

- Compact 30.5 x 29.3 x 8.1 mm
- 36-75VDC Input
- 1.5V 10A - 18V 2.5A Nominal Outputs
- Surface Mount
- Low 8.81mm Profile
- 1500VDC Basic Isolation

iPB Series

15-45W

Pico Brick Converter

iPB Features and Benefits

Features

- High operating efficiency (up to 89%)
- Constant switching frequency
- 33% smaller than eighth brick

Benefits

- Reduced system heating
- Easier system filtering
- Optimization of board space

Specifications

MODEL		iPB480				
ITEMS						
Nominal Output Voltage	VDC	3.3	5	12	15	18
Input Voltage Range	VDC	36 - 75				
Input Current (max)	A	2.0 - 2.2 Amps model dependent				
Output Voltage Tolerance	VDC	3.19-3.41	4.8-5.2	11.52-12.48	14.4-15.6	17.1-18.9
Ripple & Noise (max) (pk to pk) (1)	mV	100	125	100		
Line Regulation (max)	mV	6	8	24	30	36
Load Regulation (max)	mV	12	15	96	120	144
Overload Protection (typ)	%	Inception - 120-150% of rated output; Short circuit - auto recovery				
Overvoltage Protection	VDC	12	10	19	19	27
Remote Sense	-	No				
Remote On / Off	-	Yes (Negative Logic)				
Temperature (operating)	°C	-40 to 115		-40 to 125		
Temperature (storage)	°C	-55 to 125				
Humidity (operating)	-	20-95% RH Non condensing				
Humidity (storage)	-	Per IPC / JEDEC J-STD-020, for MSL-1 (<30C/85%RH) in original packaging				
Cooling	-	Convection or forced air				
Isolation Voltage	VDC	1500				
Vibration (non operating)	-	5 to 50Hz @ 0.5g (4.9m/s ²), and 50 to 500Hz @ 1.5g (14.7m/s ²) per Bellcore TR-EOP-000063-5.4.4				
Shock	-	196.1m/s ²				
Safety Agency Approvals	-	UL60950 (US and Canada), VDE0805 (IEC60950), CB scheme (IEC60950), CE Mark (LVD)				
Weight (max)	g	18				
Size	mm	30.5 x 29.3 x 8.81				
Warranty	-	3 years				

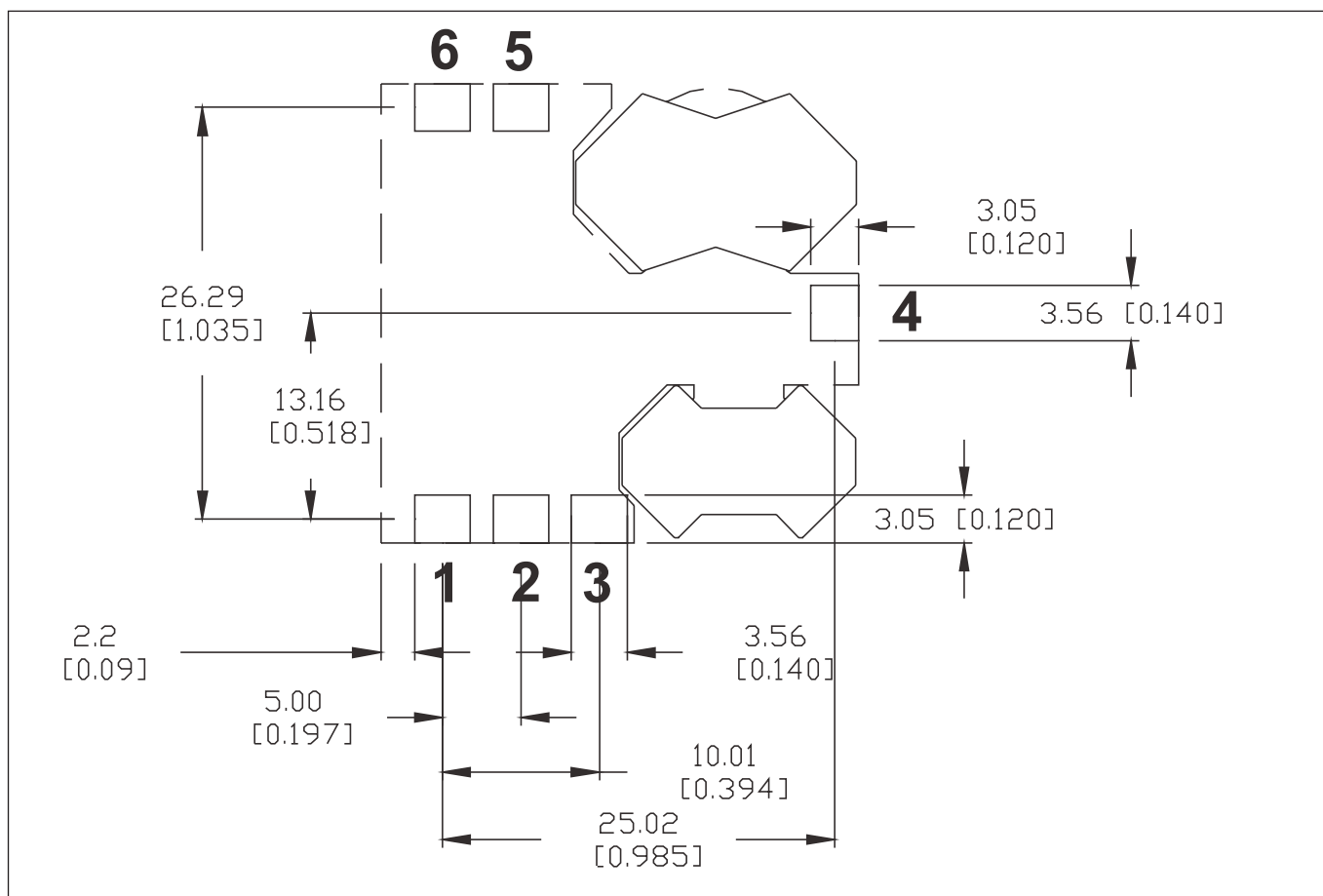
Notes: (1) Measured across one 3.3uF ceramic capacitor and one 10uF tantalum capacitor; BW = 20MHz



Model Selector

Model	Voltage (V)	Adjust Range (V)	Max. Curr. (A)	Max. Output Power (W)	Efficiency at Full Load (%)
iPB48010A033V-001-R	3.3	2.97 - 3.46	10	33	88
iPB48007A050V-001-R	5	4.5 - 5.5	7	35	89
iPB48004A120V-001-R	12	10.8 - 13.2	3.5	42	88
iPB48003A150V-001-R	15	13.5 - 16.5	2.75	41	87
iPB48003A180V-001-R	18	16.2 - 19.8	2.5	45	88

Recommended Footprint (Top View)



PIN Assignments

Pin#	Function
1	Vout (+)
2	Vout (-)
3	Vout Trim
4	On / Off
5	Vin (-)
6	Vin (+)





TDK-LAMBDA EMEA

www.emea-tdk-lambda.com



TDK-Lambda France SAS

ZAC des Delaches
BP 1077-Gometz-le-Chatel
91940 Les Ulis
France
Tel: +33 1 60 12 71 65
Fax: +33 1 60 12 71 66
france@fr.tdk-lambda.com
www.fr.tdk-lambda.com



Italy Sales Office

Via dei Laboratori 128/130
20092 Cinisello Balsamo (MI)
Italy
Tel: +39 02 61 29 38 63
Fax: +39 02 61 29 09 00
info.italia@it.tdk-lambda.com
www.it.tdk-lambda.com



TDK-Lambda Germany GmbH

Karl-Bold-Strasse 40
77855 Achern
Germany
Tel: +49 7841 666 0
Fax: +49 7841 5000
info.germany@de.tdk-lambda.com
www.de.tdk-lambda.com



Austria Sales Office

Aredstrasse 22
2544 Leobersdorf
Austria
Tel: +43 2256 655 84
Fax: +43 2256 645 12
info.germany@de.tdk-lambda.com
www.de.tdk-lambda.com



TDK-Lambda UK Ltd.

Kingsley Avenue
Ilfracombe
Devon EX34 8ES
United Kingdom
Tel: +44 (0) 12 71 85 66 66
Fax: +44 (0) 12 71 86 48 94
powersolutions@uk.tdk-lambda.com
www.uk.tdk-lambda.com



Nemic Lambda Ltd.

Kibbutz
Givat Hashlosha 48800
Israel
Tel: +9 723 902 4333
Fax: +9 723 902 4777
info@nemic.co.il
www.nemic.co.il



Russia

Technical Support:
St Petersburg
Tel: +7 (812) 6580463
Sales:
Moscow
Tel: +7 (499) 7557732
info@tdk-lambda.ru
www.tdk-lambda.ru

LOCAL DISTRIBUTION