

- Standard DOSA SIP Footprint
- 6.0-14VDC Input
- 0.8-5.5V Outputs
- Through Hole Mounting
- Low 13.97mm Profile
- Non Isolated Output

## iAD Series

### 16A Point of Load Converters

#### iAD Features and Benefits

##### Features

- High operating efficiency (up to 94%)
- Constant switching frequency
- Starts with pre-biased output

##### Benefits

- Reduced system heating
- Easier system filtering
- Supports complex digital systems

#### Specifications

| MODEL                        |     | iAD                                                                                                                |
|------------------------------|-----|--------------------------------------------------------------------------------------------------------------------|
| ITEMS                        |     |                                                                                                                    |
| Nominal Output Voltage       | VDC | 0.8 - 5.5V                                                                                                         |
| Input Voltage Range          | VDC | 6 - 14V                                                                                                            |
| Input Current (max)          | A   | 18A                                                                                                                |
| Output Voltage Tolerance     | VDC | N/A                                                                                                                |
| Ripple & Noise (max) (pk-pk) | mV  | 100                                                                                                                |
| Line Regulation (max)        | mV  | 15                                                                                                                 |
| Load Regulation (max)        | mV  | 22                                                                                                                 |
| Overload Protection          | %   | Inception - 28A; Short circuit - auto recovery                                                                     |
| Overvoltage Protection       | -   | N/A                                                                                                                |
| Remote Sense                 | -   | Yes                                                                                                                |
| Remote On / Off              | -   | Positive or Negative Logic available, see Feature Set                                                              |
| Sequencing                   | -   | Yes, see feature set                                                                                               |
| Temperature (operating)      | °C  | -40°C to +125°C                                                                                                    |
| Temperature (storage)        | °C  | -55°C to +125°C                                                                                                    |
| Humidity (operating)         | -   | 20 - 95% RH Non condensing                                                                                         |
| Humidity (storage)           | -   | 10 - 95% RH Non condensing                                                                                         |
| Cooling                      | -   | Convection or forced air                                                                                           |
| Isolation Voltage            | -   | none                                                                                                               |
| Vibration (non-operating)    | -   | 5 to 50Hz@0.5g (4.9m/s <sup>2</sup> ), & 50 to 500Hz@1.5g (14.7m/s <sup>2</sup> ) per Bellcore TR-EOP-000063-5.4.4 |
| Shock                        | -   | 196.1m/s <sup>2</sup>                                                                                              |
| Safety Agency Certifications | -   | UL60950 (US and Canada), VDE0805 (IEC60950), CB scheme (IEC60950)                                                  |
| Weight (max)                 | g   | 12                                                                                                                 |
| Size (LxWxH)                 | mm  | 50.8 x 7.9 x 14                                                                                                    |
| Warranty                     | yrs | 3                                                                                                                  |

## Model Selector

| Model               | Output Voltage (V) | Output Adjust (V) | Output Curr. (A) | Max. Output Power (W) | Efficiency at Full Load (%) |
|---------------------|--------------------|-------------------|------------------|-----------------------|-----------------------------|
| iAD12016A008V-000-R | 0.80 - 5.5         | 0.80 - 5.5        | 16               | 80                    | 94% at 5V                   |
| iAD12016A008V-001-R | 0.80 - 5.5         | 0.80 - 5.5        | 16               | 80                    | 94% at 5V                   |

NB other configurations on request

## Feature Set

| Feat. Set | Pos. Logic On/Off | Neg. Logic On/Off | Input Voltage | Seq. | 0.13" Pin | 0.2" Pin |
|-----------|-------------------|-------------------|---------------|------|-----------|----------|
| 00*       | X                 |                   | 6 - 14V       | X    | X         |          |
| 01        |                   | X                 | 6 - 14V       | X    | X         |          |
| 02        | X                 |                   | 6 - 14V       |      | X         |          |
| 03        |                   | X                 | 6 - 14V       |      | X         |          |
| 04        | X                 |                   | 6 - 14V       | X    |           | X        |
| 05        |                   | X                 | 6 - 14V       | X    |           | X        |
| 06        | X                 |                   | 6 - 14V       |      |           | X        |
| 07        |                   | X                 | 6 - 14V       |      |           | X        |

\* Preferred feature set

Model Number Example: iAD12016A008V-001-R

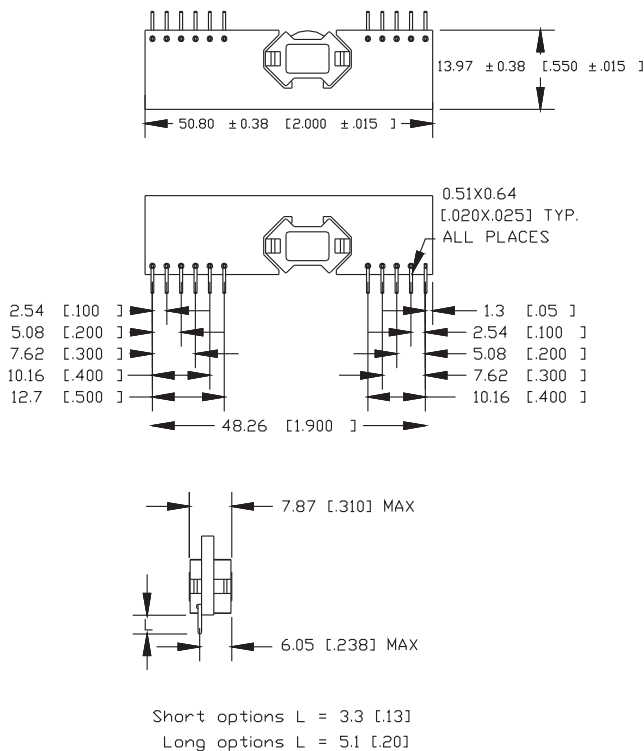
## Pinout

| PIN | Function | PIN | Function   |
|-----|----------|-----|------------|
| 1   | Vout     | 6   | GND        |
| 2   | Vout     | 7   | Vin        |
| 3   | Sense    | 8   | Vin        |
| 4   | Vout     | 9   | Sequencing |
| 5   | GND      | 10  | Trim       |
|     |          | 11  | On / Off   |

## Outline Drawing iAD Series

### Mechanical Specifications:

Dimensions are in mm [in]. Unless otherwise specified tolerances are: x.x ±0.5 [0.02], x.xx ±0.25 [0.010]



## Recommended Hole Pattern (Top View)

