

50 - 300W, 48V Input Half Brick Converter

Features

- ◆ Standard Half Brick Footprint
- ◆ 36 -75VDC Input
- ◆ 3.3V 30A - 5V 60A Nominal Outputs
- ◆ Through Hole Mounting
- ◆ 1500VDC Basic Isolation
- ◆ High operating efficiency (up to 92.5%)
- ◆ Constant switching frequency
- ◆ Low component count



Key Market Segments & Applications



Specifications					
Model		iHG48030A033V-002-R	iHG48070A033V-001-R	iHG48010A050V-002-R	iHG48060A050V-002-R
Nominal Output Voltage	VDC	3.3	3.3	5	5
Input Voltage Range	VDC	36 - 75			
Efficiency	%	92.5	90	89	91
Ripple & Noise (max)(pk-pk) (1)	mV	50	50	60	60
Line Regulation (max)	mV	10	10	10	12
Load Regulation (max)	mV	10	10	10	12
Overload Protection Threshold (3)	A	38	82	13.8	70
Overvoltage Protection (2)	VDC	4.1	4.1	6.1	6.1
Overtemperature Protection (3)	-	Yes			
Remote Sense	-	Yes			
Remote On-Off	-	Positive or Negative Logic Available, see Model Selector			
Temperature (operating)	°C	-40 to 115	-40 to 123	-40 to 125	-40 to 125
Temperature (storage)	°C	-55 to 125			
Humidity (operating)	-	20 to 95% (non-condensing)			
Humidity (storage)	-	10 to 95% (non-condensing)			
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	-	50 G at 6ms pulse in three axes			
Safety Agency Approvals	-	UL60950 (US and Canada), VDE0805, CB scheme (IEC950), CE Mark (EN60950)			
Weight (max)	g	63			
Size	mm	59.94 x 56.90 x 11.68			
Warranty	yrs	3 years			

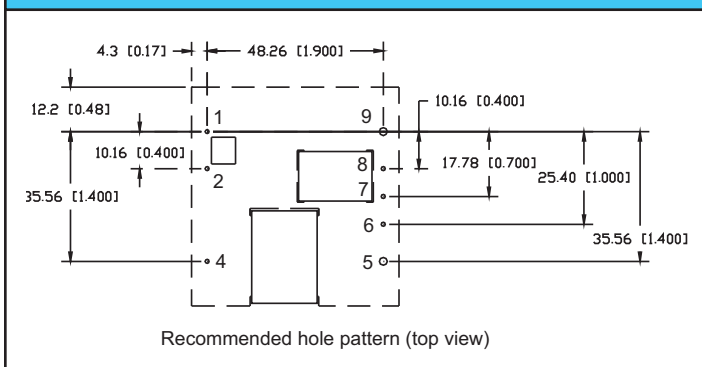
Notes:

- (1) Measured across one 10uf, one 0.47uf, one 0.1uf ceramic capacitors, and one 220uf electrolytic capacitor. BW = 20MHz.
- (2) Latching
- (3) Non-latching

Model Selector

Model	Input Volt. (V)	Output Volt. (V)	Adjust Range (V)	Max. Current (A)	Max. Output Power (W)	On/Off Logic	Pin Length
iHG48030A033V-002-R	36 - 75	3.3	1.65 - 3.63	30	99	P	0.145
iHG48070A033V-001-R	36 - 75	3.3	1.65 - 3.63	70	231	N	0.145
iHG48010A050V-002-R	36 - 75	5	2.5 - 5.5	10	50	P	0.145
iHG48060A050V-002-R	36 - 75	5	2.5 - 5.5	60	300	P	0.145

Outline Drawing



PIN Assignments

PIN	Function	PIN	Function
1	Vin (+)	6	Sense (-)
2	On / Off	7	Trim
3	N / A	8	Sense (+)
4	Vin (-)	9	Vout (+)
5	Vout (-)		

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



Other DC-DC Products

CC-E	1.5 - 25W, 1 - 2 Outputs, 5 - 48VDC Input
PX	10 - 40W, 1 - 3 Outputs, 12 - 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 Brick
iEA	30 - 78W, 1.2 - 28V Output, 36 - 75VDC Input, Eighth Brick
PAE50/100	36 - 100W, 1.9 - 5V Output, 36 - 75VDC Input, Eighth Brick
iEB	150W, 12V Output, 42 - 56VDC Input, Eighth Brick Intermediate Bus
iQD	300W, 12V Output, 42 - 53VDC Input, Quarter Brick Intermediate Bus
iQL	150 - 300W, 2.5 - 12V Output, 36 - 75VDC Input, Quarter Brick
iQE	96 - 204W, 3.3 - 15V Output, 18 - 75VDC Input, Quarter Brick
PAH	300 - 450W, 12 - 28V Output, 36 - 75VDC Input, Half Brick
PAF	400 - 700W, 1.8 - 48V Output, 36 - 75VDC Input, Full Brick
iA, iB	Non Isolated
FPS	1kW - 3kW, 12 - 48VDC Output, AC - DC Front Ends
PFE	300 - 1000W, 12 - 48VDC Output, AC - DC Front End Brick