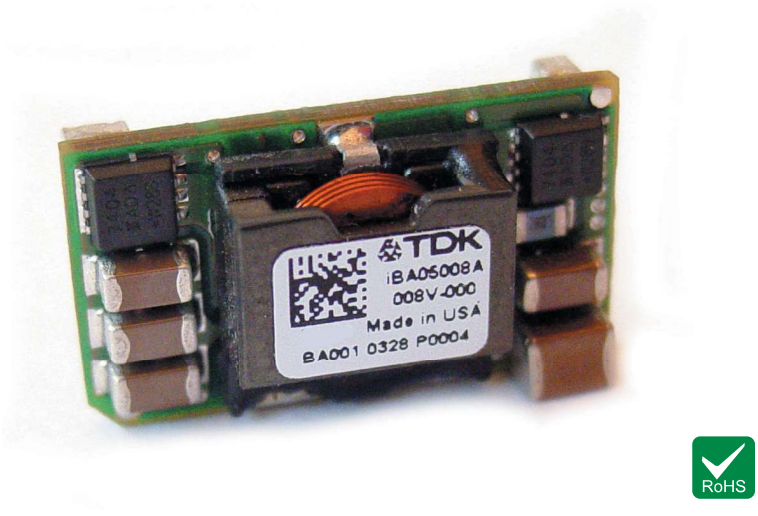
7 - 8A Non-isolated Point of Load

Features

- Standard Industry Footprint
- 3.0-5.5V and 6.0-14.0V Input
- 0.8-5.0V Nominal Output
- Low 8.38mm Profile
- High operating efficiency (up to 95%)
- Constant switching frequency
- Starts with pre-biased output



Key Market Segments & Applications

Industrial Test COMM Broadcast

RoHS

Specifications

Model		iBA05008A008V	iBC12007A008V
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	8.5	
Output Voltage Tolerance	VDC	N/A	
Ripple & Noise (max)(pk to pk) (3)	mV	75	100
Line Regulation (max)	mV	5	20
Load Regulation (max)	mV	10	30
Overload Protection	%	Inception- 185-215% of rated output; Short circuit - auto recovery	
Overvoltage Protection	-	N/A	
Remote Sense	-	No	
Remote On / Off	-	Positive or Negative Logic available, see Module Selector	
Sequencing	-	No	Yes
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	VDC	none	
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	7	
Size	mm	20.3 x 11.4 x 8.38	27.9 x 11.4 x 8.38
Warranty	-	3 Years	

Notes: See website for detailed specifications
(1) 8.3-14V 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) iBC MSL-2

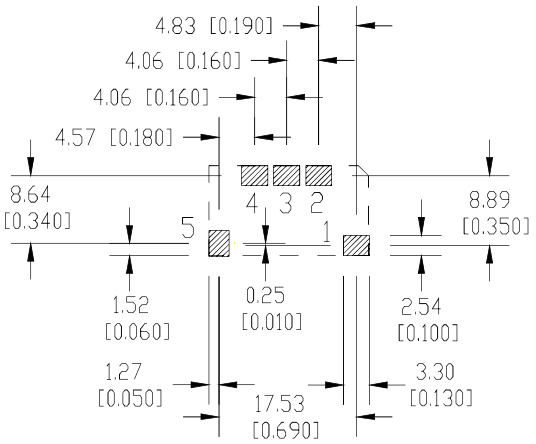
iBA - Last time buy date July 2019

Model Selector

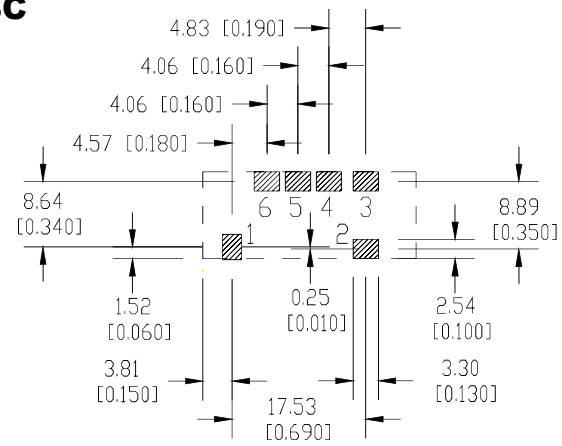
Model	Output Voltage (V)	Output Adjust (V)	Output Curr. (A)	Max. Output Power (W)	Efficiency at Full Load (%)	Pos. Logic On/Off	Neg. Logic On/Off	Seq.
iBA05008A008V-000-R	0.75-3.63	0.75-3.63	8	26.4	94 @ 3.3V	X		
iBA05008A008V-001-R	0.75-3.63	0.75-3.63	8	26.4	94 @ 3.3V		X	
iBC12007A008V-000-R	0.80-5.50	0.80-5.00	7	35.0	93 @ 5.0V	X		X
iBC12007A008V-001-R	0.80-5.50	0.80-5.00	7	35.0	93 @ 5.0V		X	X

Recommended Footprint (Top View)

iBA



iBC



Other DC-DC Products

CC-E	1.5-12W, 1 to 2 Outputs, 5 to 48VDC Input
PX	10-40W, 1 to 3 Outputs, 12 to 48VDC Input
iPB	15-35W, 1.5-5V Output, 36-75VDC Input, Pico Brick
iSA	30-78W, 1.2-12V Output, 36-75VDC Input, Sixteenth Bricks
iEA	30-78W, 1.2-28V Output, 36-75VDC Input, Eighth Brick DC-DC
PAE50/100	36-100W.1.9-5V Output, 36-75VDC Input. Eighth Brick DC-DC
iEB	150W, 12V Output, 42-56V Input, Eighth Brick Intermediate Bus DC-DC
iQD	300W, 12V Output, 42-53VDC Input, Quarter Brick Intermediate Bus DC-DC
iQB	30-300W, 1.2-12V Output, 24 to 48VDC Input, Quarter Brick DC-DC
PAH300/450	300-450W, 12 to 28V Output, 36-75VDC Input, Half Brick DC-DC
PAF	400-700W, 1.8 to 48V output, 24 to 400VDC Input, Full Brick DC-DC
FPS	1kW to 3kW, 24 to 48V Output, AC-DC Front Ends
iAA, iAD	Non Isolated DC-DC Converters

Pinout

PIN	Function iBA	Function iBC
1	Vin	On/Off
2	Gnd	Vin
3	Trim	Seq
4	Vout	Gnd
5	On/Off	Trim
6	-	Vout

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

iBA - Last time buy date July 2019