

Product Brief: Veta[™] iHA Series – Half Brick



Features

- Standard Half Brick footprint
- High efficiency, typical 91%
- Wide output trim voltage
- True 11A product at 28V output
- Industry-leading output power: 300W
- Monotonic start-up
- Starts with a pre-biased output
- Basic insulation 1500 Vdc
- Auto-recovery protection:
 - $\circ\,$ Input under and over voltage
 - o Current limit
 - Short circuit
 - o Thermal limit
- Latched output over voltage
- Optional auto-recovery output over voltage
- High reliability open frame, surfacemount construction
- Baseplate for improved thermal management
- Constant switching frequency
- Optional 0.110" pin length
- Safety agency approvals pending
- Multiple patents pending

Veta[™] iHA Series DC/DC Power Modules 48V Input, 28V/11A Output Half Brick

Its **91% efficiency** and superior thermal performance make the Veta[™] Family of power modules ideally suited for power-hungry applications in demanding thermal environments. This rugged building block is designed to serve as the core of your high reliability system. A wide output voltage **trim range**, **-46 to +10%**, and remote sensing are standard features enhancing versatility. For a full-featured version of the Veta[™] Half Brick, including active current sharing, see the iHD product brief.

Base Product Code	Input Voltage	Output Voltage	Output Current	Efficiency
iHA48011A280V	36-75V	28V	11A	91%

Typical Performance

Input Characteristics		
Operating input range	36-75V	
Transient input voltage	100V	100mS max
Turn-on voltage	34V	
Turn-off voltage	32V	
Start-up time	80 mS	On/Off to 90% Vout
Maximum input current	10.2A	Input 0-75V, Io,max
Output Characteristics		
Output voltage tolerance	+/- 3% max	Over line, load, and temp to end of life
Efficiency	see product table	
Line regulation	10 mV	Over rated input
Load regulation	25 mV	Over rated load
Output voltage adjustment	54%-110%	%Vout,nom
Output ripple	250 mVp-p	20MHz bandwidth
Dynamic response		Load step 25% of lo,max
Transient voltage	600 mV	slew rate =0.1A/us
Recovery time	350 uS	
Ripple frequency	300 kHz	Fixed
Protection		
Current limit inception	130% of lo,rated	
Short circuit	Continuous protection	Auto-recovery (AR) hiccup
Output over voltage	120% of Vout,nom	Latch (AR-optional)
Thermal shutdown	120C	Auto recovery hiccup
Environmental		
Operating temperature	-40C to 120C	Measurement point in full datasheet



Product Brief: Veta[™] iHA Series – Half Brick





Top view - Footprint

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

Ordering Information

Product Identifier	Package Size	Platform	Input Voltage	Output Current/ Power	Output Units	Main Output Voltage	# of Outputs		Safety Class	Feature Set
i	Н	А	48	011	А	280	V	-	0	00
Innoveta Technologies™	Half Brick	Veta™	36-75V	11	Amps	280 – 28V	Single			00 – Standard



840 Central Parkway East, Suite 150 Plano, Texas 75074

Phone (877) 498-0099 Toll Free (972) 398-6884 Fax (877) 498-0143 Toll Free (972) 398-6848 support@innoveta.com http://www.innoveta.com/

©2002 Innoveta Technologies™, Inc. iHA48011A280V product brief 090302.doc 9/4/2002

Feature Set	On/Off Logic	Omit pin3	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 0.1	
07	Negative	Yes	Auto-Recovery	0.110"

Information furnished by Innoveta is believed to be accurate and reliable. However, Innoveta assumes no responsibility for its use, nor for any infringement of patents or other rights of third parties, which may result from its use. No license is granted by implication or otherwise under any patent or patent rights of Innoveta. Innoveta components are not designed to be used in applications, such as life support systems, wherein failure or malfunction could result in injury or death. All sales are subject to Innoveta's Terms and Conditions of Sale, which are available upon request. Specifications are subject to change without notice.