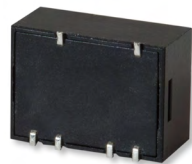


# Dual Output 2W DC/DC Converters

SMD Unregulated Dual Output 2Watt DC/DC Converters



## Product Features:

- Dual Output 2W Unregulated Converters
- 1.5KVdc Isolation Voltage
- Functional Insulation
- Operating Temperature -40C to +105C
- High Efficiency & Low Ripple/Noise
- Continuous Short-Circuit Protection
- Meets UL/EN62368-1

## 2 Watt Dual Output, 1.5KV

Part Number	Input Voltage <sup>1</sup>	Output Voltage	Input Current 0% /100% Load	Max Output Current	Output Ripple/Noise <sup>2</sup>	Efficiency @ Full Load
DC21-V0303DLF	3.3V	±3.3V	5 / 710mA	±300mA <sup>3</sup>	30mV	77%
DC21-V0305DLF	3.3V	±5V	5 / 710mA	±200mA	25mV	81%
DC21-V0312DLF	3.3V	±12V	15 / 700mA	±83mA	25mV	86%
DC21-V0315DLF	3.3V	±15V	15 / 680mA	±67mA	35mV	85%
DC21-V0503DLF	5V	±3.3V	5 / 480mA	±300mA <sup>3</sup>	30mV	82%
DC21-V0505DLF	5V	±5V	5 / 470mA	±200mA	25mV	82%
DC21-V0512DLF	5V	±12V	15 / 460mA	±83mA	25mV	88%
DC21-V0515DLF	5V	±15V	15 / 450mA	±67mA	35mV	86%
DC21-V0524DLF	5V	±24V	35 / 480mA	±42mA	30mV	84%
DC21-V1203DLF	12V	±3.3V	3 / 200mA	±300mA <sup>3</sup>	50mV	81%
DC21-V1205DLF	12V	±5V	3 / 190mA	±200mA	40mV	86%
DC21-V1212DLF	12V	±12V	5 / 190mA	±83mA	20mV	90%
DC21-V1215DLF	12V	±15V	5 / 190mA	±67mA	20mV	90%
DC21-V1224DLF	12V	±24V	15 / 200mA	±42mA	20mV	85%
DC21-V2405DLF	24V	±5V	2 / 100mA	±200mA	35mV	88%
DC21-V2412DLF	24V	±12V	4 / 100mA	±83mA	30mV	90%
DC21-V2415DLF	24V	±15V	4 / 100mA	±67mA	25mV	90%
DC21-V2424DLF	24V	±24V	8 / 100mA	±42mA	20mV	89%

Notes:

<sup>1</sup>Maximum input voltage range +/-10% from nominal

<sup>2</sup>Output ripple/noise tested with a 4.7uF capacitor at input and 10uF capacitor at output of the device @ 20MHz BW

<sup>3</sup>Maximum current derating above 85C by 20% at 105C

<sup>4</sup>Line regulation: +/-1.3% per 1% input change for 3.3V versions and less than +/-1.2% for all other devices

<sup>5</sup>Switching Frequency: 3.3Vin = 220kHz, 5Vin = 420kHz, 12Vin = 350kHz, 24Vin = 350kHz

<sup>6</sup>RoHS exemption 7(c)-I is applicable to internal chip resistor

For additional information contact your [local representative](#), or HALO's support staff at (650) 903-3800 or [info@haloelectronics.com](mailto:info@haloelectronics.com)

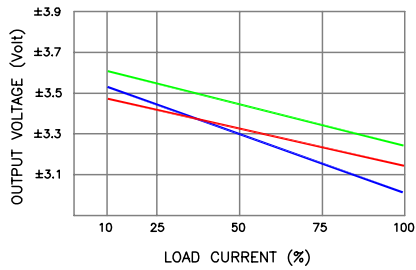
# HALO Dual Output 2W DC/DC Converters

## Output Voltage vs. Load

**2W**

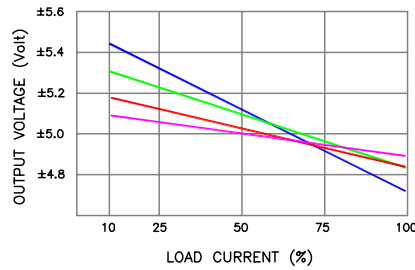
3.3Vin — 5Vin — 12Vin — 24Vin

**3.3V OUTPUT VOLTAGE VS. LOAD**



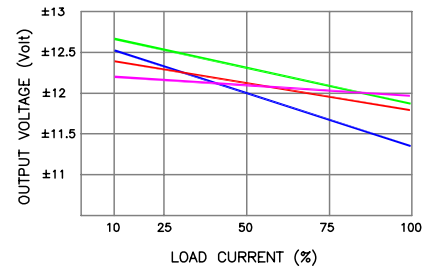
DC11-V0303DLF  
DC11-V0503DLF  
DC11-V1203DLF

**5V OUTPUT VOLTAGE VS. LOAD**



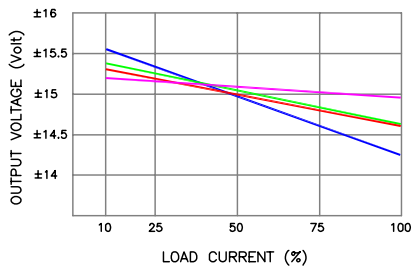
DC21-V0305DLF  
DC21-V0505DLF  
DC21-V1205DLF  
DC21-V2405DLF

**12V OUTPUT VOLTAGE VS. LOAD**



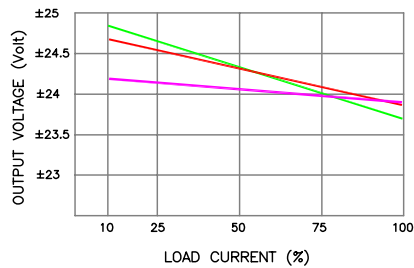
DC21-V0312DLF  
DC21-V0512DLF  
DC21-V1212DLF  
DC21-V2412DLF

**15V OUTPUT VOLTAGE VS. LOAD**



DC21-V0315DLF  
DC21-V0515DLF  
DC21-V1215DLF  
DC21-V2415DLF

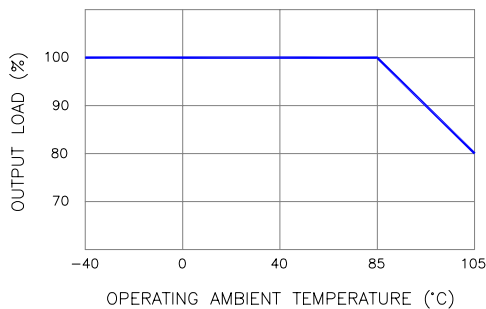
**24V OUTPUT VOLTAGE VS. LOAD**



DC21-V0524DLF  
DC21-V1224DLF  
DC21-V2424DLF

## Power Derating Curve

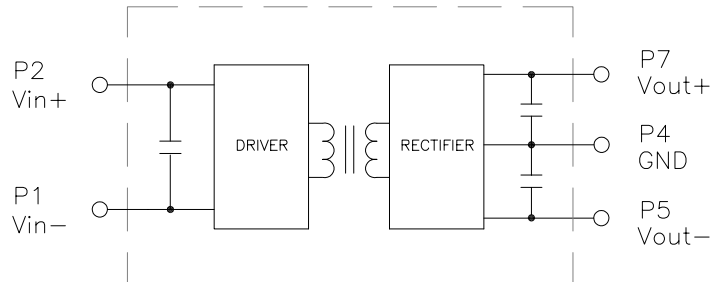
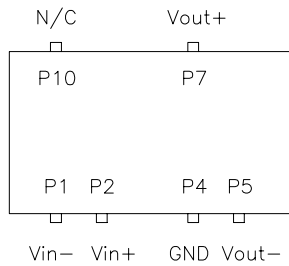
**OUTPUT POWER DERATING**



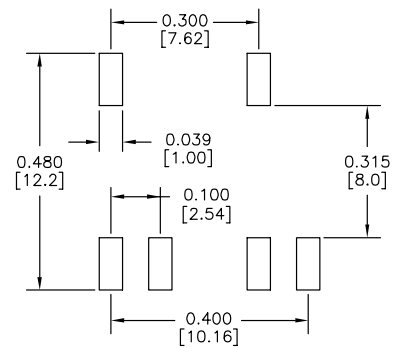
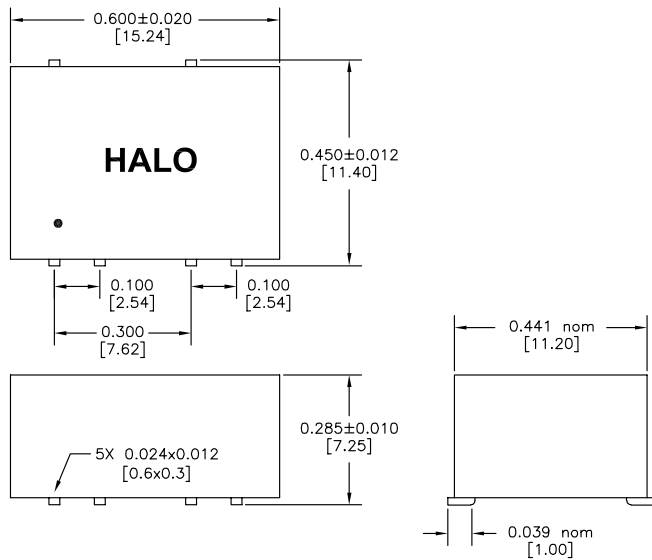
Applicable Part Numbers:  
DC21-V0303DLF  
DC21-V0503DLF  
DC21-V1203DLF

# HALO Dual Output 2W DC/DC Converters

## Pin Out / Block Diagram



## Mechanical



RECOMMENDED SOLDER PAD DIM.

DIMENSION: inch [mm]  
 CO-PLANARITY: 0.004 [0.1]  
 TOLERANCES:  $\pm 0.005$  inch IF NOT SPECIFIED



Santa Clara, CA 95054  
 (650) 903-3800

[info@haloelectronics.com](mailto:info@haloelectronics.com)  
[www.haloelectronics.com](http://www.haloelectronics.com)

HALO® Electronics is a leading supplier of high quality communication magnetics including signal transformers, filters, CMR chokes, PoE power transformers, DC/DC isolation modules, and integrated Ethernet connectors. HALO's high quality and competitively priced leading edge technology solutions are manufactured in ISO9001 and ISO14001 factories.