DLD SERIES
57 WATT
BUCK LED DRIVER



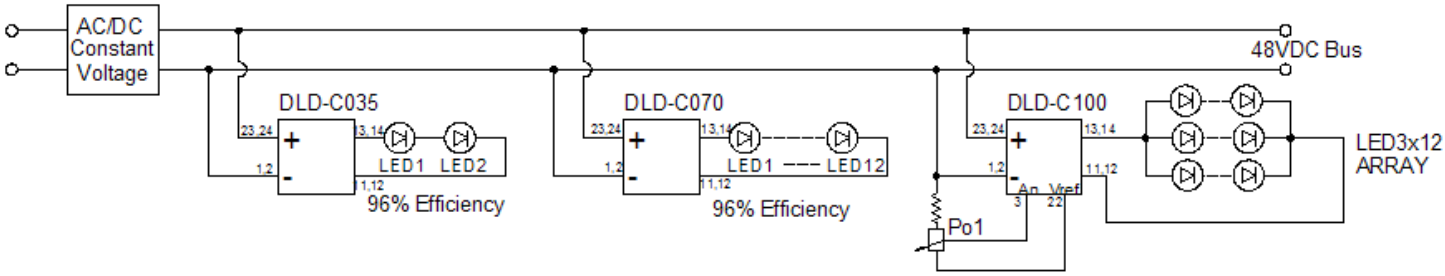
Features

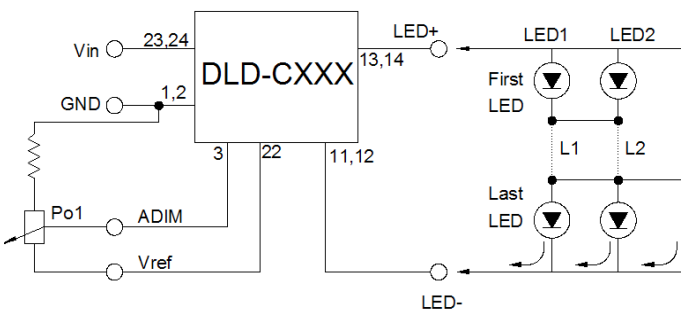
* LED Driver Current up to 1400mA
* Constant Current Output
* Digital PWM Dimming
* Analog Dimming Control
* High Efficiency up to 96%
* Continuous Short Circuit Protection
* DIP16 Package and Wired Version
* High Reliability
* IP67 Protection

MODEL	INPUT VOLTAGE RANGE	OUTPUT OPERATING VOLTAGE	OUTPUT RATED CURRENT	OUTPUT RATED POWER	RIPPLE & NOISE (Max.) NOTE2	%EFF. (Typ.) NOTE3
DLD-C035	4.5-60 VDC	2-57 VDC	350 mA	20 W	300 mVpp	96%
DLD-C070	4.5-60 VDC	2-57 VDC	700 mA	40 W	500 mVpp	96%
DLD-C100	4.5-60 VDC	2-57 VDC	1000 mA	57 W	500 mVpp	96%
DLD-C140	10-36 VDC	8-33 VDC	1400 mA	46.2 W	500 mVpp	96%

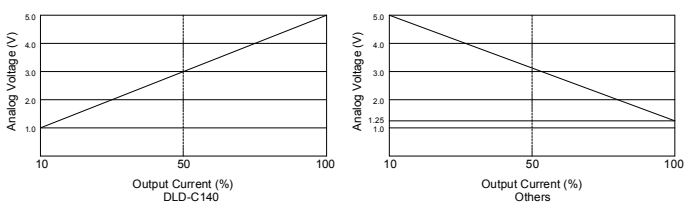
Note:

1. 3V< Vin - Vout <30Vdc, to keep current accuracy. Nominal Input Voltage: 48Vdc, 28Vdc (C140 models)
2. Ripple and Noise are measured at rated current, Nominal Input and 36Vdc or 24Vdc (C140 models) output and 20MHz bandwidth with a 0.1uF ceramic capacitor.
3. Measured at rated current, Nominal Input and 36Vdc or 24Vdc (C140 models) output.
4. Acceptable customer modifications.





Dimming Controlled by Analog Voltage



Specifications

All specifications are Typical at nominal line , full load and 25˚C unless otherwise noted

INPUT SPECIFICATIONS:

Input Voltage ..... 1400mA/others 10-36VDC/4.5-60Vdc
Input Surge Voltage (1second) ... 1400mA/others ... 50Vdc/65Vdc max.
Input Filter ..... Capacitor
Under Voltage Lockout ..... Power up ..... 8.0Vdc/4.0Vdc typ.
Power down .... 6.9Vdc/3.7Vdc typ.

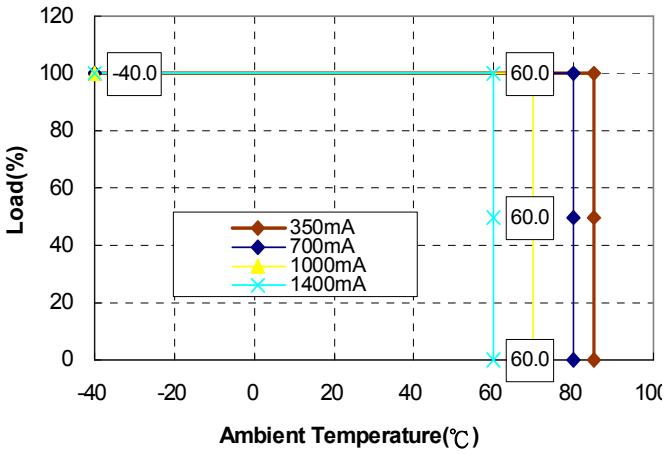
OUTPUT SPECIFICATIONS:

Constant Current Accuracy .... (note1) .....±5% max.
Current Line Regulation ..... (note2) ..... ±5% max.
Current Load Regulation ..... (note3) ..... ±5% max.
Short Circuit Protection ..... Constant Current with Auto Recovery
Start up time ..... 60ms max.

GENERAL SPECIFICATIONS:

Efficiency ..... See Table
Temperature Coefficient ..... ±0.05%/℃
Isolation Voltage ..... Non-isolation
Switching Frequency ... 1400mA/Others ..... 50-500KHz/ 300KHz typ.
Operating Ambient Temperature ..... -40 ~ 85℃ see Derating Curve
Case Temperature ..... 100℃ max.
Cooling ..... Natural Convection
Storage Temperature ..... -55 ~ 125℃
Operating Humidity ..... 10%~95%RH non-condensing
Operating Altitude ..... Sea Level to 3000m
Vibration ..... 0~500Hz, 2G 60min./1cycle, period for 3hours, 3 axes
Shock ..... 30g peak, half sine, 6 axes
MTBF, L-HDBK-217F (25℃) ..... >1.6Mhrs
Dimensions ..... 1.28x0.66x0.40 Inches(32.5x16.8x10.2 mm)
Weight ..... 18g.
Case Material ..... Plastic Case

DLD Derating Curve



PWM DIMMING: (leave open if not used)

Input Voltage Range ..... TTL Logic Compatibility 5Vdc typ.
Threshold Voltage ..... Module on >1.75Vdc, Module off <0.5Vdc
Switching Frequency ..... 1KHz max.
Output Current Range ..... 10% to 100%
Minimum On Time 100ns

ANALOGUE DIMMING: (leave open if not used)

Control Voltage Range 1.25-5Vdc/1-5Vdc (DLD-C140)
Analogue Pin Drive Current ..... 0.4mA max.

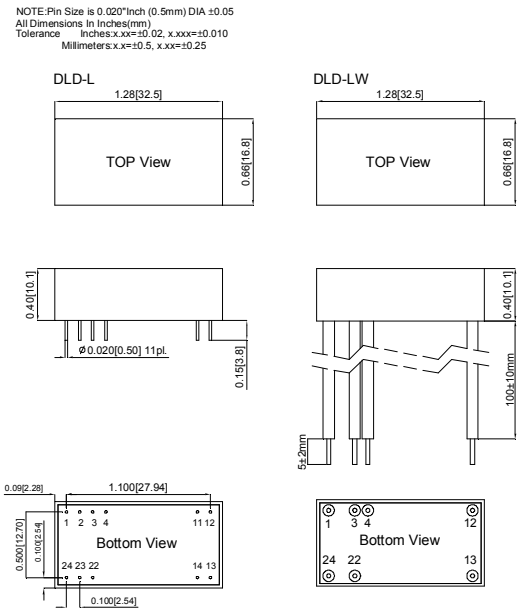
SAFETY AND EMISSIONS:

EMI ..... EN55022/EN55015 Class B
EMS EN61547,EN61000-4-2,3,4,5,6

NOTE:

1. 3V<Vin-Vout <30Vdc to keep current accuracy.
2. Current line regulation is measured from High Line to Low Line.
3. Current load regulation is measured from high to low operating voltage.
4. Acceptable customer modifications.

Mechanical Specification



DLD Connections		
DLD-CXXX	DLD-CXXXLW	Function
1&2	1(Black)	-V Input
3	3(White)	Analogue DIMming
4	4(Green)	PWM/ON/OFF
11&12	12(Blue)	-V Output
13&14	13(Yellow)	+V Output
22	22(Brown)	Vref/NP
23&24	24(Red)	+V Input

NP: No Pin for DLD-C140