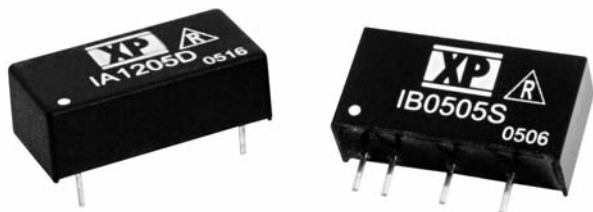


## IA/IB Series



- Single & Dual Output
- SIP or DIP Package
- Industry Standard Pinout
- 1000 VDC Isolation
- Short Circuit Protection
- -40 °C to +85 °C Operation
- MTBF >2 MHRs

## Specification

## Input

- Input Voltage Range • Nominal  $\pm 10\%$
- Input Reflected Ripple • 20 mA rms
- Input Reverse Voltage Protection • None

## Output

- Output Voltage • See table
- Minimum Load • None<sup>(7)</sup>
- Line Regulation • 1.2%/1%  $\Delta V_{in}$
- Load Regulation •  $\pm 10\%$  20-100% load change (3.3 V models  $\pm 20\%$ )
- Setpoint Accuracy •  $\pm 3\%$
- Ripple & Noise • 60 mV pk-pk 20 MHz bandwidth
- Temperature Coefficient • 0.02%/°C
- Short Circuit Protection • 1 s max
- Maximum Capacitive Load • 100  $\mu\text{F}$

## General

- Efficiency • 75% typical
- Isolation Voltage • 1000 VDC minimum
- Isolation Resistance •  $10^9 \Omega$
- Isolation Capacitance • 60 pF typical
- Switching Frequency • Variable
- MTBF • >2 MHRs to MIL-STD-217F

## Environmental

- Operating Temperature • -40 °C to +85 °C
- Storage Temperature • -40 °C to +125 °C
- Case Temperature • 100 °C max
- Cooling • Convection-cooled

## Notes

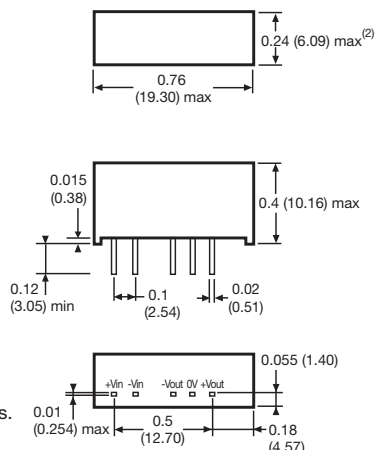
1. Replace 'S' in model number with 'D' for DIP package.
2. SIP 48 Vin models, dimension is 0.28 (7.20) max.
3. DIP 48 Vin models, dimension is 0.27 (6.88) max.
4. Outputs power-trade.
5. All dimensions in inches (mm).
6. For 48 V models a 10  $\mu\text{F}$  capacitor is required between +Vin and -Vin pins.
7. Operation at no load will not damage unit but it may not meet all specifications.
8. IB Series has no 0V pin. Use -Vout and +Vout pins for output.

Input Voltage	Output Voltage	Output Current <sup>(4)</sup>	IA Model Number <sup>(1)</sup>	Output Voltage	Output Current	IB Model Number
3.3 VDC	$\pm 5.0$ V	$\pm 100$ mA	IA0305S			
5 VDC	$\pm 3.3$ V	$\pm 151$ mA	IA0503S	3.3 V	303 mA	IB0503S
	$\pm 5.0$ V	$\pm 100$ mA	IA0505S†	5.0 V	200 mA	IB0505S
	$\pm 9.0$ V	$\pm 55$ mA	IA0509S†	9.0 V	111 mA	IB0509S
	$\pm 12.0$ V	$\pm 42$ mA	IA0512S†	12.0 V	84 mA	IB0512S
	$\pm 15.0$ V	$\pm 33$ mA	IA0515S†	15.0 V	66 mA	IB0515S
	$\pm 24.0$ V	$\pm 21$ mA	IA0524S	24.0 V	42 mA	IB0524S
12 VDC	$\pm 3.3$ V	$\pm 151$ mA	IA1203S	3.3 V	303 mA	IB1203S
	$\pm 5.0$ V	$\pm 100$ mA	IA1205S†	5.0 V	200 mA	IB1205S
	$\pm 9.0$ V	$\pm 55$ mA	IA1209S†	9.0 V	111 mA	IB1209S
	$\pm 12.0$ V	$\pm 42$ mA	IA1212S†	12.0 V	84 mA	IB1212S
	$\pm 15.0$ V	$\pm 33$ mA	IA1215S†	15.0 V	66 mA	IB1215S
	$\pm 24.0$ V	$\pm 21$ mA	IA1224S	24.0 V	42 mA	IB1224S
24 VDC	$\pm 3.3$ V	$\pm 151$ mA	IA2403S	3.3 V	303 mA	IB2403S
	$\pm 5.0$ V	$\pm 100$ mA	IA2405S†	5.0 V	200 mA	IB2405S
	$\pm 9.0$ V	$\pm 55$ mA	IA2409S	9.0 V	111 mA	IB2409S
	$\pm 12.0$ V	$\pm 42$ mA	IA2412S†	12.0 V	84 mA	IB2412S
	$\pm 15.0$ V	$\pm 33$ mA	IA2415S†	15.0 V	66 mA	IB2415S
	$\pm 24.0$ V	$\pm 21$ mA	IA2424S	24.0 V	42 mA	IB2424S
48 VDC	$\pm 3.3$ V	$\pm 151$ mA	IA4803S	3.3 V	303 mA	IB4803S
	$\pm 5.0$ V	$\pm 100$ mA	IA4805S†	5.0 V	200 mA	IB4805S
	$\pm 9.0$ V	$\pm 55$ mA	IA4809S	9.0 V	111 mA	IB4809S
	$\pm 12.0$ V	$\pm 42$ mA	IA4812S†	12.0 V	84 mA	IB4812S
	$\pm 15.0$ V	$\pm 33$ mA	IA4815S	15.0 V	66 mA	IB4815S
	$\pm 24.0$ V	$\pm 21$ mA	IA4824S	24.0V	42 mA	IB4824S

† Available from Farnell. See pages 204-206.

## Mechanical Details

## SIP Package



## DIP Package

