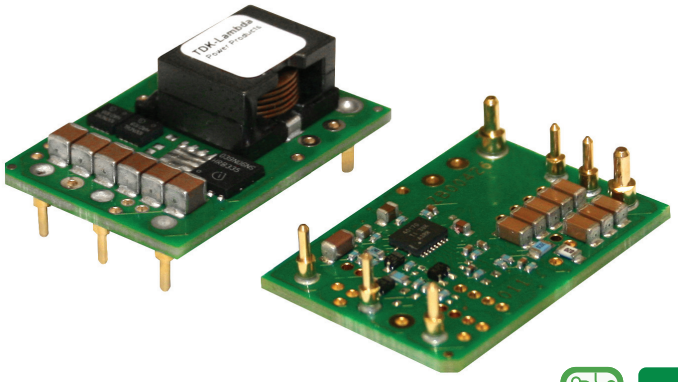
TDK·Lambda i6AN Series

75W, 9 to 40V Input Non-isolated DC-DC Converter with Negative Output

Features

- 75W 8A Output
- 1/16th brick Footprint
- Wide Output Adjustment -3.3 to -30V
- Minimal External Components Needed
- Constant Switching Frequency



Key Market Segments & Applications

Industrial Test COMM Broadcast

Non-Isolated RoHS

Specifications

Model		i6A24-N
DC Output Voltage	V	-3.3 to -30V Note - Output voltage range is dependent on input voltage (see graph on page 2)
DC Input Voltage	V	9 to 40 (Turn on at 10V or greater)
Efficiency	%	90 - 94
Output Voltage Tolerance	%	±4
Switching Frequency	kHz	400
Line Regulation	%	0.5
Load Regulation	%	0.6
External Load Capacitance	uF	200 - 1600
Output Ripple and Noise	mVpp	20
Overcurrent Protection	A	15
Remote On / Off	-	See options table
Remote Sense	-	(-) Sense, compensating up to 5% of output voltage
Operating Temperature	°C	-40 to 125 (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	15g / 0.53 oz
Size (LxWxH)	mm / in.	33 x 22.9 x 12.1 / 1.3 x 0.9 x 0.47
Warranty		3 years

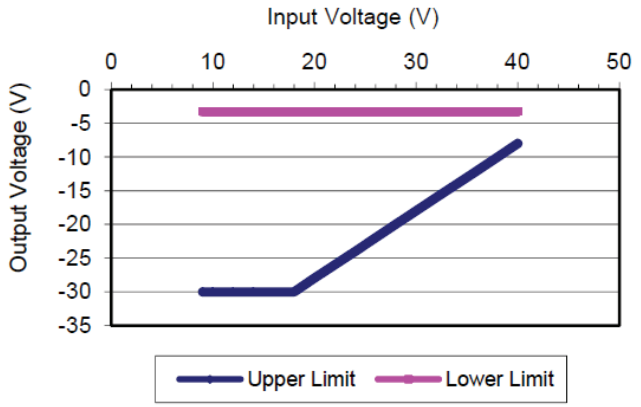
Note: (1) Consult the Full Datasheet for additional product information.

Model Selector

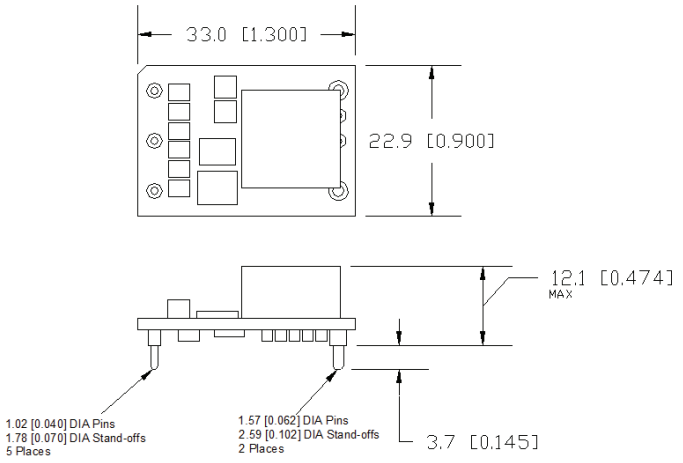
Input Model	Input Voltage (V)	Output Current (A)	Output Voltage (V)	Positive Logic On/Off	Negative Logic On/Off
i6A24008A033V-N00-R	+9 to +40	8	-3.3 to -30	Yes	-
i6A24008A033V-N01-R	+9 to +40	8	-3.3 to -30	-	Yes

Preferred

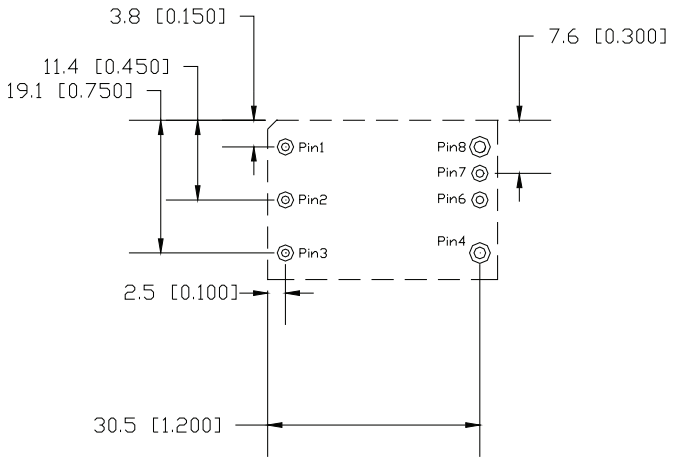
Output Voltage vs Input Voltage Operating Range



Mechanical Specification



Recommended Hole Pattern (top view)



Pinout

PIN	Function	PIN	Function
1	VIN (+)	6	TRIM
2	ON / OFF	7	SENSE
3	VOUT (-)	8	VIN (-), VOUT (+)
4	VOUT (-)		

Other Industrial Products

CC-E, CCG	1.5 - 30W 5, 12, 24 or 48V input isolated DC-DC converters
PX	10 - 60W 12, 24 or 48V input isolated DC-DC converters
iAH, iBF, iBH, iCF, iCH, iCG	3 - 40A DOSA2 non isolated DC-DC converters
iJA, iJB, iJC	35 - 100A non isolated DC-DC converters with PMBus

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

Evaluation Board

Evaluation kit part #	Contents
i6A14A-001-EVK-D2PN	Populated with I6A24014A033V-001-R & I6A24008A033V-N01-R for dual ± outputs

User manual available at I6AN technical files in our website