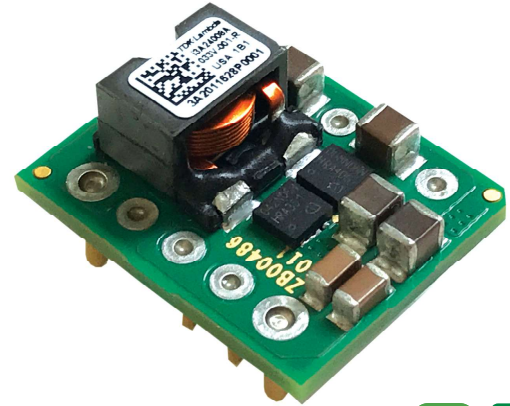


## 100W, 9 to 53V Input Non-isolated DC-DC Converters

### Features

- ◆ 100W 4.5 or 8A Output
- ◆ 1/32nd brick Footprint
- ◆ Wide Output Adjustment 3.3 to 16.5V or 5 to 30V
- ◆ Minimal External Components Needed
- ◆ Constant Switching Frequency



### Key Market Segments & Applications



| Specifications               |          |                                                     |               |
|------------------------------|----------|-----------------------------------------------------|---------------|
| Model                        |          | i3A4W008A033V                                       | i3A4W005A150V |
| DC Output Voltage            | V        | 3.3 - 16.5 (1)                                      | 5 - 30 (1)    |
| DC Input Voltage             | V        | 9 - 53 (Turn on at 10V or greater)                  |               |
| Efficiency (Typical)         | %        | 89 - 96.5                                           | 95.5 - 98     |
| Output Voltage Tolerance     | %        | ±4                                                  |               |
| Switching Frequency          | kHz      | 450                                                 | 400           |
| Line Regulation              | %        | 0.3%                                                | 0.2%          |
| Load Regulation              | %        | 0.7%                                                | 0.5%          |
| External Load Capacitance    | uF       | 0 - 1200                                            |               |
| Output Ripple and Noise      | mVpp     | 20                                                  | 40            |
| Overcurrent Protection (Typ) | A        | 14                                                  | 9             |
| Remote On / Off              | -        | Negative Logic (For Positive Logic Contact Factory) |               |
| Remote Sense                 | -        | (+ ) Sense, compensating up to 5% of output voltage |               |
| Power Good                   | -        | Optional, contact factory for status                |               |
| Operating Temperature        | °C       | -40 to 125 (see thermal data on website)            |               |
| Storage Temperature          | °C       | -55 to 125                                          |               |
| Safety Agency Certifications | -        | UL/EN/IEC 60950-1, CE Mark                          |               |
| Weight                       | g / oz   | 8g / 0.29 oz                                        |               |
| Size (LxWxH)                 | mm / in. | 19.1 x 23.4 x 9.6 / 0.75 x 0.92 x 0.38              |               |
| Warranty                     | yrs      | 3 years                                             |               |

Note: (1) Output voltage cannot exceed input voltage (see graph on page 2)  
 (2) Consult the Full Datasheet for additional product information.

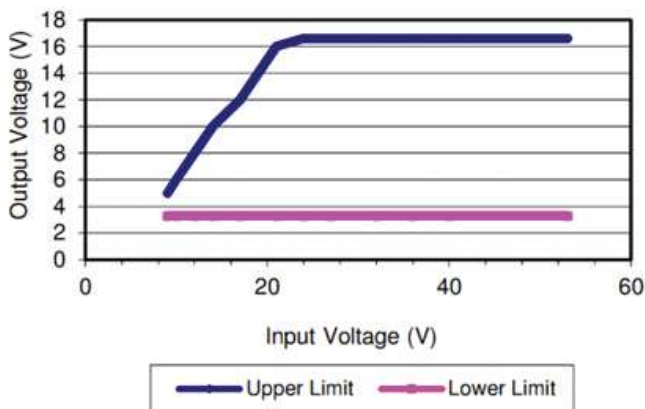
## Model Selector

| Model               | Input Voltage (V) | Output Current (A) | Output Voltage (V) (1) | Positive Logic On/Off | Negative Logic On/Off |
|---------------------|-------------------|--------------------|------------------------|-----------------------|-----------------------|
| i3A4W008A033V-001-R | 9 - 53            | 8                  | 3.3 - 16.5             | -                     | Yes                   |
| i3A4W005A150V-001-R | 9 - 53            | 4.5                | 5 - 30                 | -                     | Yes                   |

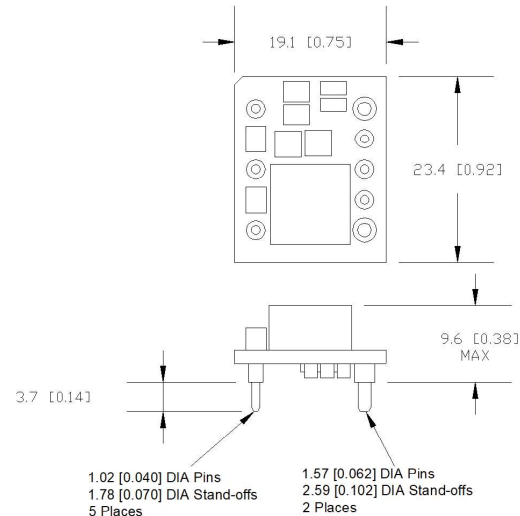
Note: (1) Output voltage cannot exceed input voltage (see graph below)

## Output Voltage vs Input Voltage Operating Range

### i3A4W008A033V

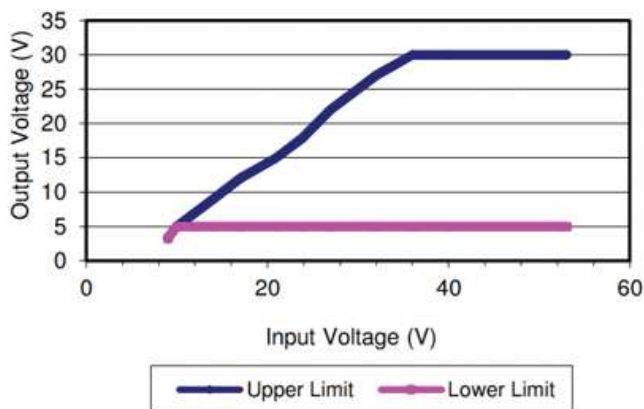


## Mechanical Specification

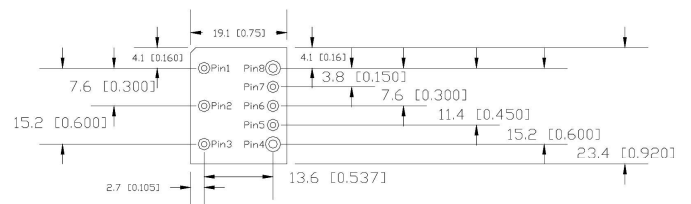


## Output Voltage vs Input Voltage Operating Range

### i3A4W005A150V



## Recommended Hole Pattern (top view)



## Evaluation Board

| Evaluation kit part # | Contents                                                                       |
|-----------------------|--------------------------------------------------------------------------------|
| i3A5A8A-001-EVK-D2PP  | Populated with one piece i3A4W008A033V-001-R and one piece i3A4W005A150V-001-R |

## Pinout

| PIN | Function | PIN | Function          |
|-----|----------|-----|-------------------|
| 1   | VIN (+)  | 5   | PWR GOOD (Option) |
| 2   | ON / OFF | 6   | TRIM              |
| 3   | VIN (-)  | 7   | SENSE (+)         |
| 4   | VOUT (-) | 8   | VOUT (+)          |

For Additional Information, please visit [us.tdk-lambda.com/lp/products/i6a-series.htm](http://us.tdk-lambda.com/lp/products/i6a-series.htm)

