

DC-DC Converters



Series PB Single and Series PB Dual

Isolated Regulated 100 Watts, Wide Input Range/36-72 VDC

Fully Regulated, Short Circuit Protected

Parallel Operation Available

Features:

- Dual isolated outputs
- Short circuit protection
- Input voltage protection
- Thermal, over temp. shutdown
- Line regulation
- Load regulation
- No external components required
- Hi density, hi efficiency design
- Remote shutdown
- Trim capabilities
- Fixed frequency-100 Khtz

The PICO PB Series of high power DC-DC Converters, allow a wide input voltage of 36-72 VDC, while maintaining a regulated output. They are fully safeguarded for over voltage, over temperature and continuous short circuit protection.

The availability of Dual Isolated Outputs, small size, and the capability of parallel operations as standard features should reduce your design and component costs, while the fixed frequency operation helps parallel connections for higher power requirements.

This high density unit is assembled in the USA with PICO quality and component selection, allowing it to meet the most stringent commercial requirements.

Typical Characteristics:

Frequency: 100 Khtz

Base plate: Max. +85° C

Operating temperature: See thermal chart, Min. 0° C ambient, Max. +85° C base plate temp.

Test conditions: 25° C ambient

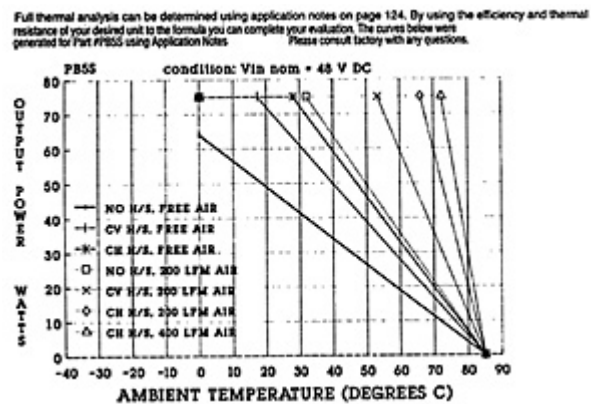
Isolation Base Input: 2121 VDC

Isolation Input Output: 4242 VDC

Isolation Output to Base: 1000 VDC

Storage temperature: -55° C to +105° C

- **25 Standard Models**
100 VDC Output Models
Hi Density 100 Watts
Fixed Frequency
- For all variations, call factory.



Larger Version of Graph [1]

Series PB Single									
100 Watts - Input 36-72 VDC									
Pico Part No.	Input Voltage Range (V DC)	Output Voltage (V DC)	Max. Output Power * (W)	EFF. Full Load Typical ** (%)	Max. Load Regulation (%)	Max. Line Regulation At Full Load (%)	Output Voltage Ripple (Full Load) 1-1MHz BW (MV P-P)	Output Voltage Tolerance ** (± %)	Price (US \$)

10-50%	50-100%	36-48V	48-72V								
PB3.3S	36-72	3.3	50	76	1.50	1.50	0.75	0.75	50	2.0	171.63
PB5S	36-72	5	75	78	1.00	1.00	0.75	0.75	50	1.5	171.63
PB5.2S	36-72	5.2	75	78	1.00	1.00	0.75	0.75	50	1.5	171.63
PB9S	36-72	9	100	82	1.00	1.00	0.75	0.75	50	1.0	171.63
PB12S	36-72	12	100	84	0.75	0.75	0.50	0.50	50	1.0	171.63
PB15S	36-72	15	100	85	0.75	0.75	0.50	0.50	50	1.0	171.63
PB24S	36-72	24	100	87	0.50	0.50	0.50	0.50	50	0.5	171.63
PB28S	36-72	28	100	87	0.50	0.50	0.50	0.50	50	0.5	171.63
PB48S	36-72	48	100	88	0.50	0.50	0.50	0.50	50	0.5	171.63
PB100S	36-72	100	100	87	0.50	0.50	0.50	0.50	50	0.5	236.49
10% Minimum load required at all times. * Using proper thermal management, maximum temp. of +85° C (case) ** Reading taken at nominal 48 VDC input											

Series PB Dual * 100 Watts * Input 36-72 VDC											
Pico Part No.	Input Voltage Range (V DC)	Output Voltage (V DC)	Max. Output Power Per Output *	EFF. Full Load Typical ** (%)	Max. Load Regulation (%) ***		Max. Line Regulation At Full Load (%)		Output Voltage Ripple (Full Load) 1-1MHz BW (MV P-P)	Output Voltage Tolerance ** (± %)	Price (US \$)
					10-50%	50-100%	36-48V	48-72V			
PB5D	36-72	5	37.5	78	1.00	1.00	0.75	0.75	50	1.5	245.90
PB9D	36-72	9	50	82	1.00	1.00	0.75	0.75	50	1.0	245.90
PB12D	36-72	12	50	84	0.75	0.75	0.50	0.50	50	1.0	245.90
PB15D	36-72	15	50	85	0.75	0.75	0.50	0.50	50	1.0	245.90
PB24D	36-72	24	50	87	0.50	0.50	0.50	0.50	50	0.5	245.90
PB28D	36-72	28	50	87	0.50	0.50	0.50	0.50	50	0.5	245.90
PB48D	36-72	48	50	88	0.50	0.50	0.50	0.50	50	0.5	264.28
10% Minimum load required at all times. * Using proper thermal management, maximum temp. of +85° C (case) ** Reading taken at nominal 48 VDC input *** Balance Load											

****HIGH VOLTAGE SERIES PB TO 300 VDC - 150 WATTS - INPUT 36-72 VDC											
PICO PART NUMBER	INPUT VOLTAGE RANGE (VDC)	OUTPUT VOLTAGE (DC)	MAX. OUTPUT POWER (W)*	EFF. @ FULL LOAD TYPICAL (%)**	MAX. LOAD REGULATION (%)**		MAX. LINE REGULATION AT FULL LOAD (%)		OUTPUT VOLTAGE RIPPLE FULL LOAD 1-1 MHz BW (%)	OUTPUT VOLTAGE Tolerance (±%)**	PRICE (US \$)
					20-50%	50-100%	36-48V	48-72V			
PB125S	36-72	125	150	84	0.5	0.5	0.3	0.3	1	0.5	236.49
PB150S	36-72	150	150	84	0.5	0.5	0.3	0.3	1	0.5	236.49
PB175S	36-72	175	150	84	0.5	0.5	0.3	0.3	1	0.5	236.49
PB200S	36-72	200	150	84	0.5	0.5	0.3	0.3	1	0.5	315.32
PB225S	36-72	225	125	84	0.5	0.5	0.3	0.3	1	0.5	315.32

PB250S	36-72	250	125	84	0.5	0.5	0.3	0.3	1	0.5	315.32
PB275S	36-72	275	100	84	0.5	0.5	0.3	0.3	1	0.5	315.32
PB300S	36-72	300	100	84	0.5	0.5	0.3	0.3	1	0.5	394.15
15% Minimum load required at all times *Using proper themal management maximum temp of +85 °C (case) ** Reading taken at nominal 48 VDC **** UL approval pending											

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[GO TO HEAT SINK INFORMATION](#)^[3]

[GO TO MECHANICAL CONFIGURATION](#)^[4]

For immediate engineering assistance or to place an order: **Call Toll Free: 800-431-1064**

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