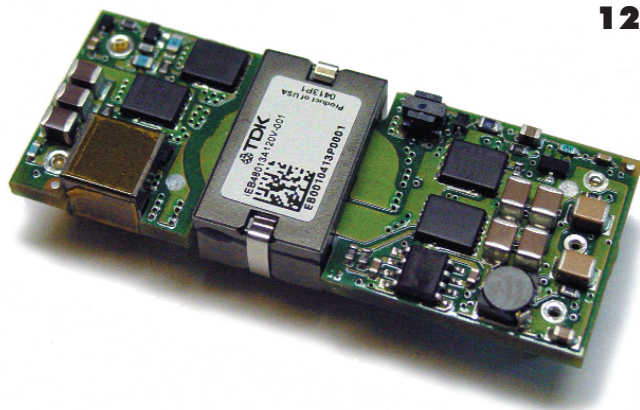




12V Eighth Brick Intermediate Bus Converter

- ◆ Standard Eighth Brick Footprint
- ◆ 38-56VDC Input
- ◆ 12V Nominal Output
- ◆ Through Hole Mounting
- ◆ Low 8.5mm Profile
- ◆ 2250VDC Basic Isolation

RoHS

Features and Benefits

Feature	Benefit
◆ High operating efficiency (94%)	◆ Reduced system heating
◆ Constant switching frequency	◆ Easier system filtering
◆ Nominal 12V output	◆ Ideal for non-isolated point of load converters

Specifications

MODEL		iEB48013A120V	iEB48017A120V
ITEMS			
Nominal Output Voltage	VDC	12	
Input Voltage Range	VDC	42 - 56	38-53
Input Current (max)	A	6	6.5
Output Voltage Tolerance	VDC	8.9 to 14.4	7.9 to 13.7
Ripple & Noise (max) (pk to pk) (1)	mV	200	
Line Regulation (max)	mV	3500	3800
Load Regulation (max)	mV	750	600
Overload Protection (typ)	-	auto recovery	
Overload Threshold	A	20	23
Short Circuit Current	A	6	7
Remote Sense	-	no	
Remote On / Off	-	Positive or Negative Logic, see Model Selector	
Temperature (operating)	°C	-40 to 120	
Temperature (storage)	°C	-55 to 125	
Humidity (operating)	-	20 - 95% RH Non condensing	
Humidity (storage)	-	10 - 95% RH Non condensing	
Cooling	-	Convection or forced air	
Isolation Voltage	VDC	2250VDC (Basic isolation)	
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	27	30
Size	mm	58.4 x 22.9 x 8.5	58.4 x 22.9 x 11.8
Warranty	-	3 Years	

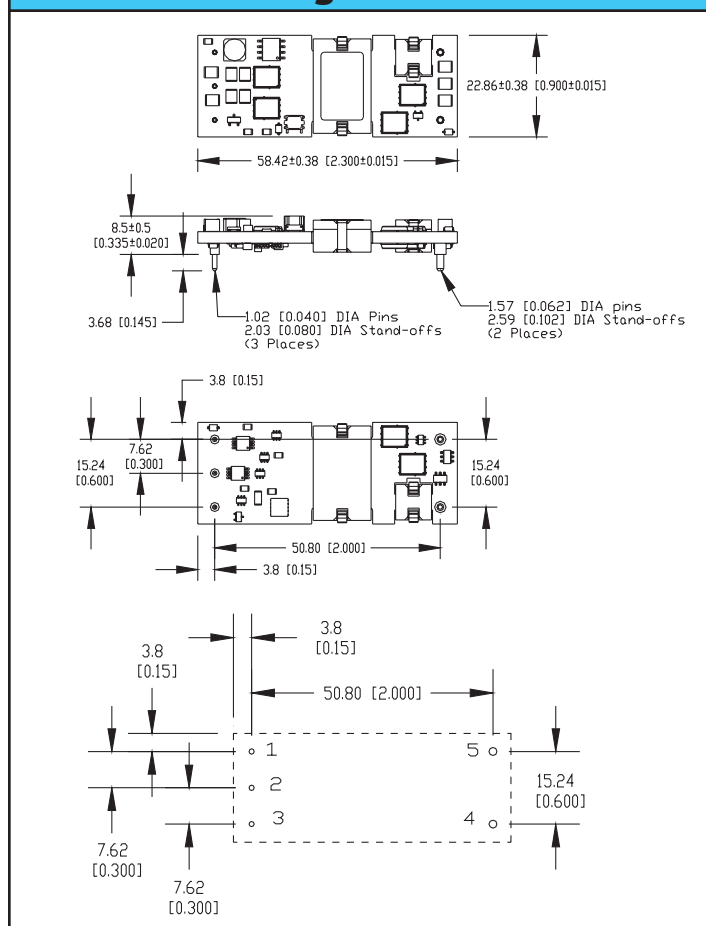
Notes: See website for detailed specifications

(1) Measured across one 0.1μF, and 2x22μF ceramic capacitors; BW = 20MHz

Model Selector

Model	Voltage Output (V)	Output Curr. (A)	Max. Output Power (W)	Efficiency at Full Load (%)	Pos. Logic On/Off	Neg. Logic On/Off
iEB48013A120V-000-R	12	13.5	150	94.0	X	
iEB48013A120V-001-R	12	13.5	150	94.0		X
iEB48017A120V-001-R	12	16.7	200	94.5	X	

Outline Drawing



PIN Assignments

PIN	Function
1	Vin (+)
2	On / Off
3	Vin (-)
4	Vout (-)
5	Vout (+)

For Additional Information, please visit
us.tdk-lambda.com/lp/products/ieb-series.htm

Other Lambda DC-DC Products

CC-E	1.5-12W, 1 to 2 Outputs, 5 to 48VDC Input
PX	10-40W, 1 to 3 Outputs, 12 to 48VDC Input
iPB	15-35W, 1.5-5V Output, 36-75VDC Input, Pico Brick
iSA	30-78W, 1.2-12V Output, 36-75VDC Input, Sixteenth Bricks
iEA	30-78W, 1.2-28V Output, 36-75VDC Input, Eighth Brick DC-DC
PAE50/100	36-100W, 1.9-5V Output, 36-75VDC Input, Eighth Brick DC-DC
iQD	300W, 12V Output, 42-53VDC Input, Quarter Brick Intermediate Bus DC-DC
iQB	30-300W, 1.2-12V Output, 24 to 48VDC Input, Quarter Brick DC-DC
PAH300/450	300-450W, 12 to 28V Output, 36-75VDC Input, Half Brick DC-DC
PAF	400-700W, 1.8 to 48V Output, 24 to 400VDC Input, Full Brick DC-DC
FPS	1kW to 3kW, 24 to 48V Output, AC-DC Front Ends
iAA, iAD, iBC	Non Isolated DC-DC Converters