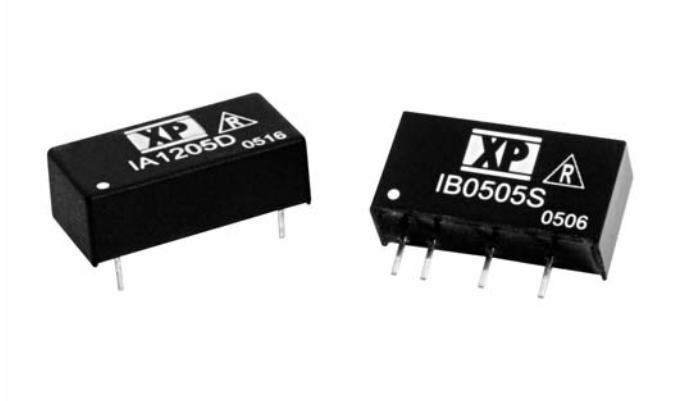
1 Watt
IA/IB Series



- 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 ±10%
Input Reflected Ripple	• 20 mA rms
Input Reverse Voltage Protection	• None

Output

Output Voltage	• See table
Minimum Load	• None[7]
Line Regulation	• 1.2%/1% Δ Vin
Load Regulation	• ±10% 20-100% load change (3.3 V models ±20%)
Setpoint Accuracy	• ±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 µF

General

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

Environmental

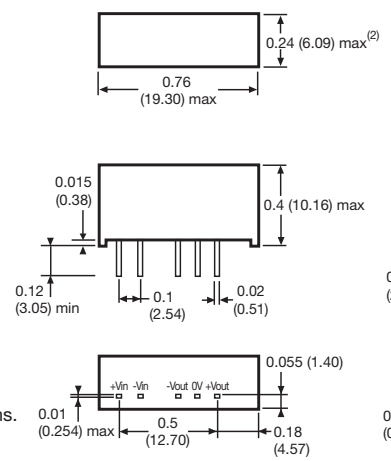
Operating Temperature	• -40 °C to +85 °C
Storage Temperature	• -40 °C to +125 °C
Case Temperature	• 100 °C max
Cooling	• Convection-cooled

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

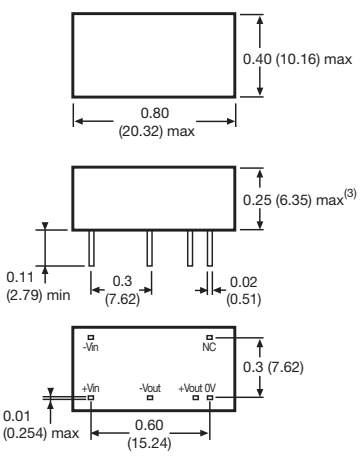
† Available from Farnell. See pages 204-206.

Mechanical Details

SIP Package



DIP Package



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 µF 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.