





(Track adapter application)

LED

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Features

- DC/DC step-down converter
- · Constant current output: 250mA to 1000mA
- Wide input voltage: 12 ~ 56VDC(48V typ.)
- Wide output LED forward string voltage: 2 ~ 45VDC
- · High efficiency up to 96%
- Built-in EMI filter, comply with BS EN/EN55015
- 3 in 1 dimming and remote ON/OFF control.
- Protections: Short circuit / Over temperature / Over current
- · Cooling by free air convection
- · Compact size and Fully encapsulated
- · Suitable for driving illumination LED
- 5 years warranty

Applications

- · DC battery source lighting
- · Portable lighting
- · Commercial lighting
- DC 48V Track lighting
- DC 24V landscape lighting
- For STUCCHI track adapters
- For (III) class III application(SELV)

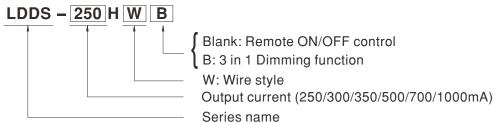
■ GTIN CODE

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

Description

LDDS-H series is a 45W DC/DC LED drive featuring constant current output. LDDS-H operates from 12~56VDC and offers models with different rated current ranging between 250mA and 1000mA. With the high efficiency up to 96%, The 94V-0 flame retardant plastic case with fully-potted to enhance th heat dissipation allows this series to fit for class $\rm III$ commercial track light or DC bus lighting application.

■ Model Encoding





DC-DC Constant Current Step-Down LED driver

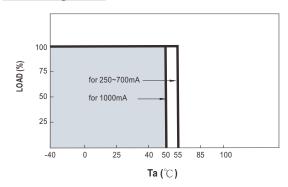
LDDS-H series

SPECIFICATION

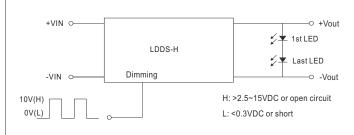
ORDER NO.		LDDS-250HW	LDDS-300HW	LDDS-350HW	LDDS-500HW	LDDS-700HW	LDDS-1000HW		
	CURRENT RAN	IGE	250mA	300mA	350mA	500mA	700mA	1000mA	
OUTPUT	VOLTAGE RANGE Note.4		2 ~ 45VDC						
	CURRENT ACCURACY (Typ.)		±5% at 48VDC input (or 24VDC)						
	RIPPLE & NOISE(max.) Note.2		150mVp-p	150mVp-p	200mVp-p	350mVp-p	350mVp-p	350mVp-p	
	SWITCHING FREQENCY		40KHz ~ 1000KHz						
EXTERNAL CAPACITANCE LOAD (max.)		2.2uF							
VOLTAGE RANGE		12 ~ 56VDC							
INPUT	EFFICIENCY (Typ.) Note.3		94%	95% 96%				96%	
	DC CURRENT	Full load Note.3	200mA	250mA	300mA	400mA	570mA	820mA	
		No load	6mA						
	FILTER		Capacitor						
REMOTE ON/OFF & 3 IN 1 DIMMING	REMOTE ON/OFF		Leave open if not use						
			Power ON with dimming: DIM ~ -Vin >2.5 ~ 15VDC or open circuit						
			Power OFF: DIM ~ -Vin < 0.3VDC or short						
	PWM FREQUENCY		100 ~ 1KHz (4mA at PWM dimming off)						
	3 IN 1 DIMMING		0 ~ 10V / PWM / Resistor Dimming						
	SHORT CIRCUIT		Regulated at rated output current						
PROTECTION			Protection type: Can be continued, recovers automatically after fault condition is removed						
	OVER TEMPERATURE		Tj 150°C typically(IC1) detect on main control IC						
			Protection type: Shut down, recovers automatically after temperature goes down						
WORKING TEMP.		-40 ~ + 55°C (Refer to derating curve) @ full load							
WORKING HUMIDITY STORAGE TEMP., HUMIDITY		20% ~ 90% RH non-condensing							
		-55 ~ +125°C, 10 ~ 95% RH							
ENVIRONMENT	TEMP. COEFFICIENT		±0.03% / ℃						
	VIBRATION		10 ~ 500Hz, 2G 10min./1 cycle, period for 60min. each along X, Y, Z axes						
OPERATING CASE TEMP. (max.			90℃						
SAFETY & EMC	SAFETY STANDARDS		EAC TP TC 020/2011 approved						
	EMC EMISSION		Compliance to BS EN/EN55015, 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		650Khrs min. MIL-HDBK-217F (25°C)						
	DIMENSION		47*12*7mm or 1.85"*0.47"*0.28" inch (L*W*H)						
	WEIGHT		9.5g, 36pcs/box, 0.43kg/box. 12 box per carton/6kg						
	POTTING MATERIAL		Expoxy(UL94-V0)						
NOTE	2.Ripple & no 3.Test conditi 4.Output volta 5.The output	1.All parameters are specified at normal input(48VDC), rated load, 25°C 70% RH ambient. 2.Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1µf capacitor. 3.Test condition: 48VDC input, 36VDC output without Dimming. 4.Output voltage will always step down 4 volts from input DC voltage. 5.The output of LDDS-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							

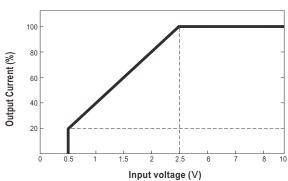


■ Derating Curve



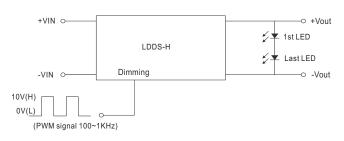
■ Standard Application(LDDS-HW series)(Remote ON/OFF control)

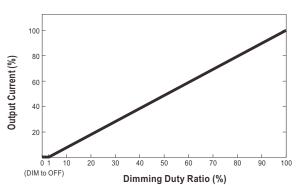




■ 3 in 1 Dimming Control(LDDS-HWB series)

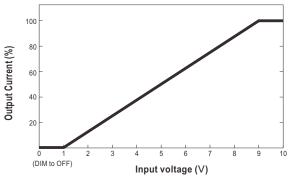
O Applying additive 10VDC PWM signal



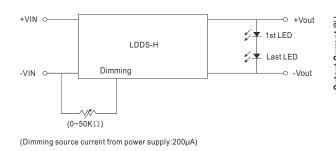


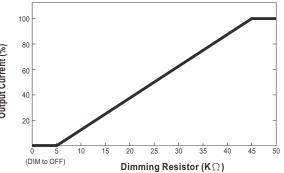
O Applying additive 0~10VDC





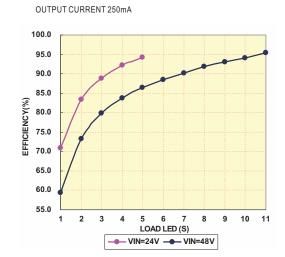
\bigcirc Applying additive resistance



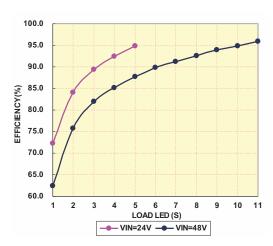




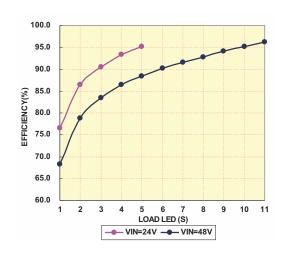
■ Efficiency VS Output Voltage(Number of LEDs)



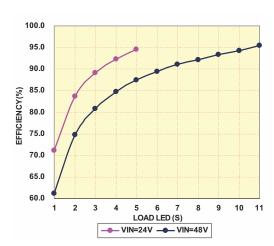
OUTPUT CURRENT 350mA



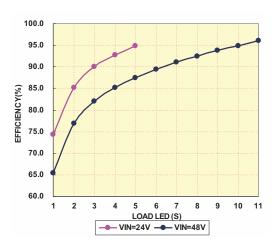
OUTPUT CURRENT 700mA



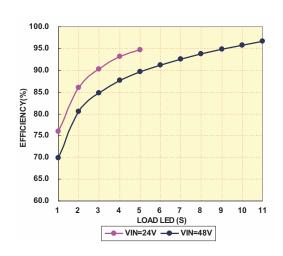
OUTPUT CURRENT 300mA



OUTPUT CURRENT 500mA



OUTPUT CURRENT 1000mA



Unit: mm (inch)



■ Mechanical Specification

BOTTOM VIEW

5 6

12 [0.47]

3±1mm 50±10mm 7 [0.28] SIDE VIEW

NOTE: All wires UL3385 22AWG/300V/105 $^{\circ}\mathrm{C}$ rated

30 [1.18] 47 [1.85]

3 [0.12]

■ Pin Configuration

Р	in No.	Comment		
1	-Vin (Black)	Don't connect to -Vout		
2	+Vin (Red)	DC Supply		
3	DIM(-) (Black)	Connect to -Vin		
4	DIM(+) (White)	ON/OFF control or 3 in 1 Dimming		
5	+Vout (Yellow)	LED + Connection		
6	-Vout (Blue)	LED - Connection		