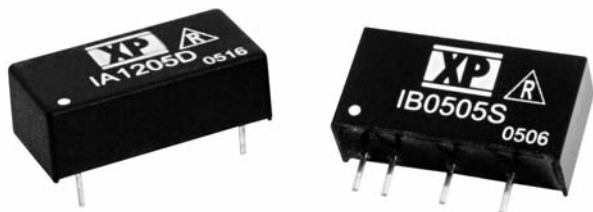


## IA/IB Series



- 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 $\mu$ 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

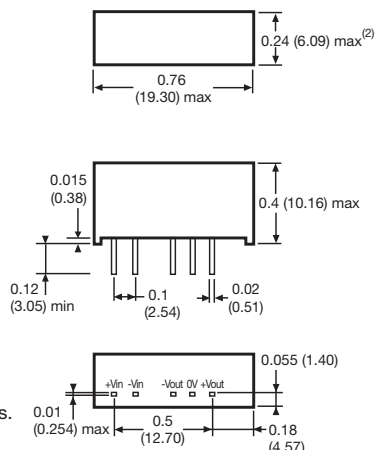
1. Replace 'S' in model number with 'D' for DIP package.
2. SIP 48 Vin models, dimension is 0.28 (7.20) max.
3. DIP 48 Vin models, dimension is 0.27 (6.88) max.
4. Outputs power-trade.
5. All dimensions in inches (mm).
6. For 48 V models a 10  $\mu$ F capacitor is required between +Vin and -Vin pins.
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
12 VDC	$\pm 24.0$ V	$\pm 21$ mA	IA0524S	24.0 V	42 mA	IB0524S
	$\pm 3.3$ 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
24 VDC	$\pm 15.0$ 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
	$\pm 3.3$ 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
48 VDC	$\pm 12.0$ 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
	$\pm 3.3$ 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
48 VDC	$\pm 9.0$ 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	24.0 V	42 mA	IB4824S

† Available from Farnell. See pages 204-206.

## Mechanical Details

## SIP Package



## DIP Package

