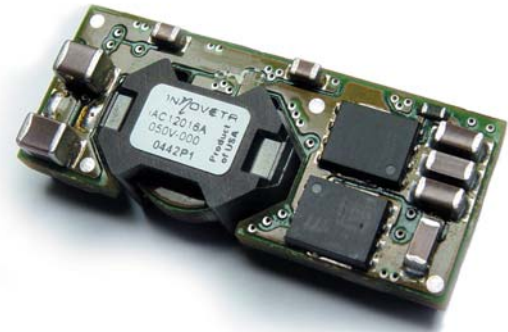


15 - 16A Non-isolated SMT Point of Load

Features

- ◆ Standard Industry Footprint
- ◆ 3.0-5.5V and 6.0-14.0V Inputs
- ◆ 0.8-5.0V Nominal Outputs
- ◆ Surface Mount
- ◆ High operating efficiency (up to 95%)
- ◆ Constant switching frequency
- ◆ Starts with pre-biased output



Key Market Segments & Applications



Specifications			
Model			
		iAA05015A008V	
		iAC12016A008V	
Nominal Output Voltage	VDC	0.75-3.63	0.8 - 5.0
Input Voltage Range	VDC	3.0-5.5 ⁽²⁾	6.0 ⁽¹⁾ -14
Input Current (max)	A	16	18
Output Voltage Tolerance	VDC	±3.3% Vo, set	-2.5 to +3.5% Vo, set
Ripple & Noise (max)(pk to pk) (3)	mV	75	100
Line Regulation (max)	mV	5	10
Load Regulation (max)	mV	10	15
Overload Protection	%	Inception - 175-235% of rated output; Short circuit - auto recovery	
Overvoltage Protection	-	N/A	
Remote Sense	-	Yes	
Remote On / Off	-	Positive or Negative Logic available, see Model Selector	
Sequencing	-	See Model Selector	
Temperature (operating)	°C	-40 to 125	
Temperature (storage)	°C	-55 to 125	
Humidity (operating)	-	20-95% RH Non condensing	
Humidity (storage)	-	Per IPC / JEDEC J-STD-020, for MSL-1 ⁴ (<30C/85%RH) in original packaging	
Cooling	-	Convection or forced air	
Isolation Voltage	-	N/A	
Vibration (non operating)	-	5 to 50Hz @ 0.5g (4.9m/s ²), and 50 to 500Hz @ 1.5g (14.7m/s ²) per Bellcore TR-EOP-000063-5.4.4	
Shock	-	196.1m/s ²	
Safety Agency Approvals	-	UL60950 (US and Canada), VDE0805 (IEC60950), CB scheme (IEC60950)	
Weight (max)	g	12	
Size	mm	33 x 13.5 x 8.5	
Warranty	-	3 Years	

Notes: See website for detailed specifications

(1) 8.3 - 14.0V when output is >3.63V

(2) 4.5 - 5.5V when output is ≥3.0V

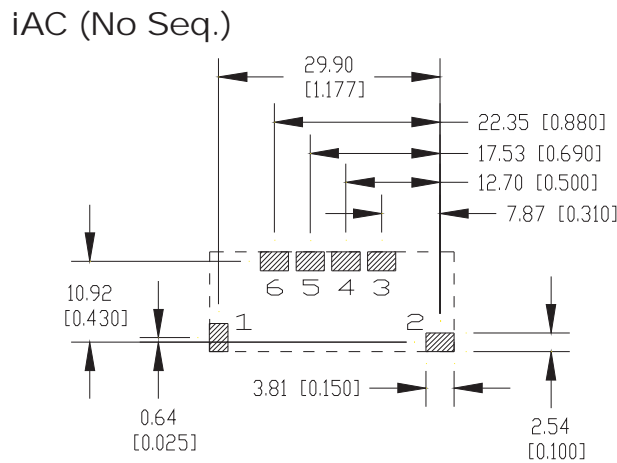
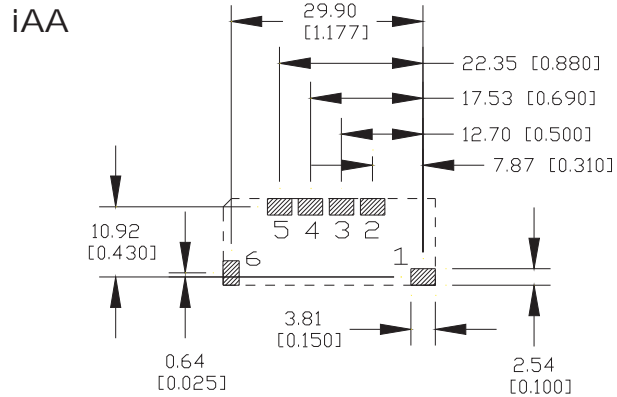
(3) Measured across one 0.1µF ceramic capacitor and one 47µF ceramic capacitor; BW = 20MHz

(4) iAC MSL-2

Model Selector

Model	Output Adjust (V)	Output Curr. (A)	Max. Output Power (W)	Efficiency at Full Load (%)	Pos. Logic On/Off	Neg. Logic On/Off	Sequencing
iAA05015A008V-000-R	0.75 - 3.63	15	49.5	94.5	X		
iAC12016A008V-002-R	0.80 - 5.00	16	80.0	94.5 @ 5V	X		
iAC12016A008V-003-R	0.80 - 5.00	16	80.0	94.5 @ 5V		X	

Recommended Footprint (Top View)



Pinout

PIN	Function	
	iAA	iAC(No Seq)
1	Vin	On/Off
2	Gnd	Vin
3	Vout	Gnd
4	Trim	Vout
5	Sense	Trim
6	On/Off	Sense
7	-	-

For Additional Information, please visit us.tdk-lambda.com/lp/products/iaa-series.htm

