

- Standard Industry Footprint (DOSA)
- 3.0-5.5V and 6.0-14.0V Input
- 0.8-5.0V Nominal Output
- Surface Mount
- Low 8.38mm Profile
- Non Isolated Output

iBA/iBC Series

7 to 8A point of load converter

iBA/iBC Features and Benefits

Features

- High operating efficiency (up to 95%)
- Constant switching frequency
- Starts with pre-biased output

Benefits

- Reduced system heating
- Easier system filtering
- Supports complex digital systems

Specifications

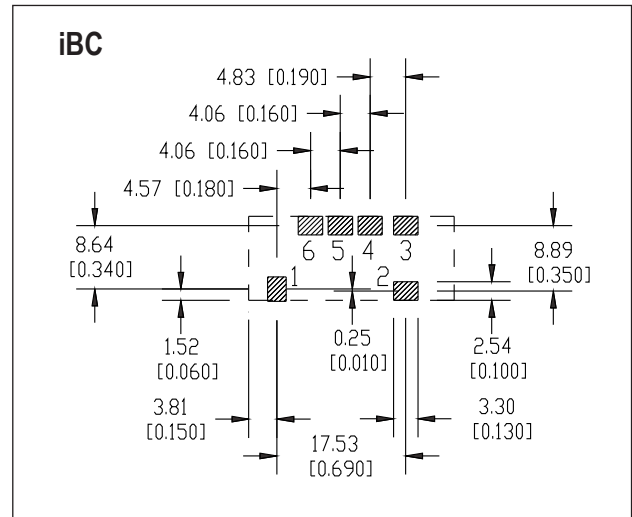
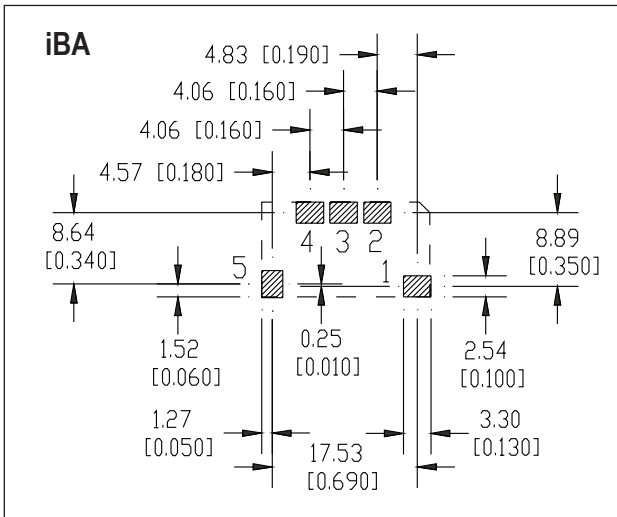
ITEMS		MODEL	iBA05008A008V	iBC12007A008V
Nominal Output Voltage	VDC		0.75 - 3.63	0.8 - 5.0
Input Voltage Range	(2) VDC		3.0 - 5.5	6.0 ⁽¹⁾ - 14 or 9.6 - 14
Input Current (max)	A			8.5
Output Voltage Tolerance	VDC			N/A
Ripple & Noise (max) (pk to pk) (3)	mV		75	100
Line Regulation (max)	mV		5	20
Load 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 Feature Set	
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-2 (<30C/60%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:**
- (1) 8.3-14V when output is >3.63V
 - (2) 4.5-5.5V when output is >3.0V
 - (3) Measured across one 0.1uF ceramic capacitor and one 47uF ceramic capacitor; BW = 20MHz

Model Selector					
Model	Output Voltage	Output Adjust	Output Curr. (A)	Max. Output Power (W)	Efficiency at Full Load (%)
iBA05008A008V-000-R	0.75 - 3.63	0.75 - 3.63	8	26.4	94
iBA05008A008V-001-R	0.75 - 3.63	0.75 - 3.63	8	26.4	94
iBC12007A008V-000-R	0.8 - 5.0	0.8 - 5.0	7	35	93
iBC12007A008V-001-R	0.8 - 5.0	0.8 - 5.0	7	35	93
iBC12007A008V-002-R	0.8 - 5.0	0.8 - 5.0	7	35	93

NB other configurations on request

Recommended Footprint iBA iBC Series (Top View)



Feature Set					
	Feature Set	Pos. Logic On / Off	Neg. Logic On / Off	Sequencing	(6-14V) Input Rng
iBA	00	X			
	01		X		
iBC	00	X		X	X
	01*		X	X	X
	02	X			X
	03		X		X
	05		X	X	
	06	X			

* Preferred feature set
Model Number Example: iBC12007A008V-001-R

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