



■ Features :

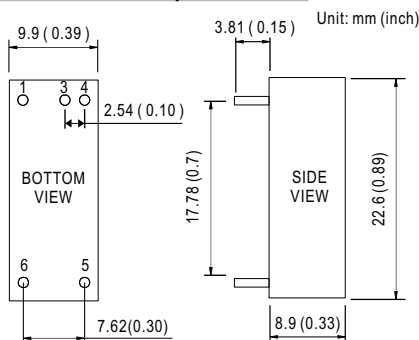
- Constant current output: 300mA to 700mA
- Wide input voltage: 9 ~ 36VDC
- Wide output LED string voltage: 2 ~ 32VDC
- High efficiency up to 95%
- DC/DC step-down converter
- Built-in EMI filter, comply with EN55015 and FCC part15 without additional input filter and capacitors
- Built-in PWM and remote ON/OFF control
- Protections: Short circuit / Over temperature
- Cooling by free air convection
- Fully encapsulated with IP67 level
- Compact size
- Low cost, high reliability
- Suitable for driving illumination LED
- 3 years warranty



SPECIFICATION

ORDER NO.	LDD-300L	LDD-350L	LDD-500L	LDD-600L	LDD-700L
OUTPUT	CURRENT RANGE				
	300mA				
	VOLTAGE RANGE				
	2 ~ 32VDC				
	CURRENT ACCURACY (Typ.)				
±5% at 24VDC input					
OUTPUT	RIPPLE & NOISE(max.) Note.2		150mVp-p	150mVp-p	200mVp-p
	SWITCHING FREQUENCY		40KHz ~ 1000KHz		
EXTERNAL CAPACITANCE LOAD (max.)		2.2uF			
INPUT	VOLTAGE RANGE				
	9 ~ 36VDC				
	EFFICIENCY (max.)				
	95% at full load and 24VDC/36VDC input				
INPUT	DC CURRENT	Full load Note.3	300mA	350mA	500mA
		No load	10mA		
FILTER		Capacitor			
PWM DIMMING & ON/OFF CONTROL	REMOTE ON/OFF				
	Leave open if not use				
	Power ON with dimming: DIM ~ -Vin >3.5 ~ 8VDC or open circuit				
	Power OFF : DIM ~ -Vin < 0.5VDC 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 Protection type: Can be continued, recovers automatically after fault condition is removed				
PROTECTION	OVER TEMPERATURE				
	Tj 150°C typically(IC1) detect on main control IC Protection type : Shut down, recovers automatically after temperature goes down				
ENVIRONMENT	WORKING TEMP.				
	-40 ~ + 85°C (Refer to derating curve)				
	WORKING HUMIDITY				
	20% ~ 90% RH non-condensing				
	STORAGE TEMP., HUMIDITY				
-55 ~ +125°C, 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°C					
EMC	EMI CONDUCTION & RADIATION				
	Compliance to EN55015, FCC part 15 class B				
EMS IMMUNITY					
Compliance to EN61000-4-2,3,4,6,8, light industry level, criteria A					
OTHERS	MTBF				
	2000Khrs min. MIL-HDBK-217F (25°C)				
	DIMENSION				
	22.6*9.9*8.9mm or 0.89**0.39**0.33" inch (L*W*H)				
WEIGHT					
4g					
POTTING MATERIAL					
Expoxy(UL94-V0)					

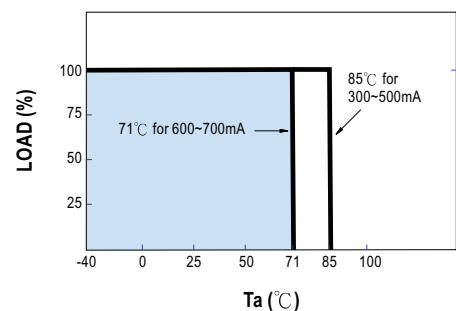
■ Mechanical Specification



■ Pin Configuration

Pin No.	Output	Comment
1	+Vin	DC Supply
3	PWM DIM	ON/OFF and PWM Dimming (Leave open if not used)
4	-Vin	Don't connect to -Vout
5	-Vout	LED - Connection
6	+Vout	LED + Connection

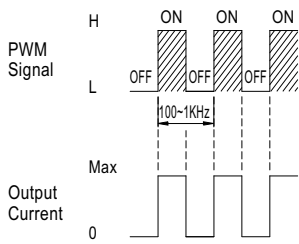
■ Derating Curve



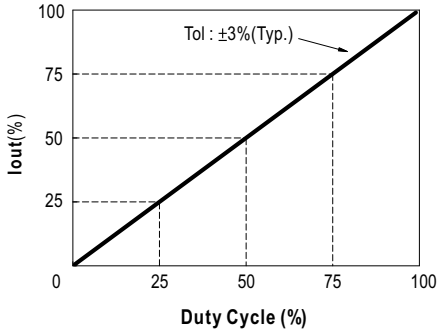
NOTE

1. All parameters are specified at normal input(24VDC), rated load, 25°C 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: 24VDC input.

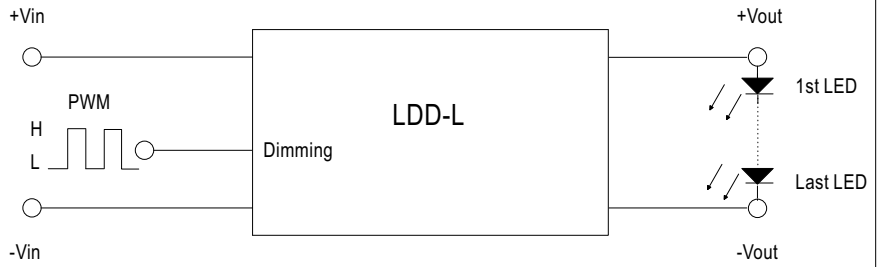
■ PWM Dimming Control



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



■ Standard Application



H: >3.5~8VDC or open circuit
L: <0.5VDC or short

■ Efficiency VS Output Voltage(Number of LEDs)

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

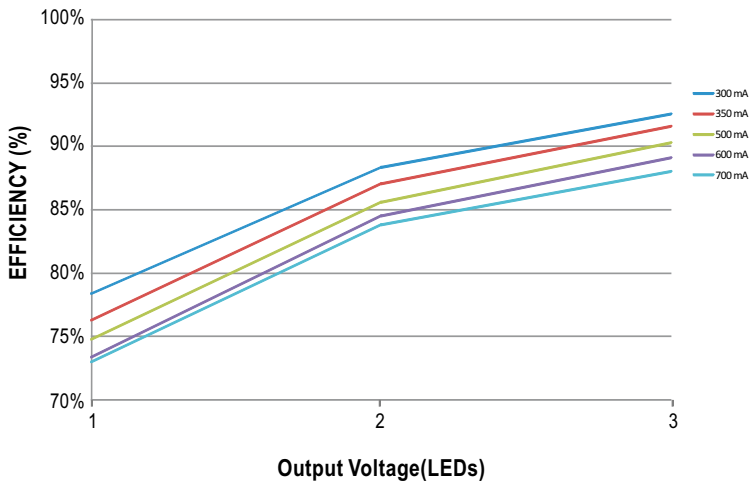


Fig-2 24VDC input, 1~7 LEDs(Vf=3V)

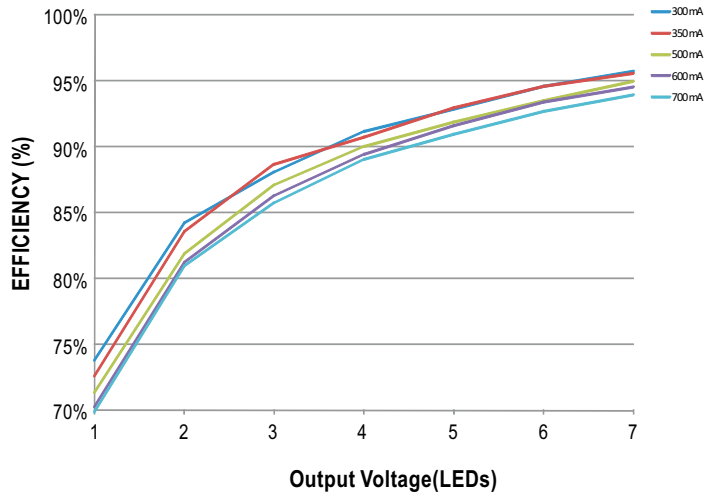


Fig-3 36VDC input, 1~10 LEDs(Vf=3V)

