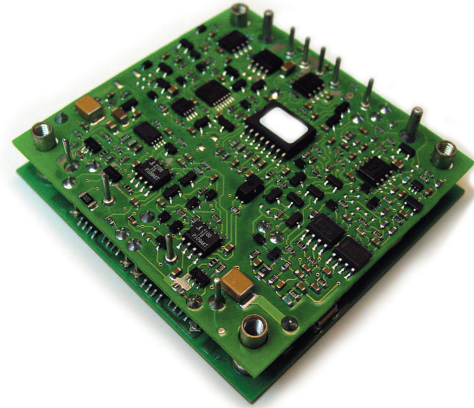


72 - 448W Half Brick Converter

Features

- ◆ Standard Half Brick Footprint
- ◆ 36-75VDC Input
- ◆ 1.2V 60A - 28V 16A Nominal Outputs
- ◆ Through Hole Mounting
- ◆ Low 12.7mm Profile
- ◆ 1500VDC Basic Isolation
- ◆ High operating efficiency (up to 93.5%)
- ◆ Constant switching frequency
- ◆ Baseplate



Specifications

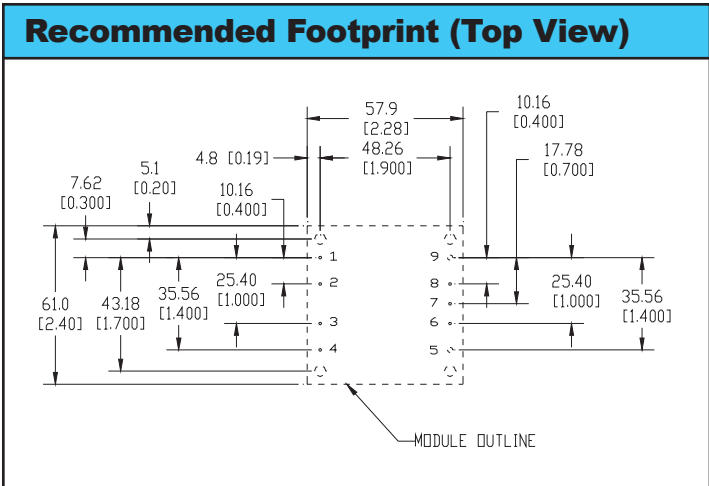
Model	iHA48										
Nominal Output Voltage	VDC	1.2	1.5	1.8	2.5	3.3	5	12	24	28	
Input Voltage Range	VDC	36 - 75 (28V/16A: 40 - 60)									
Input Current (max)	A	2.6 - 12.8 Amps model dependent									
Output Voltage Tolerance	VDC	1.16-1.24	1.46-1.55	1.75-1.85	2.43-2.58	3.20-3.40	4.84-5.15	11.64-12.36	23.28-24.72	27.16-28.84	
Ripple & Noise (max)(pk to pk) (1)	mV	60	60	80	75	55	70	100	600	675	
Line Regulation (max)	mV	2	2	4	5	6	8	15	25	30	
Load Regulation (max)	mV	6		8		10	10	25	50	50	
Overload Protection (typ)	%	Inception- 113-156% of rated output; Short circuit auto recovery									
Overvoltage Protection (typ)	VDC	1.5	1.8	2.2	3.0	4.0	6.0	14.5	29.0	33.0	
Remote Sense	-	Yes									
Remote On / Off	-	Positive or Negative Logic available, see Feature Set									
Temperature (operating)	°C	-40 to 115 for Vo ≤ 5.0V; -40 to 110 for Vo ≥ 12V									
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	1500V Input to output & baseplate, 500V Output to baseplate									
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	85									
Size	mm	57.9 x 61.0 x 12.7									
Warranty	-	3 years									

Notes: See website for detailed specifications

- (1) Measured across 47µF +1µF +0.1µF ceramic caps for 1.2-5Vo, across 1µF +0.1µF ceramic caps +10µF Tan cap for 12Vo, across 200µF Al electrolytic +10µF +1µF +0.1µF ceramic caps for 24-28Vo; BW = 20MHz

OBSOLETE

Model Selector					
Model	Voltage (V)	Adjust Range (V)	Max. Curr. (A)	Max. Output Power (W)	Efficiency at Full Load (%)
iHA48060A012V-001-R	1.2	0.65 - 1.32	60.0	72	83.0
iHA48060A015V-001-R	1.5	0.81 - 1.65	60.0	90	86.0
iHA48060A018V-001-R	1.8	0.97 - 1.98	60.0	108	86.5
iHA48060A025V-001-R	2.5	1.35 - 2.75	60.0	150	88.5
iHA48040A033V-001-R	3.3	1.78 - 3.63	40.0	132	91.5
iHA48060A033V-001-R	3.3	1.78 - 3.63	60.0	198	90.0
iHA48040A050V-001-R	5.0	2.7 - 5.5	40.0	200	91.0
iHA48025A120V-001-R	12	6.48 - 13.2	25.0	300	91.5
iHA48013A240V-001-R	24	13 - 26.4	12.5	300	91.0
iHA48011A280V-001-R	28	15.12 - 30.8	11.0	308	91.0
iHA48016A280V-001-R	28	14 - 30.8	16.0	448	93.5



Feature Set

Feature Set	On / Off Logic	Omit Pin 3	Output OVP	Pin Length
00	Positive	No	Latching	0.145
01*	Negative	No	Latching	0.145
02	Positive	Yes	Auto-Recovery	0.145
03	Negative	Yes	Auto-Recovery	0.145
04	Positive	No	Latching	0.110
05	Negative	No	Latching	0.110
06	Positive	Yes	Auto-Recovery	0.110
07	Negative	Yes	Auto-Recovery	0.110

* Preferred feature set
Model Number Example: iHA48040A050V-001-R

PIN Assignments

PIN	Function	PIN	Function
1	Vin (+)	2	On / Off
3	Case (Omit opt.)	4	Vin (-)
5	Vout (-)	6	Sense (-)
7	Trim	8	Sense (+)
9	Vout (+)		

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



Other 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
iEB	150W, 12V Output, 42-56V Input, Eighth Brick Intermediate Bus DC-DC
iQD	300W, 12V Output, 42-53VDC Input, Quarter Brick Intermediate Bus DC-DC
iQB, iQM, iQN, iQP	30-300W, 1.2-12V Output, 24 to 48VDC Input, Quarter Brick DC-DC
PAH300/350	300-350W, 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, iBC, PL	Non Isolated DC-DC Converters

OBSOLETE