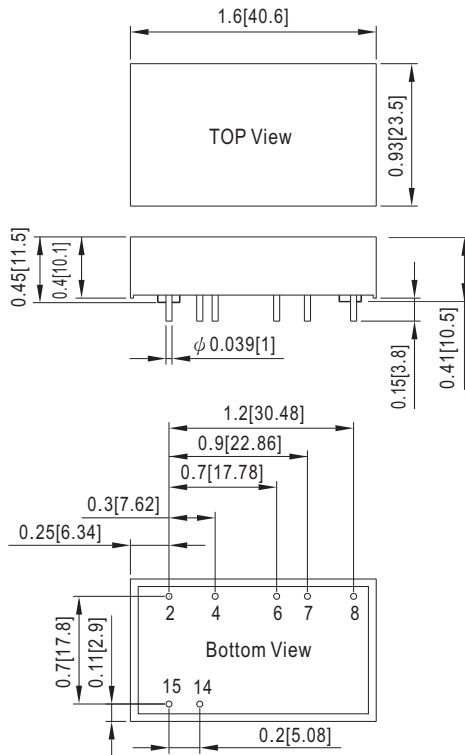
LDD-350H-☐ DA Blank : pin style
 W : wire style

SPECIFICATION

ORDER NO.			LDD-350H-□ DA	LDD-700H-□ DA	LDD-1050H-□ DA	LDD-1400H-□ DA
OUTPUT	CURRENT RANGE		350mA	700mA	1050mA	1400mA
	VOLTAGE RANGE Note.4		3 ~ 45VDC			3 ~ 36VDC
	CURRENT ACCURACY (Typ.)		±5% at 48VDC input			±5% at 28VDC input
	RIPPLE & NOISE(max.) Note.2		300mVp-p	500mVp-p	500mVp-p	500mVp-p
	SWITCHING FREQUENCY (Typ.)		500KHz			
	EXTERNAL CAPACITANCE LOAD (max.)		1400uF			
INPUT	VOLTAGE RANGE		6 ~ 50VDC			6 ~ 40VDC
	EFFICIENCY (max.)		95% at full load and 48VDC input			
	DC CURRENT	Full load Note.3	275mA	550mA	825mA	1280mA
		No load	5mA			
FILTER		Capacitor				
PWM DIMMING & ON/OFF CONTROL (PIN STYLE ONLY)	REMOTE ON/OFF		Leave open if not use			
			Power ON with dimming: DIM ~ -Vin >1.2 ~ 5VDC or open circuit, max. operation voltage 5.5VDC			
			Power OFF : DIM ~ -Vin < 0.1VDC or short			
	PWM FREQUENCY		200Hz only			
QUIESCENT INPUT CURRENT IN SHUTDOWN MODE(max.)		1mA at PWM dimming OFF and 24VDC input				
PROTECTION	SHORT CIRCUIT		Regulated at rated output current Protection type: Can be continued, recovers automatically after fault condition is removed			
	INPUT VOLTAGE LOCKOUT	Start up	4.2VDC			
		Shut-down	3.8VDC			
ENVIRONMENT	WORKING TEMP.		-40 ~ + 85℃ (Refer to derating curve)			
	WORKING HUMIDITY		20% ~ 90% RH non-condensing			
	STORAGE TEMP., HUMIDITY		-55 ~ +125℃, 10 ~ 95% RH non-condensing			
	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 004 approved			
	EMC EMISSION		Compliance to BS EN/EN55015, EAC TP TC 020			
	EMC IMMUNITY		Compliance to BS EN/EN61547, 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		40.6*23.5*10.1mm or 1.6**0.93**0.40" inch (L*W*H)			
	WEIGHT		LDD-H-DA:18g ; LDD-H-WDA:23g			
	POTTING MATERIAL		Epoxy(UL94-V0)			
NOTE	1.All parameters are specified at normal input(48VDC), rated load, 25℃ 70% RH ambient. 2.Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uf capacitor. 3.Test condition: 48VDC input for 350~1050mA, 28VDC input for 1400mA. 4.Output voltage will always step down by 3 volts from input DC voltage. 5.The output of LDD-H should not be connected to the input of the same unit or output from other sources. ※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx					

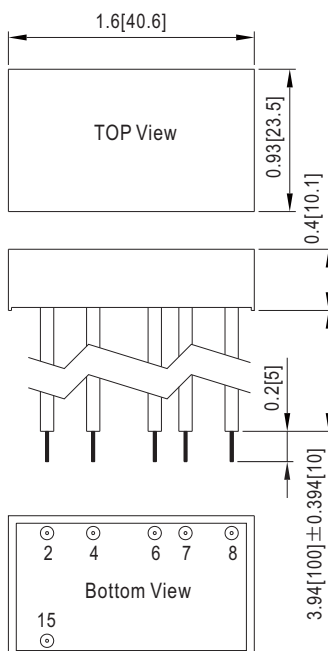
Mechanical Specification

Pin style(LDD- 350H~1400H – DA):



NOTE: Pin tolerance $\pm 0.05\text{mm}$

Wire style(LDD – 350H~1400H-WDA):



NOTE: Wire range is 16~24AWG

Pin Configuration

Pin No.		Comment
2	+Vin	DC supply
4	+Vout	LED+ connection
6	-Vout	LED- connection
7	DA	Connect to DALI Controller
8	DA	
14	PWM DIM	PWM Dimming
15	-Vin	DC supply, Don't connect to -Vout

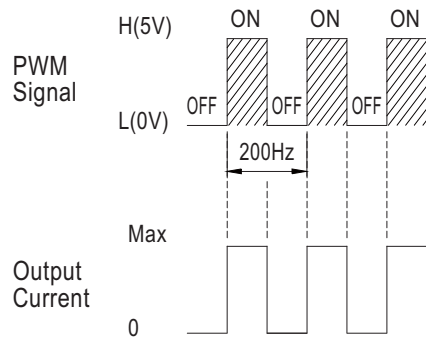
Pin No.		Comment
2	+Vin (Red)	DC supply
4	+Vout (Yellow)	LED+ connection
6	-Vout (Blue)	LED- connection
7	DA (Brown)	Connect to DALI Controller
8	DA (Brown)	
15	-Vin (Black)	DC supply, Don't connect to -Vout



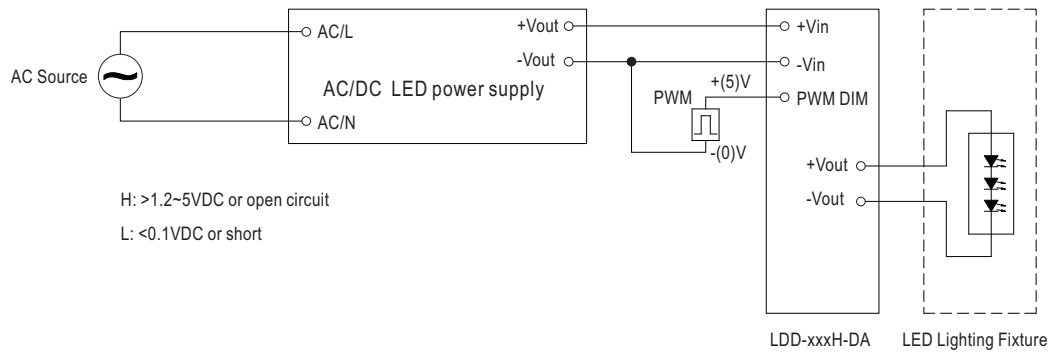
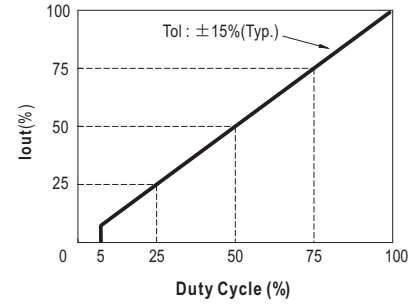
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■ PWM Dimming Control & Diagram(pin style only, wire style optional)



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



■ Efficiency VS Output Voltage(Number of LEDs)

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

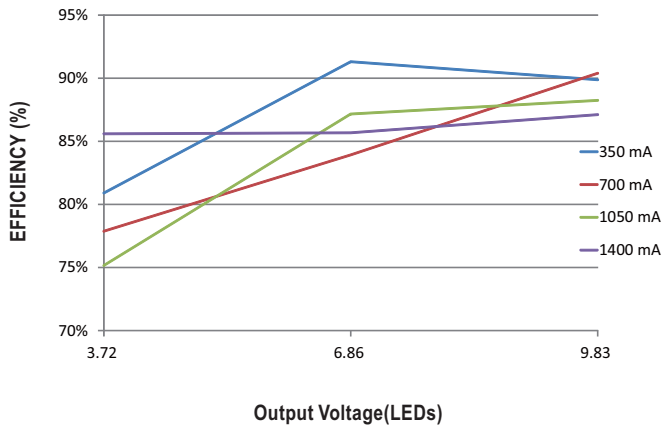


Fig-2 24VDC input, 1~7 LEDs(Vf=3V)

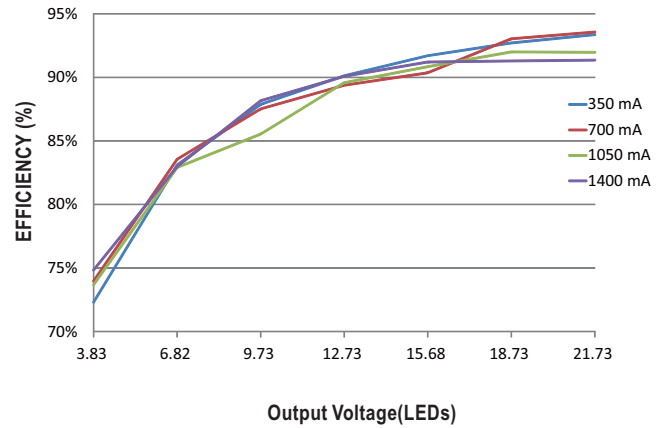


Fig-3 36VDC input, 1~11 LEDs(Vf=3V)

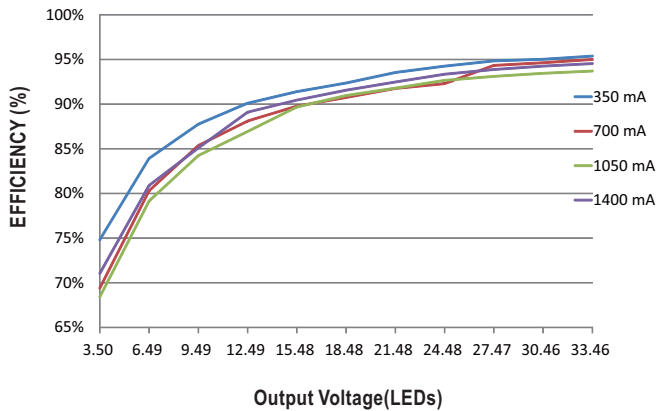
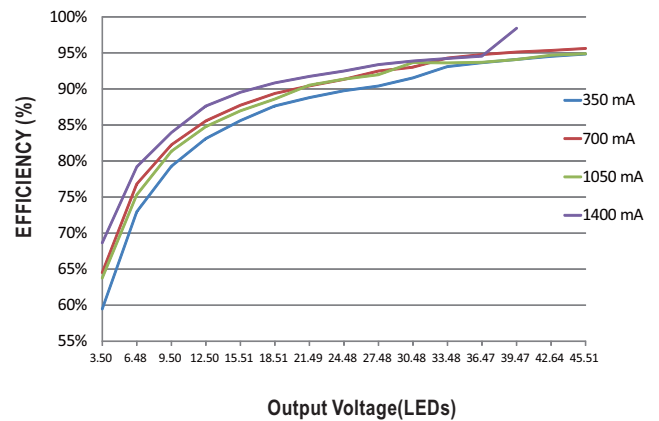


Fig-4 48VDC input, 1~15 LEDs(Vf=3V)



■ Derating Curve

