

DC-DC

VED150-106

V1.2

150W DC to DC Converter

The VED150-106 of DC to DC Converter provide 150 Watts of continuous output power. All units pass burn-in test at full load condition.



FEATURES:

- * Wide Operating Voltage 28 to 59 VDC
- * Single Output
- * C.C. Mode + C.V. Mode
- * Constant Voltage: 14.2V
- * Built-in OR-ing diode
- * Protection: Output OVP, OLP, OTP, Input/Output Reverse Polarity Protection
- * 3-Year Warranty

APPLICATIONS:

- * Outdoor Installations
- * DC-DC Converter for EV

GENERAL SPECIFICATION:

- * **Short Circuit Protection:** Latch
- * **Cooling:** Free Air Convection
- * **Protection Classes:** Class II
- * **Waterproof Rating:** IP67

Electrical Characteristics:

Characteristic	Condition	Min.	Typ.	Max.	Unit
Input Operate Voltage Range	Detail to See Fig.1	28		59	VDC
Output Power Range	See Rating Chart			150	W
Low Line Input Current	Full Load, Vin=28VDC		6.3		A
High Line Input Current	Full Load, Vin=59VDC		3.2		A
Efficiency	Full Load, Vin=48VDC, Detail to See Rating Chart	See Rating Chart			
Line Regulation	Full Load, Vin=48VDC	0.5		1	%
Load Regulation	Vin=48VDC, 10~90% Load Change at Condition			5	%
Temperature Coefficient	Full load, Vin=36~48VDC			±0.04	%/°C
Hi-Pot	Input & Output to Case			1500	VAC
EMC Emission	Meet ECE R10			B	Class
Enable		5		16	V
Inhibit(option)		5		16	V
Hysteresis Voltage		3		5	V

Environmental:

Characteristic	Condition	Min.	Typ.	Max.	Unit
Operating Temperature	Detail to see Fig.2 (Derate linearly from 100% load at 45°C to 50% load at 70°C)	-20		70	°C
Storage Temperature	10 ~ 95% RH	-30		80	°C
Operating Humidity		0		95%	RH
Storage Humidity	Non-Condensing	0		95%	RH
Electro Static Discharge	Air Discharge, ISO10605			15	kV
Electro Static Discharge	Contact Discharge, ISO10605			8	kV
Mean Time Between Failure	Operating Temperature at Vin=100VDC/Io=7A@25°C, Calculated per MIL-HDBK-217F	100k			h

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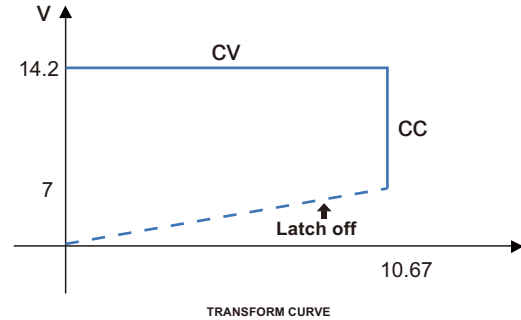
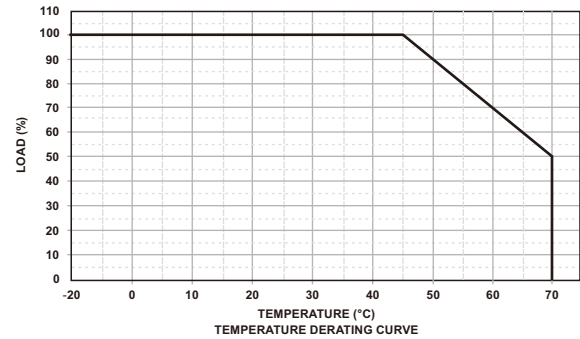
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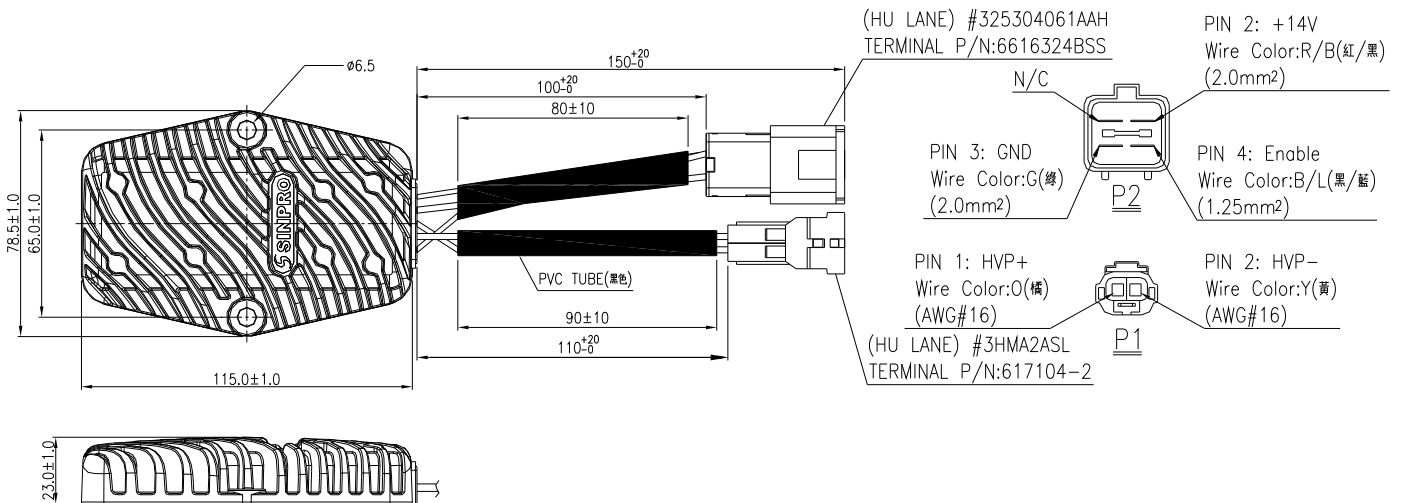
150W DC to DC Converter

SPECIFICATION NOTE :

- Output can provide up to peak load when the power supply starts up. Continuous staying in more than rated load is not allowed.
- At factory, in 60% rated load condition, each output is checked to be within voltage accuracy.
- Line regulation is defined by changing $\pm 10\%$ of input voltage from nominal line at rated load.
- Load regulation is defined by changing $\pm 40\%$ of measured output load from 60% rated load.
- The ripple is measured from peak to peak with a bandwidth-limit of 20MHz (Measured at the output connector with a 0.1uF ceramic capacitor and a 47uF electrolytic capacitor).
- Efficiency is measured at rated load, and nominal line.



MECHANICAL DIMENSIONS: (UNIT: mm)



OUTPUT CABLE RECOMMEND :

- Selected output connectors and wire, please refer to Appendix.
- Input Connector : HU-LANE#3HMA2ASL
- Output Connector : HU-LANE#325304061AAH

PACKING :

- Net weight: 293g approx.

INPUT			
PIN1:HVP+			PIN2:HVP-
OUTPUT			
PIN1:N/C	PIN2:+14.2V	PIN3:GND	PIN4:Enable Optional

Rating Chart:

MODEL NO.	Current	Remote ON/OFF(Optional)	Setting Voltage Range (Factory setting, can't be adjusted)	Maximum Output Power	Ripple & Noise	Total Regulation	Typ. Efficiency
	I _{max}	DC Voltage	DC Voltage				
	(A)	(V _{in})	(V _o)				
VED150-106	10.67	N/C	14.2	150	140	± 3	89
VED150-106E	10.67	5~16 VDC(ENABLE)	14.2	150	140	± 3	89
VED150-106I	10.67	5~16 VDC(INHIBIT)	14.2	150	140	± 3	89