

150W, 40A Non-isolated SMT Point of Load

Features

- ◆ DOSA Compatible Footprint
- ◆ Surface Mountable
- ◆ Constant Switching Frequency
- ◆ No external loop tuning components needed
- ◆ Excellent Transient Response



Key Market Segments & Applications



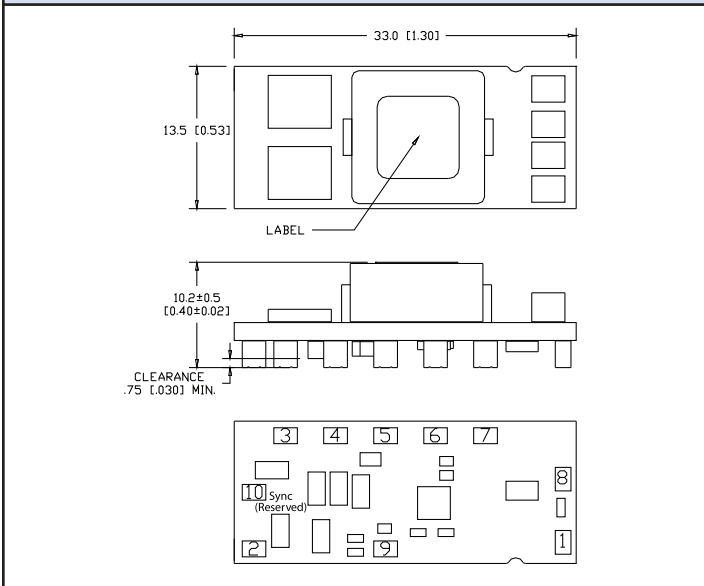
Specifications			iAH12
Model			iAH12
DC Output Voltage	V		0.7 - 5.5
DC Output Current	A		40A max (Vo, set ≤ 2.5V and Vin > 4.5V. Observe max. power limit) 30A max (Vo, set > 2.5V or Vin < 4.5V. Observe max. power limit)
DC Output Power (max)	W		150
DC Input Voltage	V		3.5 - 17
Efficiency	%		84 - 96
Output Voltage Tolerance	%		±3
Switching Frequency	kHz		600
Line Regulation	mV		4
Load Regulation	mV		7
External Load Capacitance	uF		200 - 2000
Output Ripple and Noise	mVpp		20
Overcurrent Protection	A		50A typical
Remote On / Off	-		Yes, see model selector table
Remote Sense	-		(+) Sense, compensating up to 0.5V
Power Good	-		Yes, Low on fail
Operating Temperature	°C		-40 to 115 (see thermal data on website)
Storage Temperature	°C		-55 to 125
Safety Agency Certifications	-		IEC/UL/CSA/EN62368-1, 60950-1, CE Mark
Weight	g/oz		12g / 0.42 oz
Size (LxWxH)	mm/in.		33 x 13.5 x 10.2 / 1.3 x 0.53 x 0.4
Warranty	yrs		3 years

Model Selector

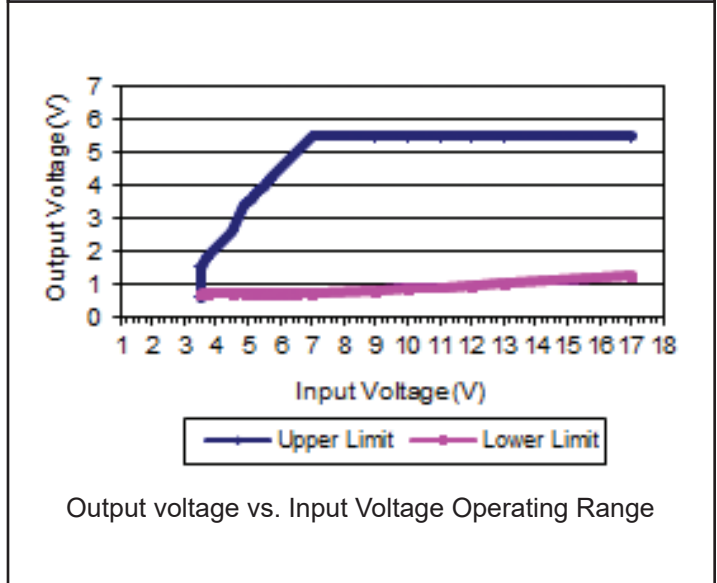
Input Model	Input Voltage (V)	Output Current (A)	Output Voltage (V)	Positive Logic On/Off	Negative Logic On/Off	Sequencing
iAH12040A007V-006-R	3.5 - 17	40	0.7 - 5.5	yes	-	-
iAH12040A007V-007-R	3.5 - 17	40	0.7 - 5.5	-	yes	-

Preferred

Outline Drawing



Voltage Operating Range



Pinout

PIN	Function	PIN	Function
1	ON / OFF	6	TRIM
2	VIN	7	SENSE (+)
3	SEQ (Option)*	8	SENSE (-) (Reserved)**
4	GND	9	PWR GOOD
5	VOUT	10	Sync (Reserved)**

* Contact Technical Support . Pin 3 is not populated if SEQ option is not selected.

** SMT pins are not populated

For Additional Information, please visit <https://product.tdk.com/en/power/>

