

- 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	Benefits
• High operating efficiency (up to 89%)	• Reduced system heating
• Constant switching frequency	• Easier system filtering
• 33% smaller than eighth brick	• Optimization of board space

Specifications

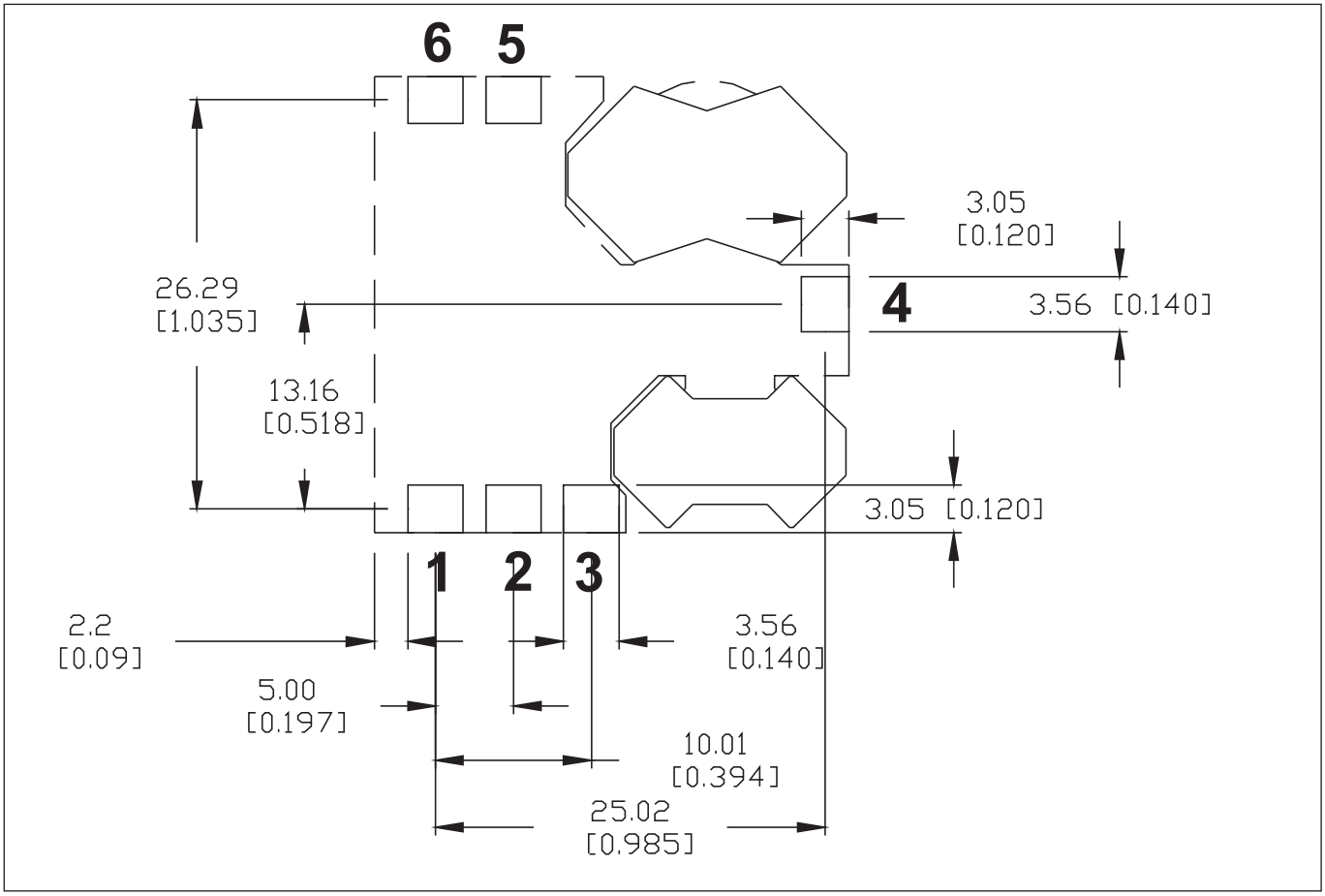
ITEMS \ MODEL		iPB480				
Nominal Output Voltage	VDC	3.3	5	12	15	18
Input Voltage Range	VDC	36 - 75				
Input Current (max)	A	2.0 - 2.2 Amps model dependent				
Output Voltage Tolerance	VDC	3.19-3.41	4.8-5.2	11.52-12.48	14.4-15.6	17.1-18.9
Ripple & Noise (max) (pk to pk) (1)	mV	100	125		100	
Line Regulation (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 one10uF Tant 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	85
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 (+)

For full data and drawings please visit www.emea.tdk-lambda.com/www/ipb

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