

## 25 Watt - DCPS25W Series

DC to DC CONSTANT VOLTAGE OR CONSTANT CURRENT LED DRIVERS



**25W**  
 DCPS25W Series  
 DC to DC

### Model: DCPS25W Series

- Drive Mode: Constant Current or Constant Voltage
- Technology: Isolated DC to DC Switch Mode
- Output Power: 25W Max.
- Input Voltage: 12 to 24VDC, 18VDC Nominal +/- 6VDC
- Number of Outputs: One
- Output Voltages: 12VDC - 72VDC
- Output Currents: 350mA - 1040mA

### Environmental

1. Operating temperature: Tc 90C Maximum. Reference -30 to +50°C ambient
2. Storage temperature range: -40 to +85°C
3. Humidity (non-condensing): 5% - 95%RH
4. Cooling: Convection
5. Vibration Frequency: 5-55Hz/2g, 30 minutes
6. Impact resistance: 1g/s
7. MTBF@ 40°C: 401,000 hours @ Full Load per MIL-217F Notice 2.

### Safety and Compliance

1. UL8750, EN61347, CSA 22.2 safety compliant
2. FCC, 47CFR Part 15 Class B compliant
3. Water resistant and Dust Proof Design: IP66, NEMA4, for Dry, Damp, Wet Locations.
4. Compact, Lightweight Design.
5. Isolation between Primary and Secondary
7. Protection: output over-voltage, output over-current, reset by power cycling.
8. Internal Thermal protection. Hick-up mode.  
Off if Tc reaches  $\approx 105^{\circ}\text{C}$ , On when Tc reaches  $\approx 65^{\circ}\text{C}$

### Electrical Specifications at 25°C

- Input voltage range: 12 to 24VDC, nominal 18 VDC +/- 6VDC
- Inrush current: <20A at 25C, 12VDC Input, cold start, Full Load
- Input current: 2.91A @ 12VDC, 1.6A at 18Vdc, Full Load
- Efficiency: 85% typical at 18Vdc Input, Full Load
- Maximum output power: 25W
- Constant Current regulation: +/-2% Over Input Variation
- Load regulation accuracy: +/-4%
- Ripple and noise: 700mV Maximum, 20MHZ B.W.



IP66



### Constant Current Versions

Part Number	US Class 2	CN Class 2	Output Voltage Range	Output Constant Current	Current Accuracy	Output Power Maximum	Typical Efficiency <sup>(1)</sup>
DCPS25W-18-072-C0350	NO	NO	36 - 72 VDC	350 mA	$\pm 4\%$	25W	86%
DCPS25W-18-056-C0450	YES	YES	28 - 56 VDC	450 mA	$\pm 4\%$	25W	85%
DCPS25W-18-036-C0700	YES	YES	18 - 36 VDC	700 mA	$\pm 4\%$	25W	84%
DCPS25W-18-024-C1040	YES	YES	12 - 24 VDC	1040 mA	$\pm 4\%$	25W	83%

### Constant Voltage Versions <sup>(2)</sup>

Part Number	US Class 2	CN Class 2	Output Voltage	Output Current Range	Voltage Accuracy	Output Power Maximum	Typical Efficiency <sup>(1)</sup>
DCPS25W-18-072	NO	NO	72 VDC	87 - 350 mA	$\pm 5\%$	25W	86%
DCPS25W-18-056	YES	YES	56 VDC	112 - 450 mA	$\pm 5\%$	25W	85%
DCPS25W-18-036	YES	YES	36 VDC	175 - 700 mA	$\pm 5\%$	25W	84%
DCPS25W-18-024	YES	YES	24 VDC	260 - 1040 mA	$\pm 5\%$	25W	83%

### Notes

1. Typical efficiency measured at 18Vdc input, full load
2. Constant voltage models will only maintain CV mode when load resistance + LED Load  $\geq$  Vout/Iout

25W

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DC to DC



DC/DC LED Optimized Drivers

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## Mechanical Dimensions: Inches [mm]

Material: Black PC ABS Plastic Case Fully Encapsulated  
Weight: 198 grams (7.0 oz) Typical

## Labeling Example

