



Full Brick 117x61x15mm

- SMT - on ceramic technology
- Full Brick - metal case
- 100% burn-in & parameter test
- Assembling according to ANSI/IPC-A-610
- Laser trimmed thick film resistors
- High efficiency up to 94,5%
- Short circuit proof
- Extended temperature range: -40°C to +85°C
- EMC/EMV compliant according EN55022-B
- Integrated pi Input filter
- RoHS compliant
- UL94V-0 compliant

Examples of Part Number

Model	Input	Output	Efficiency	Optional
EBB100-24-12-O	18V to 36V	12V / 8,33A	93%	with On/Off pin
EBB100-24-18-S	18V to 36V	18V / 5,56A	92,5%	with Sense pin
EBB100-36-48	21V to 51V	48V / 2,09A	90,5%	no additional pin
EBB100-36-24-S	21V to 51V	24V / 4,17A	92%	with Sense pin
EBB100-48-48	36V to 76V	48V / 2,09A	91,5%	no additional pin
EBB100-48-12-T	36V to 76V	12V / 8,33A	93,5%	On/Off and sense pin
EBB100-72-15-S	55V to 100V	15V / 6,67A	94%	with Sense pin
EBB100-72-36	55V to 100V	36V / 2,78A	93%	no additional pin
EBB100-110-12-S	66V to 154V	12V / 8,33A	94%	with Sense pin
EBB100-110-48-O	66V to 154V	48V / 2,09A	92%	with On /Off pin
EBB100-150-15	100V to 375V	15V / 6,67A	93,5%	no additional pin
EBB100-150-36-O	100V to 375V	36V / 2,78A	91%	with On/Off pin

Part Numbering System

EBB	100	36	24	T
Serie	Power	Input	Output	Optional
EBB	100: 100W	24: 18V to 36V 36: 21V to 51V 48: 36V to 76V 72V: 55V to 100V 110: 66V to 154V 150V: 100V to 375V	12: 12V 15: 15V 18: 18V 24: 24V 36: 36V 48: 48V XX: custom solution value between 12 and 48	O: With On / Off pin (no sense pin) S: With Sense Pin (no On / off pin) T: With On / Off and Sense Pin

## General electrical specifications (Note1)

INPUT	Nominal input voltage	24V DC	36V DC	48V DC	72V DC	110V DC	150V DC
	Input voltage range	18 - 36V	21 - 51V	36 - 76V	55 - 100V	66 - 154V	100 - 375V
	Low side turn off / on	16V / 17,5V	18V / 20V	33V / 35V	52V / 54V	58V / 64V	95V / 99V
	High side turn off / on	39 / 37V	54V / 53V	79V / 77V	106V / 103V	165V / 160V	382V / 378V
	Max. input voltage	50V DC	100V DC	100V DC	150V DC	200V DC	400V DC
	No load input current	< 25 mA	< 25 mA	< 15 mA	< 15 mA	< 15 mA	< 15 mA
	Nominal input current	4,46 A	2,97 A	2,23 A	1,49 A	0,97 A	0,71 A
	Efficiency	up to 93%	up to 93,5%	up to 93,5%	up to 94%	up to 94%	up to 93,5%

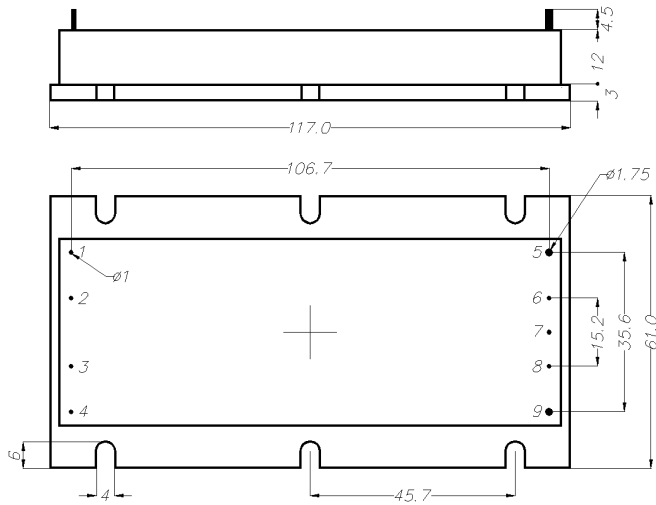
OUTPUT	Output voltage	12V	15V	18V	24V	36V	48V
	Output current	8,33A	6,67A	5,56A	4,17A	2,78A	2,09A
	Output voltage accuracy	± 1%					
	Regulation line <sup>3</sup> (Note 2)	± 1%					
	Regulation load (Note 3)	± 2%					
	Ripple (20 MHz)	< 100 mVpp		< 150 mVpp		< 300 mVpp	

PROTECTION	Short circuit protection	current limiting
	Overload protection	Thermal shutdown @ ca 120°C
ISOLATION	Isolation I/O	3000Vrms
	Isolation I/ case	1500Vrms
	Isolation O/case	1000Vrms
Environment (Note 4)	Operating temperature	-40 to +85°C
	Storage temperature	-55 to +125°C
Other	Temperature coefficient	0,02%/°C

### Notes:

1. Typical specifications at  $T_a = 25^\circ\text{C}$  under normal line voltage and full load conditions, unless otherwise noted; external input and output capacitor required
2.  $U_i \text{ min}$  to  $U_i \text{ max}$
3.  $I_{\text{min}} = 0$  to  $I_{\text{max}} = 100\%$
4. Case temperature

**Mechanic solution**



all dimensions in mm  
tolerance:  $\pm 1$ mm

Pin 1	- Input
Pin 2	no pin
Pin 3	On / Off
Pin 4	+ Input
Pin 5	- Output
Pin 6	- Sense
Pin 7	no pin
Pin 8	+ Sense
Pin 9	+ Output

**Derating**

**Output power vs. case temperature**

