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pV300

PicoVerter Series

40-60 Watts
 300 VDC Input
 1/2 Brick

The pV300LF PicoVerter modules combine high efficiency electrical design with advanced thermal management techniques including insulated metal substrate technology and thermally conductive potting to produce a small, ruggedized DC-DC converter with reduced temperature rise and increased reliability. Operating over the entire 220-400 VDC Input Range, the pV300LF Series is ideal for use in rugged and high reliability applications requiring baseplate cooled operation such as military, telecommunication, civil avionic and industrial applications. This series is designed for Lead Free and RoHS Compliance.



Operational Features

- Lead Free / RoHS Compliant Product
- Miniature Size - Low Profile .42"
- High Efficiency
- Industry Standard Pin-out
- Low Thermal Resistance
- 100°C Baseplate Operation
- Constant Frequency Operation
- Non-Shutdown Over Voltage Protection
- Logic On/Off
- Fully Automated Manufacturing
- UL/cUL 60950-1 / CE Mark (pending)

Typical Applications

- Aerospace
- Civil Avionics
- Military / COTS
- Industrial Control
- Telecommunication

Model Selection

Model Number	Input Range (VDC)	Output Voltage (VDC)	Output Current (Amps)
pV300-3	220-400V	3.3V	12.5A
pV300-5	220-400V	5.0V	10
pV300-12	220-400V	12.0V	5A
pV300-15	220-400V	15.0V	4A
pV300-24	220-400V	24.0V	2.5A



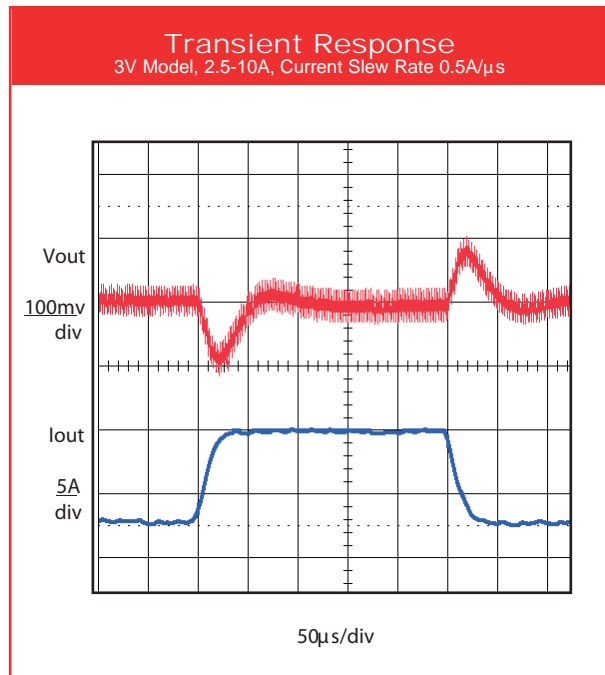
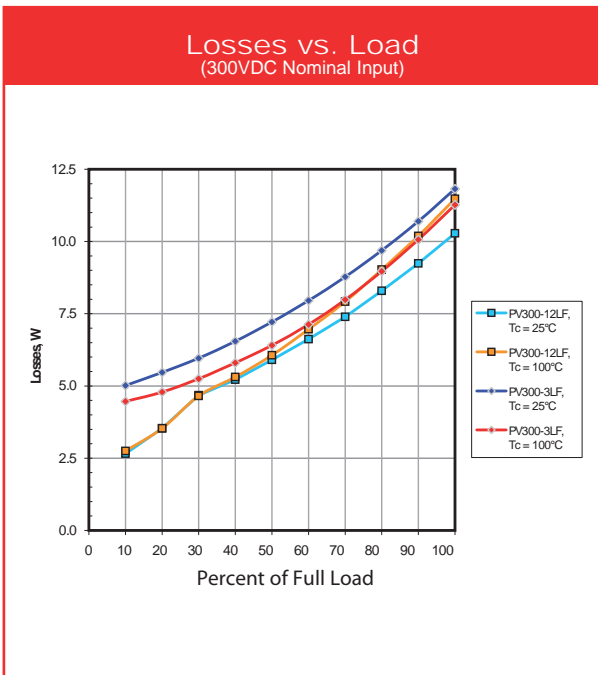
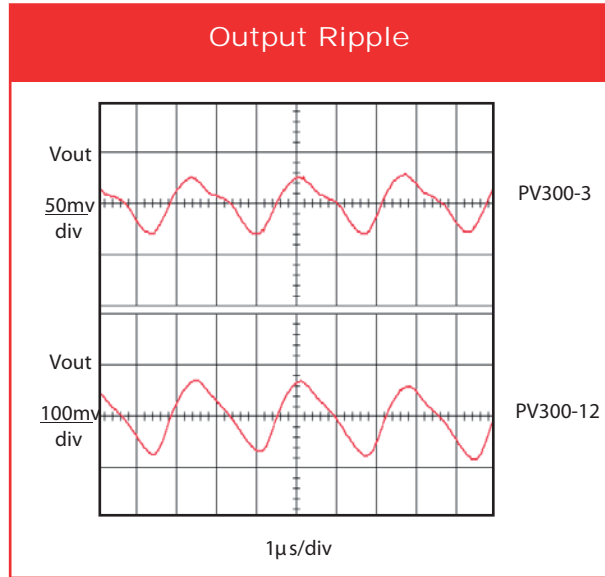
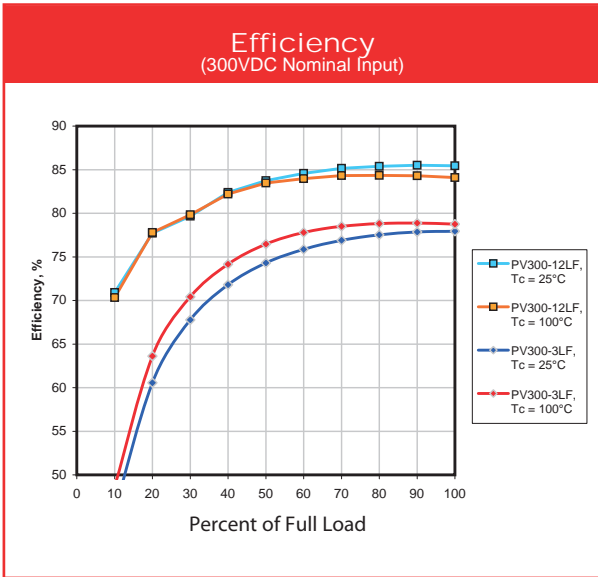
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pV300

40-60 Watt / 300 VDC Input / Half Brick



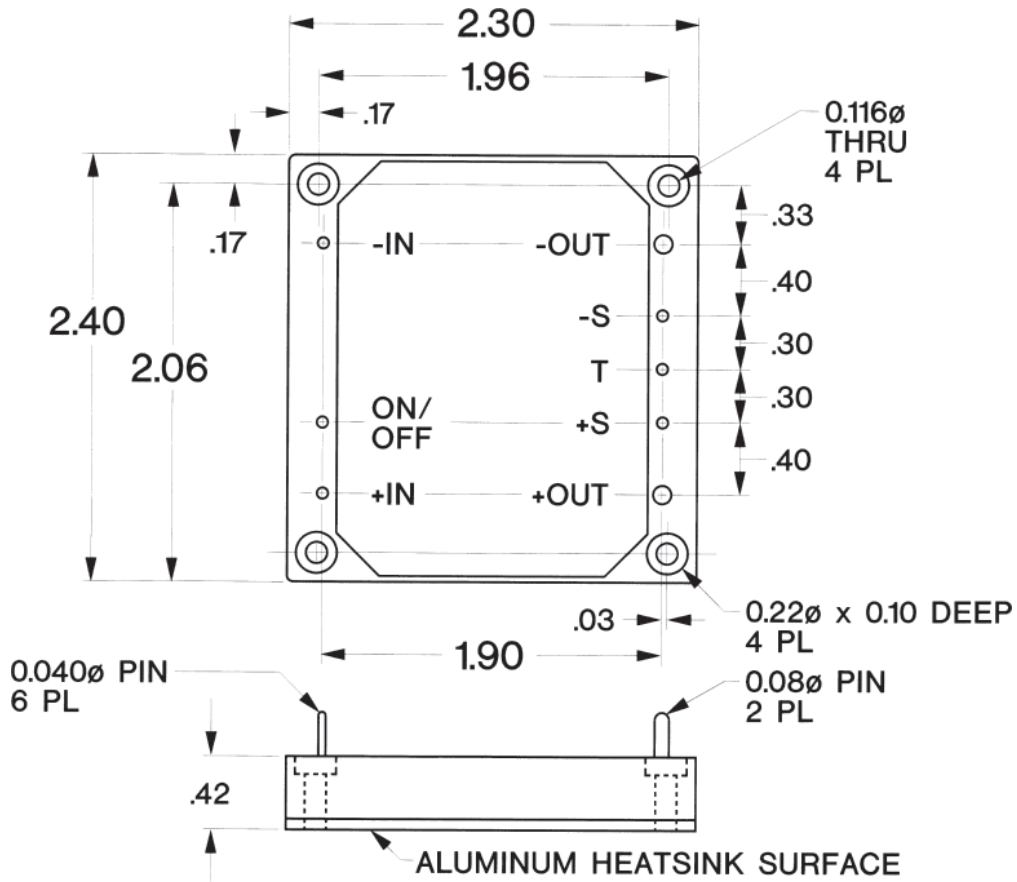
Specifications:					
CATEGORY	SPECIFICATION	MIN	TYP	MAX	CONDITIONS
INPUT	Input voltage (VDC)	220	330	400	
	Input reflected ripple		10%		full load, nominal line
OUTPUT	Set point accuracy		±0.5%	±1%	full load
	Load regulation		0.1%	0.2%	0 - full load
	Line regulation		0.1%	0.2%	220-400 VDC
	Ripple / Noise		1%	3%	0 - 20MHz
	Trim range	±10%			
	Remote sense compensation	0.5V total			
	OVP (non shutdown auto. rec.)	110%	115%	130%	
	Current Limit (auto recovery)		115%		
	Short circuit current		130%		full load
	Transient response - Excursion		2%		20 - 80% FL, 1/2 A/μs
	Transient response - Recovery Time		50μs	200μs	Vout 1%
	Temperature drift			0.02%/°C	
ISOLATION	Input to output	4500VDC			
	Input to case	2500VDC			
	Output to case	500VDC			
THERMAL	Operating temperature	-40°C		+100°C	Case
	Automatic shut down temperature	+100°C	+105°C	+110°C	Case
	Thermal resistance case to ambient		6.6 °C/watt		
	Storage temperature	-55°C		+110°C	
WEIGHT	3.4oz. (96 grams)				
SIZE	0.42 x 2.40 x 2.30" / (10.70 x 60.96 x 58.42mm)				



A wide variety of evaluation boards are available for your evaluation requirements. Our application notes provide circuit design and board layout details to simplify your design processes.

Our experienced application engineering team is available for “free engineering evaluation” of your schematic and board layout to ensure your design is right the first time.

Mechanical Drawing



Note: Pin Material
 * Input and Control Pins are Brass
 * Output Pins are Copper
 * Pin Finish is Gold over Nickel, JESD97
 2nd Level Interconnect Category e4

Note:

Specifications are subject to change without notice