

- 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 ²), & 50 to 500Hz@1.5g (14.7m/s ²) per Bellcore TR-EOP-000063-5.4.4
Shock	-	196.1m/s ²
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]

13.97 ±0.38 [.550 ±.015]

50.80 ±0.38 [2.000 ±.015]

0.51X0.64
[.020X.025] TYP.
ALL PLACES

2.54 [.100]

5.08 [.200]

7.62 [.300]

10.16 [.400]

12.7 [.500]

48.26 [1.900]

1.3 [.05]

2.54 [.100]

5.08 [.200]

7.62 [.300]

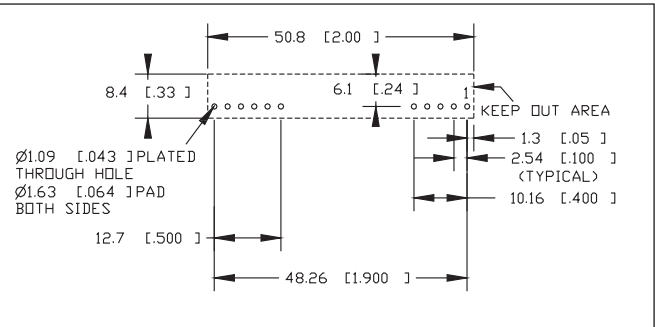
10.16 [.400]

7.87 [.310] MAX

6.05 [.238] MAX

Short options L = 3.3 [.13]
Long options L = 5.1 [.20]

Recommended Hole Pattern (Top View)





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