

- ◆ Standard Half Brick Footprint
- ◆ 36-75VDC Input
- ◆ 1.2V 60A - 28V 16A Nominal Outputs
- ◆ Through Hole Mounting
- ◆ Low 12.7mm Profile
- ◆ 1500VDC Basic Isolation

iHA Series

72 - 448W Half Brick Converter

iHA Features and Benefits

Features

- ◆ High operating efficiency (up to 93.5%)
- ◆ Constant switching frequency
- ◆ Baseplate

Benefits

- ◆ Reduced system heating
- ◆ Easier system filtering
- ◆ Allows for improved thermal management with optional heatsink

Specifications

MODEL		iHA48								
ITEMS		1.2	1.5	1.8	2.5	3.3	5	12	24	28
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		80	75	55	70	100	600	675
Line Regulation (max)	mV	4			5	6	8	15	25	30
Load Regulation (max)	mV	6			8	10		25	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
Remote Sense	-	Yes								
Remote On / Off	-	Positive or Negative Logic available, see Feature Set								
Temperature (operating)	°C	-40 to 115 $V_o \leq 5.0V$; -40 to 110 for $V_o \geq 12V$								
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								

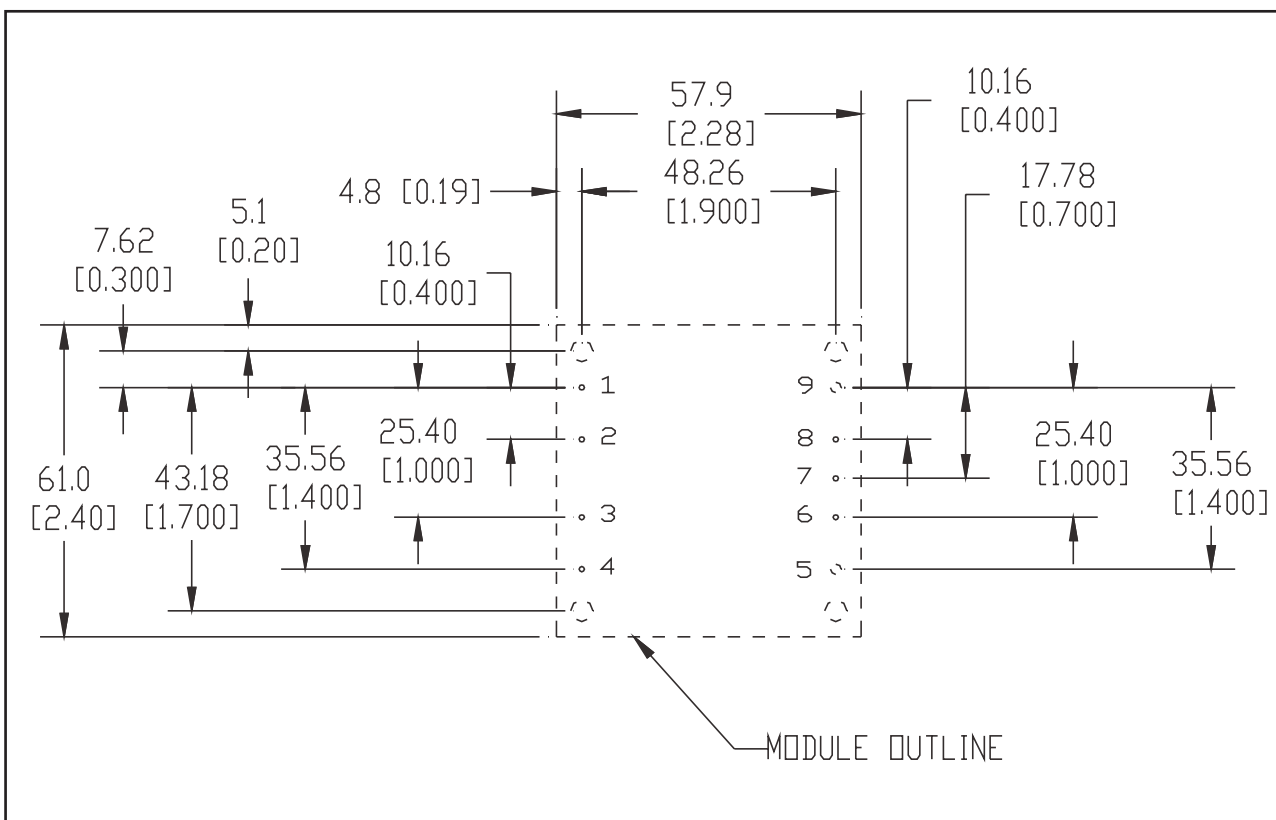
Notes:

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

Model Selector

Model	Voltage (V)	Adjust Range (V)	Max. Curr. (A)	Max. Output Power (W)	Efficiency at Full Load (%)
iHA48060A012V-001-R	1.2	.65 - 1.32	60	72	83
iHA48060A015V-001-R	1.5	.81 - 1.65	60	90	86
iHA48060A018V-001-R	1.8	0.97 - 1.98	60	108	86.5
iHA48060A025V-001-R	2.5	1.35 - 2.75	60	150	88.5
iHA48040A033V-001-R	3.3	1.78 - 3.63	40	132	91.5
iHA48060A033V-001-R	3.3	1.78 - 3.63	60	198	90
iHA48040A050V-001-R	5	2.7 - 5.5	40	200	91
iHA48025A120V-001-R	12	6.48 - 13.2	25	300	91.5
iHA48013A240V-001-R	24	13 - 26.4	12.5	300	91
iHA48011A280V-001-R	28	15.12 - 30.8	11	308	91
iHA48016A280V-001-R	28	14 - 30.8	16	448	93.5

Recommended Footprint (Top View)



Pinout			
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 (+)		

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

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