Product Brief: Veta® iHA Series – Half Brick

Veta® iHA Series DC/DC Power Modules
24V Input, 28V/8A Output
Half Brick

Its **92% 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.

Features

- **Standard Half Brick footprint**
- **High efficiency, typical 92%**
- **Wide output trim voltage**
- **True 8A product at 28V output**
- **Industry-leading output power: 225W**
- **Monotonic start-up**
- **Starts with a pre-biased output**
- **Basic insulation – 1500 Vdc**
- Auto-recovery protection:
  - Input under and over voltage
  - Current limit
  - Short circuit
  - Thermal limit
- Latched output over voltage
- Optional auto-recovery output over voltage
- High reliability open frame, surface-mount construction
- Baseplate for improved thermal management
- Constant switching frequency
- Optional 0.110” pin length
- Safety agency approvals pending
- Multiple patents pending

Base Product Code	Input Voltage	Output Voltage	Output Current	Efficiency
iHA24008A280V	18-36V	28V	8A	92%

Typical Performance

Input Characteristics		
Operating input range	18-36V	
Transient input voltage	50V	Continuous
Turn-on voltage	17.3V	
Turn-off voltage	17.0V	
Start-up time	20 mS	On/Off to 90% Vout
Maximum input current	15A	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	10 mV	Over rated load
Output voltage adjustment	54%-110%	%Vout,nom
Output ripple	250 mVp-p	20MHz bandwidth
Dynamic response Transient voltage Recovery time	 300 mV 500 uS	Load step 25% of Io,max slew rate =0.1A/us
Ripple frequency	300 kHz	Fixed
Protection		
Current limit inception	130% of Io,rated	
Short circuit	Continuous protection	Auto-recovery (AR) hiccup
Output over voltage	120% of Vout,nom	Latch (AR-optional)
Thermal shutdown	110C	Auto recovery hiccup
Environmental		
Operating temperature	-40C to 110C	Measurement point in full datasheet

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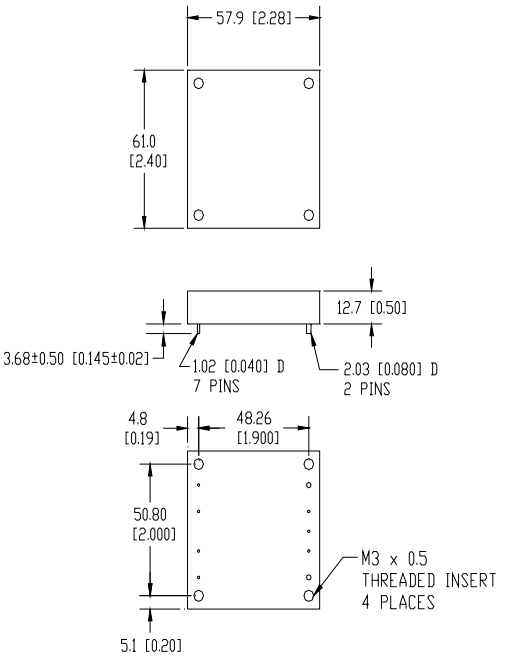

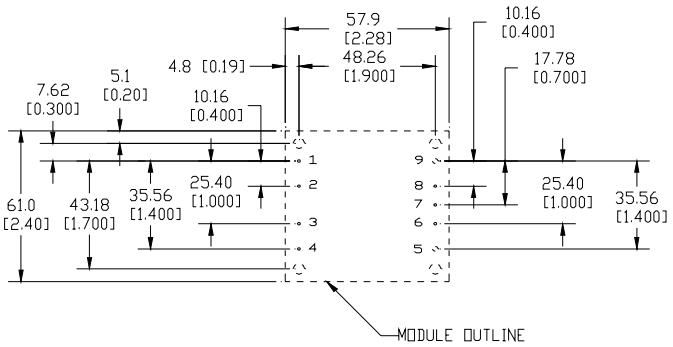

Top view - Footprint

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	H	A	24	008	A	280	V	-	0	00
TDK Innoveta	Half Brick	Veta®	18-36V	8	Amps	280 – 28V	Single			00 – Standard

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	0.110”
07	Negative	Yes	Auto-Recovery	0.110”

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