

# VI 200

## 50 - 200W PCB MOUNTING COMPONENTS

### Features

- **Inputs: 10 to 400VDC**
- **Output, 1 to 95VDC**
- **UL, CSA, TÜV, VDE, BABT, CF**
- **80–90% efficiency (typical)**
- **ZCS power architecture**
- **Low noise FM control**
- **Booster versions available for expanded power**



### Specifications

| <b>INPUT</b>                   |  |
|--------------------------------|--|
| Input voltage                  | See table  |
| <b>OUTPUT</b>                  |  |
| PRODUCT GRADE                  | E, C, I, M   |
| Output voltage                 | See table  |
| Output power                   | See table  |
| Set point accuracy             | 0.5%   |
| Low–high trim voltage          | 50%–110%   |
| Output ripple pk-pk            | 1%   |
| Load regulation                | 0.05%  |
| Line regulation                | 0.05%  |
| OVP set point                  | 115%–135%  |
| Current limit setting          | 105%–125%  |
| Remote sense Compensation      | 0.5V   |
| <b>OPERATING</b>               |  |
| MTBF                           | >1,000,000 hrs   |
| Efficiency                     | 80%–90%  |
| Isolation input – output       | 3750V rms  |
| Baseplate operating temp.      | 85°C   |
| Shutdown temperature           | 95°C   |
| Thermal shutdown               | Yes, C, I, M grades                                      |
| <b>ENVIRONMENTAL</b>           |  |
| Cooling                        | External cooling often required, consult sales office    |
| <b>STANDARDS AND APPROVALS</b> |  |
| Safety                         | UL1950, CSA C22.2 No. 950, TÜV IEC950, EN60950, VDE 0805 |
| C-Tick                         | AS/NZS CISPR11 Group 1 Class A                           |
| <b>MECHANICAL</b>              |  |
| Dimensions                     | 117x61x12.7mm  |
| PCB mounting                   | Yes  |

### Selection Table Guide

**VI - 2 [a] [b] - [c] [d]**  
**VI - B [a] [b] - [c] [d] Booster**

Note: For RoHS version replace VI with VE.

Mechanical Drawings See page 230

### Selection Table

| <b>A = INPUT VOLTAGE</b>                            |          |       | <b>B = OUTPUT VOLTAGE</b>       |           |  |
|---|----------|-------|---------------------------------|-----------|--|
| Nominal   | Range    | Notes |                                 |           |  |
| 0= 12V  | 10–20V   | (1)   | Z = 2V                          | 2 = 15V   |  |
| 1= 24V  | 21–32V   | (6)   | Y = 3.3V                        | N = 18.5V |  |
| W= 24V  | 18–36V   | (4)   | 0 = 5V                          | 3 = 24V   |  |
| 2= 36V  | 21–56V   | (3)   | X = 5.2V                        | L = 28V   |  |
| 3= 48V  | 42–60V   | (6)   | W = 5.5V                        | J = 36V   |  |
| N= 48V  | 36–76V   | (6)   | V = 5.8V                        | K = 40V   |  |
| 4= 72V  | 55–100V  | (6)   | T = 6.5V                        | 4 = 48V   |  |
| T= 110V   | 66–160V  | (4)   | R = 7.5V                        | H = 52V   |  |
| 5= 150V   | 100–200V | (5)   | M = 10V                         | F = 72V   |  |
| 6= 300V   | 200–400V | (6)   | 1 = 12V                         | D = 85V   |  |
| 7= 150/300V   | 100–375V | (2)   | P = 13.8V                       | B = 95V   |  |
| <b>C = PRODUCT GRADE</b>                            |          |       | <b>D = OUTPUT POWER/CURRENT</b> |           |  |
|   |          |       | V out ≥5V                       | V out <5V |  |
| E= -10°C to +85°C                                   |          |       | Y= 50W                          | Y= 10A    |  |
| C= -25°C to +85°C                                   |          |       | X= 75W                          | X= 15A    |  |
| I= -40°C to +85°C                                   |          |       | W= 100W                         | W= 20A    |  |
| M= -55°C to +85°C                                   |          |       | V= 150W                         | V= 30A    |  |
|   |          |       | U= 200W                         | U= 40A    |  |
| <b>NOTES:</b>                                       |          |       |                                 |           |  |
| NOTES: Maximum Output for — (1) (2) (3) (4) (5) (6) |          |       |                                 |           |  |
| 5V Outputs 75W 75W* 100W 150W 150W 200W             |          |       |                                 |           |  |
| >5V Outputs 75W 100W 100W 150W 200W 200W            |          |       |                                 |           |  |
| <5V Outputs 15A 20A 20A 30A 40A 40A                 |          |       |                                 |           |  |
| *100W @ 5V (20A), 300V input only.                  |          |       |                                 |           |  |

# Mechanical Drawings

## FULL AND JUNIOR SIZED MECHANICAL SPECIFICATIONS

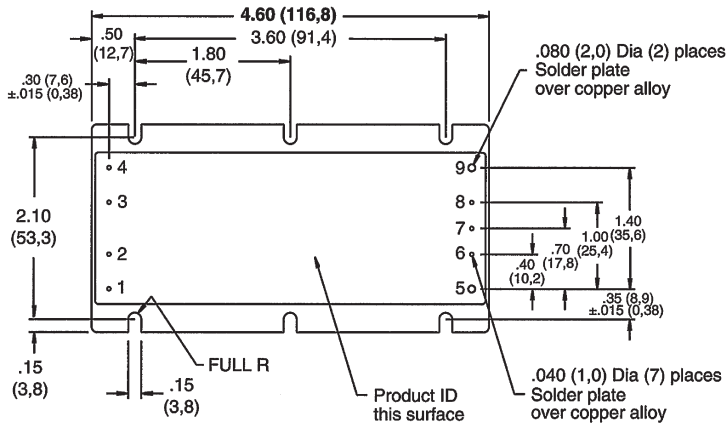
### JUNIOR SIZED MODULES



| Half Size Modules |          |          |          |           |
|-------------------|----------|----------|----------|-----------|
| Pin #             | VI-J00   | VI-AIM   | VI-IAM   | VI-RAM    |
| 1                 | +In      | L1       | +In      | +In       |
| 2                 | Gate In  | NC       | +In      | +Sense In |
| 3                 | Gate Out | NC       | -In      | -Sense In |
| 4                 | -In      | L2/N     | -In      | -In       |
| 5                 | +Out     | +Out     | +Out     | +Out      |
| 6                 | +Sense   | Gate In  | Gate In  | +Sense    |
| 7                 | Trim     | Parallel | Parallel | NC        |
| 8                 | -Sense   | Gate Out | Gate Out | -Sense    |
| 9                 | -Out     | -Out     | -Out     | -Out      |



### FULL SIZED MODULES



| Full Size Modules |          |          |          |
|-------------------|----------|----------|----------|
| Pin #             | VI-200   | BatMod   | VI-HAM   |
| 1                 | +In      | +In      | L1       |
| 2                 | Gate In  | Gate In  | Gate In  |
| 3                 | Gate Out | Gate Out | Gate Out |
| 4                 | -In      | -In      | L2/N     |
| 5                 | +Out     | +Out     | +Out     |
| 6*                | +Sense   | VTRIM    | P/OK     |
| 7*                | Trim     | ITRIM    | E/O      |
| 8*                | -Sense   | IMON     | A/S      |
| 9                 | -Out     | -Out     | -Out     |

\* Do not connect on Booster modules

